UNITED STATES OF AMERICA
SURFACE TRANSPORTATION BOARD
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HEARING

IN THE MATTER OF:	
ARKANSAS ELECTRIC COOPERATIVE CORPORATION - PETITION FOR DECLARATORY ORDER	Finance Docket No. 35305

Thursday,
July 29, 2010

Surface Transportation Board
Suite 120
395 E Street, S.W.

Washington, D.C.

The above-entitled matter came on for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

DANIEL ELLIOTT	Chairperson
FRANCIS MULVEY	Vice Chairperson
CHARLES NOTTINGHAM	Commissioner

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ALSO PRESENT:

GREGORY C. FOX, BNSF

STEVE SHARP, AECC

SAMUEL M. SIPE, JR., BNSF

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P-R-O-C-E-E-D-I-N-G-S

9:30 A.M.

CHAIRMAN ELLIOTT: Good morning. Welcome. The Board has convened a hearing today in the case of Arkansas Electric Cooperative Corporation, Petition for Declaratory Order in Finance Docket 35305.

This has drawn a great deal of interest and as a result we have panels of participants who will be speaking today. A list of participants, together with their allotted times was issued by the Board in our July 21, 2010 decision in this case and is available at the back of the hearing room.

Before we begin with presentations, I wanted to cover a few procedural matters. We've asked each party to present their comments as they deem appropriate, but participants should be prepared to answer questions from the Board after the allotted time.

We have read the pleadings and

evidence submitted into the record and while there is no reason to repeat every point, we hope that you will focus on drawing our attention to those aspects you believe are most salient.

Speakers, please note that the timing lights are in front of me. You will see a yellow light when you have one minute remaining and a red light when your time has expired. The yellow one-minute light will be accompanied by a single chime. The red light signifying that your time has expired will be accompanied by two chimes. Please keep to the time you have been allotted. When you see the red light and hear the double chime, please finish your thought and take a seat.

In addition, just as a reminder to everyone to please turn off your cell phones. Now we will proceed.

Any opening statements?

VICE CHAIRMAN MULVEY: Briefly, I would say it's a very important hearing we're

going to have today. We have some very detailed presentations, very technical presentations. Many consultant-verified statements and studies have been submitted and it's obvious that a lot of time and effort has gone into -- has been spent on this issue by both the railroad and by the shippers.

One issue that I hope that will be further fleshed out during this hearing is the IDV.2 standard itself in terms of how it was developed, what it measures, how it can be verified regarding its accuracy and integrity. I hope that the parties will address this thoroughly in their presentations and in the responses to questions from the Board. Thank you.

CHAIRMAN ELLIOTT: Thank you, Vice Chairman Mulvey.

Anything else?

COMMISSIONER NOTTINGHAM: I have no opening statement.

CHAIRMAN ELLIOTT: I have none

either. So we will proceed. We will call up the first panel which is the Government Panel, United States Department of Transportation.

You may proceed, Ms. Smith, and you have five minutes.

MR. SMITH: Thank you, Chairman Elliott, Vice Chairman Mulvey, Commissioner Nottingham, my name is Paul Samuel Smith. Again, it's my distinct privilege to represent the United States Department of Transportation.

With me is Dr. Ted Sussman from the Department's Volpe Center in Massachusetts. I brought him not to make a presentation, but to answer any questions you might have of a technical nature. He is an expert in rail ballast and track geometry. He was very closely involved in those portions of the Department's submissions on that subject. And I would be utterly at sea if I tried to answer any technical questions of the kind the Vice Chairman might be interested in.

I want to leave you today with a few main points. The first one, indeed as the Doctor will get into, if necessary, is that coal dust is a particularly pernicious fouling agent. It is not a garden variety dust or a fouling agent. It has its own particular characteristics, particularly when wet. It is something that poses a particularly substantive problem to the stability of rail ballast and although there has been some doubt raised on the record, we don't want here to be any doubt that from the FRA's perspective and from the DOT's perspective it is a real substantive problem that must be dealt with.

Having said that, it is also the case that from a safety perspective there is more than one way to deal with it. There is indeed maintenance, accelerated maintenance, expanded maintenance, and that has been going on in the Powder River Basin since approximately 2005 anyway. There are also other methods, containment-type methods, that

stop it from being released in the first place.

From a safety perspective, from a compliance with FRA ballast standards perspective, either will do and we want to make sure that you recognize that there are multiple choices and indeed other countries, other shippers, railroads, government agencies have taken different routes, have indeed, at least in Australia, taken the route that we at DOT prefer and that the Board has preferred, usually as a positive matter and that is a cooperative effort on behalf of all concerned and not just the railroads, not just the shippers. Those parties have an identify of interest, so that that kind of alignment provides the best incentives, we think, for progress, particularly of a cost effective nature. In an adversarial proceeding, unfortunately, there is most often a winner and a loser and it's much more difficult to get cooperation in that context.

In this case, of course, BNSF's tariff rule has put the containment option before you, and as a result under Section 49 USC 10702, that must meet the standard of reasonableness. Reasonableness, in this case, means that you must be satisfied with the bona fides of the methodology chosen by BNSF to arrive at its emission limits. And there are of course, two different ones for different lines. And the results can be anticipated from having met those limits.

We do not take a position on those highly technical matters, but we think that that's what the law requires. We do believe it is certainly appropriate for the shippers to load their shipments in a manner that every other shipper does, to our knowledge at least, and that is so that it stays in the transport car, either because in other cases it has its own inherent value or because there could be operational or safety problems if it gets out.

I want to just leave you with one

last point and that is that FRA will continue to oversee the safety of the operations in the Powder River Basin and elsewhere. And I left with you a copy of the Preliminary National Rail Plan. It's a public document and I'll leave one here for the record and provide you with an electronic copy if you like.

On page four, there is a graphic, Figure 1, and it shows traffic density, traffic volume. And you'll notice right in the center is the bright red. It's the highest volume traffic corridor in the country. It's coming from the Powder River Basin and it meets up with other lines after that. So this is an extremely important line for energy purposes and every other.

Thank you very much and I stand ready to answer your questions of a nontechnical nature. Dr. Sussman is here for those. Thank you.

CHAIRMAN ELLIOTT: Thank you very much, Mr. Smith. We really appreciate you

coming here today and providing your expertise.

One question I have and it's more of a broad question and it might go to the Doctor, with respect to in 2005, we have these derailments which were quite serious and the allegation is that it was as a result of -- partially as a result of coal dust. And I guess my question is it only happened, from my understanding in 2005. Why all these years, for hundreds of years, coal cars have been running without any type of containment? And why, all of sudden in 2005, has it become such a big issue? If any of you had such a thought on why that is the case?

MR. SMITH: I could speculate about volumes and such, but prefer not, perhaps.

Dr. Sussman has a thought?

DR. SUSSMAN: For the most part, I think the Powder River Basin has come into large use because of regulations on the

quality of coal used and that has concentrated the source of coal to the Powder River Basin. But I think BNSF would be better to answer the direct questions of the volumes on those lines.

CHAIRMAN ELLIOTT: Thank you. And one other question, with respect -- you mentioned cooperative efforts which I always encourage. Have there been anything similar to a cooperative effort on issues of this nature, maybe at the FRA or DOT before?

MR. SMITH: Not DOT or FRA to my knowledge and I think I would have learned of that in the process somewhere in this proceeding about coal dust. Of course, in the record there's references to cooperative endeavors either at one point or it's still on-going perhaps with different railroads or different places, but that's all I know about this particular subject.

CHAIRMAN ELLIOTT: Thank you. Vice Chairman?

VICE CHAIRMAN MULVEY: About the coal dust, isn't it true that Powder River Basin coal is different from Appalachian coal or Illinois coal and the dust is finer coming off the trains in the Powder River Basin?

MR. SMITH: My knowledge is limited to a very basic level and that is it different in terms of the energy that it produces and in terms of what is emitted when it is burned, but beyond that, perhaps Dr. Sussman knows.

VICE CHAIRMAN MULVEY: Dr. Sussman?

DR. SUSSMAN: I believe there is a difference in the amount of dust. It is a finer dust. It's more prevalent.

VICE CHAIRMAN MULVEY: We had some examples the other day. We were looking at the Powder River Basin coal in a test tube and Appalachian coal and clearly the Powder River Basin coal did seem finer than the Appalachian coal.

I want to make a small point on this graph since it's been very, very contentious about here. This graph of the forecast of traffic volumes is based upon the Freight Analytic Forecast, is it not?

MR. SMITH: I believe that's the case and that is not just rail traffic. That is all

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VICE CHAIRMAN MULVEY: But are you aware also that we did a study here at the STB by Christiansen and Associates which was done subsequent to this and really questioned the accuracy of this flow, especially given the turndown of the economy that's occurred since this was first developed as well as some of the other projections with regard to coal traffic that were made by the DOE?

MR. SMITH: There's no question that the economy has had an effect on pre-recession projections. This particular graphic is drawn from information that is

listed as 2002, but I've been assured that at least with respect to Powder River Basin coal volumes, those have not declined at all. There has been some reduction, again, recently with the recession, but in terms of the relative dimensions, this is still the largest, heaviest volume rail line in the continent of the world.

VICE CHAIRMAN MULVEY: One question for Dr. Sussman on this issue of the IDV.2. Are you familiar with what that stands for, how it was developed? Is it parts per million? What is it measuring? And are you confident in the techniques that were used to develop these measures?

MR. SMITH: I don't think that Dr. Sussman is. He has reviewed the verified statements and so forth, but that's the extent of his knowledge at this point.

DR. SUSSMAN: I don't have any knowledge other than what's in the record.

VICE CHAIRMAN MULVEY: Well, it's

a proprietary program I gather, but it makes it hard to evaluate whether or not it's appropriate. But we'll develop that later.

DR. SUSSMAN: Thank you.

CHAIRMAN ELLIOTT: Thank you, Vice Chairman.

Commissioner?

COMMISSIONER NOTTINGHAM: Thank you, Mr. Chairman.

Mr. Smith, thank you for being with us today. It's always good to have someone from the Department before us. Just a couple of questions, if I could. One of the advantages of having the Department participate is we can perhaps learn something about how other modes of transportation handle issues such as spillage, loss of cargo and steps, reasonable or unreasonable, to prevent spillage and loss of cargo.

Can you help educate us? Are there other modes who have taken steps or do take steps routinely to prevent cargo from

being spilled or lost during transit? I can just think of, for example, as a customer occasionally my private and sometimes on business capacity of the commercial airlines, if I were to arrive and try to check in a shopping bag that was ripped and leaking clothing or other material at the counter, I probably wouldn't be able to check that bag. That's sort of a -- that may sound like a very pedestrian example, but can you help fill us in?

We know that a lot of coal, for example, moves by barge, truck. Have those sectors and modes been able to contain routine spillage?

MR. SMITH: Other than, of course, hazardous materials which are very heavily regulated in terms of their packaging and so forth to prevent that from happening, the only other comparable mode of transport of which I am aware, although you mentioned barges, they go down the riverways, they are not covered,

but they're not -- unless they actually, unfortunately, have an accident, they're not subject to the kind of jostling that rail motions subject their traffic to.

The only other remotely comparable transport mode that I'm aware of is the large dump trucks which, of course, in recent years have had to have covers installed to prevent loose shipments of gravel or coal perhaps and for short distances and so forth which historically was not the case, but has been in the last decade or so. But beyond that, there isn't a problem that I'm aware of with more or less consistent spillage simply because the shippers and the receivers would have a real problem if there was. Now again, for 100 years it hasn't been the case with coal and I'm not exactly sure why it is that it has just been accepted as a byproduct of coal transport for so long.

COMMISSIONER NOTTINGHAM: So in your professional opinion, would you say it is

unusual or the opposite? Does it fall within the norm for common carriers or a common carrier to routinely or to have routinely allowed for the spillage, routine spillage or routine loss of common carrier cargo?

MR. SMITH: I don't know of any other instance where that's happened across any mode.

COMMISSIONER NOTTINGHAM: Do you have any testimony for us about just the reasonableness of a common carrier wanting to adopt, if it were the case, and we'll explore this later today, I certainly will, if a common carrier wanted to adopt a no-cargo lost policy, would that generally sound reasonable or unreasonable, basically, you pay us to deliver stuff, whatever that stuff might be. We'll guarantee to the best efforts we can that all the stuff you ordered you'll actually get. We won't lose any of it on the way. Does that sound reasonable to you or unreasonable?

MR. SMITH: I think as a general proposition that's probably reasonable. I think it's probably the norm, as I said, in other modes of transport, and even in this mode for more or less every other type of shipment that there is.

Now obviously, given the extraordinary volumes of the coal traffic and the unit trains and the distances they travel, a lot more than your standard concerns or standard logistics would be required to ensure that that happens. And of course, the nature of the cargo itself is not quite powder, but it's quite granular. So it's not pre-packaged in any way like ore in an enclosed container like a box car or a grain car or something. You would have to go about especially with the backdrop of nothing at all like that with coal transport by rail, you'd have to maybe not invent the wheel, but you have to bring it over from other contexts herein, as an extraordinarily important traffic.

COMMISSIONER NOTTINGHAM: The point you make about all other commodities moving basically in a manner that prevents the routine spillage or loss of that commodity, I think that's an important point. It seems to me that the Department has a good sense of the history of freight transportation, that it probably, I don't know this from personal observation, but I'm surmising that perhaps every other commodity today moves in a no spill, no routine spill manner, somewhere along the line historically, actually made some adjustments or made some car standard adjustments to get to that state. I'm guessing that when railroading first started in the 1800s, you probably had a lot of stuff moving in pretty simple cars, exposed, open, spillage, loss of grain or grain damage, for example.

And over the years, the industry has been working with its customers, seems to have adopted ways to ensure that those, all of

those other commodities actually get to their endpoint destination without routine spillage or loss. And presumably those railroads and their customers have had to absorb over the years, the costs of those technology improvements, those container improvements.

What happened to coal to make that the exception?

MR. SMITH: I'm personally not enough of an historian for that. As we recognize in our position papers, we're not aware of this happening anywhere else and we don't know why it happened for so long with coal. Obviously, circumstances have changed. We now recognize it's not just a low value commodity that has no consequences when it does get out in volume, especially. And perhaps that's part of the reason. That it didn't appear on anybody's radar screen, if you will, for decades. People didn't recognize it for what it actually was, at least in certain circumstances. That's all I

can speculate about.

COMMISSIONER NOTTINGHAM: And I know we'll hear some conflicting as we often do and it's one of the good purposes of a hearing, so we'll hear some conflicting arguments about the relative hazards or negative externalities of coal dust. Some of the submissions to us indicate or argue that it's somewhat benign or it can be addressed with just simple routine maintenance. Other testimony told us it's a much more serious problem.

Putting that aside, even if we were to stipulate just for the moment that coal dust was benign, that it had no harmful effects on anything, couldn't -- hypothetically, I'll just ask you, couldn't a common carrier be within the realm of reasonableness by saying we want to guarantee that all the cargo you asked to be shipped to you actually gets to you, even if it's cotton candy or peanuts or coal or widgets that we

won't drop it along the way?

MR. SMITH: I see kind of countervailing strains in that. The first is yes, of course, that makes sense. The second is under the legal standard of reasonableness, the cost benefit analysis that ones goes to determine what's reasonable, it may be very expensive to prevent cotton candy from falling out of an open rail car, but if there are no implications for operations or safety or something like that which again perhaps is why coal dust has been left as it has been for so long, then how reasonable is it to enforce a containment strategy of one sort or another. It would be more expensive and not reach the level, because there's no benefit to attain. If there's no consequence for the cotton candy or whatever coming out of the car, then what is the benefit to closing it except for again this kind of common sense principle that, of course, whatever it is that's being shipped should stay in the car in the first place. I

think that's a fall out of the reasonableness test and the adversarial proceeding that brings it to you today and other occasions.

COMMISSIONER NOTTINGHAM: Okay. I'm not sure if that passes my leaking luggage at the airline counter test.

MR. SMITH: Clearly, there's no security question about the leaking luggage these days. The reality is --

COMMISSIONER NOTTINGHAM: That would be an airline or maybe a TSA kind of policy as opposed to a DOT nationwide standard that thou shall not bring leaking luggage aboard your carry ons or something.

I'll wrap up in a second, Mr. Chairman. Thank you for your forbearance.

Have you had a chance, what we really have at issue here today when we boil down what brought this hearing together is, of course, a tariff, a specific tariff that was drafted and opposed by the BNSF.

Have you had a chance to look at

that tariff and the terms that touch on coal dust?

MR. SMITH: I know that there are quantitative limits, one for each of the two lines that are at issue and I know that they are designed according to BNSF to prevent the emissions that were very, very high level of the emissions, but beyond that, that's why Dr. Sussman and others provide the content of our statement, and why even then to make sure that you knew that as far as we are concerned, coal dust is indeed quite pernicious. We couldn't, and don't, take a position on the scientific bona fides of those particular limits.

COMMISSIONER NOTTINGHAM: If I were to sort of simplify down or strip down to sort of layman's English the terms of the tariff and describe it as follows: your coal car's rail customer better not leak significant coal dust or else. And if that phrase were put in the tariff, would you not have some sympathy with the rail customer's

concern well, what does "or else" mean? In other words, coal dust has been falling off of rail cars for hundreds of years and now we're being told, the rail customer is being told stop it or else.

As you look around the different modes and there are all kinds of requirements about transport including the examples I raised about commercial aviation, there are certain things you can do or can't do to make yourself eligible to actually board a commercial flight, but usually you're told somewhere in specific terms what those terms are and what those repercussions are.

Do you have anything to say about sort of the reasonableness of the rail customer's expectation that they actually be told in advance of entering into a commercial relationship what the essential terms and conditions are in some detail?

MR. SMITH: Indeed, the shippers have raised that. It is a very legitimate

question. In its rebuttal filing, BNSF seemed to put a different emphasis on the standards themselves and how -- and what it is going to use them for. It's a tool. It's a prod. And they just want, according to the rebuttal statement, to begin to see some progress to deal with this problem on the containment side and they are going to accept good faith effort, so it was to me, an added element of flexibility, perhaps because the standard is -- even the IDV is a new term and the standard is new and as you said, it's been going on for decades without anybody paying much attention to it.

And so it may be that it's a recognition that a hard edge standard maybe isn't appropriate at this time, but I'll certainly leave that to them, but yes, the shippers certainly have a legitimate point to know to the extent that they can or BNSF can tell them the "or else." And that is, I think, a legitimate part of your inquiry as to

whether the overall rule is reasonable because if the rule is not going to be enforced, then why bother in the first place?

COMMISSIONER NOTTINGHAM: Thank you. I have no further questions at this time.

VICE CHAIRMAN MULVEY: Just a bit of a follow up on the question that Commissioner Nottingham had raised earlier and that is whether or not there's any other modes of transportation where this problem exists. And what comes to my mind is that there has been a problem with fugitive dust in the past from trucks carrying municipal solid waste to landfills. And I believe that those problems have been addressed by local municipalities putting restrictions on the trucks and requiring the trucks be covered in such a way that they avoid putting out fugitive dust. But I believe that's a local issue and therefore does not involve interstate commerce usually and so therefore the Department was

not involved.

Do you know anything about that issue, that particular issue?

MR. SMITH: I do not. I don't believe the Department -- I agree with you, I don't believe the Department was involved. I can't say definitively it was not. It sounds to me more like either strictly a local matter or possibly within some kind of -- possibly within some kind of overall program or guidance from EPA or another environmental agency on the federal level.

VICE CHAIRMAN MULVEY: Or perhaps state environmental agencies.

MR. SMITH: Indeed.

VICE CHAIRMAN MULVEY: The other thing is, and this is an interesting issue because the shipper and the loader are not the same individuals or the same firms here, the shippers are, in fact, the utilities. The loaders are the coal mining companies. Have you looked at that as a problem and how that

could be addressed? After all, some of the proposals for correcting this, spraying of surfactants or loading the car in such a way as to lessen the likelihood of dust emanating from the cars, would be the responsibility of the coal companies doing this, and yet the penalty goes to the shipper who has very little control over what the coal company does.

Do you have any views on that?

MR. SMITH: The mine owners have been conspicuous by their absence in this proceeding and that may be because -- it may be because that again traditionally all they've ever done is load the cars more or less, I guess, a standardized chute. I know that they have been more recently involved in changing the profile, if you will, of the coal.

Obviously, to the extent that there would be some kind of containment strategy, whether it's surfactant spraying or

coal car covers of some sort, that changes to some extent the logistics of the loading. And depending on what it is, the unloading, possibly the burning of the coal, I don't know what surfactants do to the characteristics of the burn, whether they do anything to the inside of the cars that are used, if they're, in fact, made to keep the coal in the car, then I wonder what that does to tipping them over when you get to the utility. It's just not going to hold several tons, obviously.

I just wonder -- that's part of the inquiry here that I'm not familiar with that maybe somebody has addressed that in the record and it may just be that the coal, excuse me, the mine owners will certainly be cooperating with their customers. And they recognize their customers for the most part are quite some distance away, but as to who is to bear what part of the -- of a corrective measure and the cost of that again, the containment obviously has to be at the mine if

that's the route that is going there. If it's after-the-fact maintenance, then that just occurs elsewhere on the line.

VICE CHAIRMAN MULVEY: Thank you.

CHAIRMAN ELLIOTT: Thank you, Vice Chairman. Thank you very much, Mr. Smith and Dr. Sussman. We greatly appreciate you taking the time to come and help us out in this very complicated and interesting case. You're free to go.

MR. SMITH: Thank you very much.

CHAIRMAN ELLIOTT: Next, we'll call up the second panel which are the carriers, BNSF and Union Pacific.

We'll have BNSF start out. You'll have 30 minutes. And it looks like later on 10 minutes on rebuttal.

MR. WEICHER: Thank you, Mr. Chairman.

My name is Rick Weicher from BNSF Railway. There are three of us that are going to make statements on behalf of BNSF and to

some extent some interplay. On my left is Mr. Greg Fox, our Vice President of Transportation, who will explain why the coal dust problem in the Powder River Basin must be addressed by keeping coal in the cars and not performing after-the-fact maintenance. Mr. Sipe, on my right, will address the legal framework for assessing the shippers' claim that our coal dust standards are unreasonable, and also summarize some of the evidence that supports our challenged standards and some of the issues that have just been raised about the development of our standards. And I will address some of the issues about how we anticipate achieving compliance with these rules and our efforts in that regard if this rule is permitted to go into effect.

As we've described in extensive evidence, we are asking the Board to conclude three things. It is necessary to keep coal dust from blowing off loaded cars in transit. That's important for a lot of good reasons.

Second, we believe as the operating railroad, we have the authority to issue rules such as at issue here that promote safety, reliability, and efficiency, and do something as fundamental as say the commodity should stay in the car. Third, we ask that the Board conclude that these standards which have been the product of years of research and work are not unreasonable as they stand today.

I'll turn it over to Mr. Fox to describe the background.

MR. FOX: Very good. Good morning. I am Greg Fox. I'm the Vice President of Transportation at BNSF. My team is accountable from that perspective for our train network, the operation of our train network. Just prior to this position I was the Vice President of Engineering. My team at that time had accountability for the maintenance and reliability of our physical infrastructure and I was in that role in 2005 at the time of the back-to-back train

derailments on the joint line. And I played a key role in the extraordinary recovery efforts that we put in place after that incident.

I therefore speak about coal dust from both the perspective of track maintenance and the trains that run across that track. And clearly, based on my experience, coal dust cannot be allowed to continue to be deposited along the right of way.

Coal dust compromises the strength and integrity of the track structure and frankly it puts at risk the transportation services in a critical part of the overall nation's energy supply chain. Shippers must be required to take the measures necessary to keep coal dust in the cars.

The evidence in this case shows beyond really any question that coal dust falling along the right of way on the joint line is extensive. As you can see from these photos, coal dust fouling is not confined to

a specific location. Coal dust is found all along the joint line.

Witnesses have also explained that coal dust is not confined to the coal -- to the joint line alone. There's a very high volume of coal traffic on lines leading out of joint line. And extensive coal dust deposits have been found along these lines as well. Coal dust has been found along BNSF right of way as far as 500 miles from the joint line.

There also can be no question that coal dust comes off the top of loaded coal cars in large quantities as shown on this short video clip.

(Pause.)

This photo shows the top of a loaded coal car and the effect that wind erosion has on the load. Coal blown off of the car, along with coal blowing off of the thousands of other loaded coal cars on the joint line is deposited along the right of way and ultimately makes it way into the ballast

section.

Coal dust emissions on the joint line were manageable in the early years when transportation volumes were relatively low, but the joint line has become, as indicated earlier, the most dense rail corridor in the world. As many as 70 loaded coal trains move on the joint line each day. BNSF estimates that up to 500 pounds of coal may be lost from the top of each car. We assume that each of those 70 trains has 120 cars. That adds up to over 2,000 tons of coal dust deposited on the joint line every day.

BNSF became concerned about coal dust as volumes increased. And after our initial study of the problem in 2003 and 2004 we concluded that measures needed to be taken to address the coal dust emissions.

We accelerated our study of coal dust after the May 2005 back-to-back derailments and after five years of cooperative study, the evidence is

overwhelming that it's time to take action. It's time to keep coal dust in the car. In my personal opinion, doing nothing is not acceptable.

Shippers have argued that BNSF should be required to deal with coal dust through expanded maintenance after the coal has escaped from the cars. This is an irresponsible position for them to take. This slide shows a cross section of railroad track or road bed. The principal purpose of the ballast section you see here is to anchor the track and provide resistance to the movement of ties and rail. Also, the ballast section bears and distributes the applied load of the train dissipating that pressure to the subgrade and the earth below.

Finally, the ballast section is accountable for drainage, providing drainage. We also use it to facilitate track maintenance and surface, the relationship between the rails.

As indicated earlier, coal dust is one of the worst fouling agents of the ballast section. Studies by the University of Illinois and my own experience show that its characteristics make it particularly dangerous for track stability, even in small quantities.

Sheer strength is a component, a key component of ballast performance. Sheer strength occurs when friction is created, when one piece of ballast contacts or interlocks with another piece of ballast. Sheer strength is the characteristics of compacted ballast that allow the ballast section to distribute that applied load of the train to the subgrade below.

As you can see on this slide, when coal dust fills the voids between the individual ballast pieces, friction is lost, sheer strength is lost and the support for ties and rails is adversely impacted. This leads to deviations in surface or the relationship of the rails to one another and

if left unattended to, can result in service interruptions.

This situation only gets worse when coal dust gets wet.

Routine maintenance cannot deal with the large quantities of coal dust along the joint line. One of BNSF's engineering consultants recently estimated that more than 1.8 million tons of coal are deposited along the right of way on the joint line, not counting the coal that's already in the ballast section.

In 2008, BNSF did a very limited clean up of coal dust around waterways and we removed over 300 rail cars of coal dust; 1.58 million tons as shown on the chart would equate to 14,000 rail cars of coal dust that needs to be removed from the joint line, obviously, an extreme condition.

Given the high level of coal traffic on the joint line, it's not surprising that coal dust accumulates far too rapidly for

routine maintenance to keep up with it. Here's a picture taken in May of 2007 of a section of the joint line that was constructed in the fall of 2006. From this, you can see rapid accumulation of coal dust.

Coal dust also does not accumulate only in visible deposits along the right of way. It also accumulates inside the ballast section. This photo shows coal dust finds being removed or extracted from the ballast section by an undercutter which cleans the ballast.

We are currently undercutting track on the joint line at least two times, more frequently than what would be required under non-coal dust conditions. Even with this extraordinary amount of maintenance, it's not enough. Coal dust, even in small amounts, poses a real threat to the integrity of the ballast section and track stability. After-the-fact maintenance is absolutely not the answer here. Coal dust deposits are too

voluminous and widespread. Maintenance will never be as effective as keeping the coal dust in the cars to begin with.

Coal dust accumulates in the ballast section are not always possible to detect, thus making it very difficult to know when and where to do corrective maintenance. As you can see from this photo, the ballast appears to be clean, often has coal dust beneath the surface.

At the end of the day, with the right confluence of events and with coal dust in the ballast section, there's a very real risk of a service interruption taking place. That's a risk that BNSF is not willing to take.

When maintenance activity takes place and takes tracks out of service, particularly on lines outside of the joint line where we don't have double track or triple track or four main track capability, in those single track locations we hold trains or

maintenance windows several hours or in some cases we reroute trains around those maintenance windows.

This map shows the lengthy reroute of coal trains that were destined for the Memphis Gateway. We were rerouting trains around an extended maintenance window near Lincoln, Nebraska adding several hundred miles to the route of these trains, just to make time available to address coal dust caused maintenance.

Our engineers estimate that as much as 80 percent of the loaders and the maintenance windows on the Powder River Basin are driven by coal dust. After-the-fact maintenance also does nothing to address the effects of coal dust that's blown off the railroad right of way. This photo appeared recently in a Nebraska newspaper of a local organic farm that was severely impacted by coal dust washed onto the farm. Expanded maintenance would do nothing to eliminate the

nuisance caused by coal dust.

BNSF's concerns about reliability are clearly not hypothetical. Coal dust was absolutely a contributing factor in the back-to-back 2005 derailments on the joint line. We have expanded our efforts to deal with coal dust since then, but again, given the high rate of coal dust deposits, the uncertainty with which accumulations occur and the risk that ballast fouling may go undetected, it is not possible to eliminate the risk of another service interruption.

At the end of the day, BNSF is not willing to take that risk and the potential threat to the supply chain. The best place for coal dust is in the rail car. There's no other line of business where we allow the product that we're transporting to fall off the car. Thank you.

MR. SIPE: Good morning, I'm Sam Sipe. As Mr. Fox explained, BNSF has concluded after extensive study that after-

the-fact maintenance is not a responsible way to address the actual and potential problems created by coal dust emissions. In particular, after-the-fact maintenance does not, in BNSF's view, provides efficient production against the risk of service disruption.

Sound regulatory policy teaches that when it is feasible to eliminate a serious risk, measures that are not unduly costly, preventive measures should be taken. Contingency planning to address potentially devastating occurrences such as the recent Gulf oil spill should not be ignored simply because the risk of occurrence is perceived to be low.

The risk of a serious coal supply chain disruption may seem low because we haven't had one for five years, but we all know that disruptions in the coal supply chain are not beyond the realm of possibility because we lived through one such disruption.

And the Board noted that and established its redact in part as a response to that.

The precautionary principles spelled out by Professors Calt and Mitchell in BNSF's rebuttal evidence represents a formalization of the common sense adage "better safe than sorry." BNSF's efforts to foreclose the possibility of an unacceptable event resulting from coal dust contamination is prudent and affordable.

As explained by Professors Calt and Mitchell, under the precautionary principle, the only relevant question about costs is whether the costs associated with the preventive measures are unduly high. I apologize for the feedback here. I'm not sure what's causing it.

The evidence in this case chose that costs clearly are not unduly high. One option for containment that has been discussed is surfactant application and for illustrative purposes in our evidence we took a look at the

potential impact of surfactant application on costs. In fact, it would have a negligible impact on the delivered price of coal and in fact, the impact of surfactant application is regularly dwarfed by the impact of changing coal prices at the mines.

Even if surfactant application costs somewhat more than enhanced maintenance which is not what the record shows here, the incremental cost of surfactant application would be an even lower percentage of delivered cost.

Any attempt to perform cost-benefit analysis would be misleading in this case. Professors Calt and Mitchell explain that a comparison of the costs of two alternatives only makes sense where the two alternatives are equally effective and Mr. Smith, I believe, suggest to you that in his view the alternatives of containment and after-the-fact maintenance may be equally effective. But in fact, the record here

demonstrates that that is not the case. After-the-fact maintenance can't eliminate the risk of ballast destabilization and track failure caused by undetected coal dust fouling.

Prevention of coal dust fouling requires that you keep the coal in the car.

So in this case, a comparison of the equally effective alternatives really isn't available because they're not equally effective. The precautionary principle teaches that keeping the coal dust in the car is the appropriate course to pursue and sound regulatory policy.

Turning to the reasonableness of BNSF's coal dust standards, there are two guiding legal principles. First, railroads have the authority to adopt operating rules to promote safe and efficient transportation. In reviewing an operating rule, the Board's role is not to second guess the railroad's determination, but rather to satisfy itself

that there is a valid basis for the operating rule.

Second, shippers are responsible for securing their freight and rail cars so that the freight does not escape from the cars and damage railroad property.

Measured against these standards, BNSF's dust monitoring and load profiling rules are reasonable means to achieve the goal of significantly reduced coal dust emissions.

Now most of the comments about BNSF's coal dust emissions standards addressed BNSF's methods for monitoring coal dust emissions. And it was BNSF's adoption of a performance-based standard set out in the tariff rule rather than an activity-based standard, that is, a mandated method for reducing coal dust emissions led to the adoption of coal dust monitoring.

Mr. Weicher will explain that BNSF adopted a performance standard to give coal shippers the flexibility to adopt dust

curtailment measures of their own choosing. The adoption of a performance standard makes it necessary for BNSF to implement a monitoring plan to make sure that coal dust is being kept in the cars.

There is nothing particularly novel or complicated about the monitoring system that BNSF has set up. In fact, BNSF's monitoring system is based on track side monitors and coal dust sensors and it's similar to dust monitoring systems established in Australia and also the State of Virginia.

BNSF's dust monitors measure the level of dust emitted by passing trains. Coal dusting is episodic and not all trains that dust on their journey will dust as they pass the track-side monitor, but the monitor functions almost like a traffic cop, and the goal is to encourage the adoption of dust suppression measures that will be effective throughout the route of movement.

The IDV.2 standard which Vice

Chairman Mulvey indicated an interest in at the outset here, is a measure of the relative dust in the air as the train passes the track side monitor. And I will describe in light of Vice Chairman Mulvey's question very, very briefly the derivation of the standard.

The surfactant monitoring system that BNSF has employs dust sensors that collect particles of dust that enter a chamber where they're subjected to a photographic process that translates to an electronic signal. That electronic signal is relayed directly to the computers of BNSF's consultant, Simpson Weather Associates in Charlottesville, Virginia. And it's the intensity of the electronic signal that forms the underpinning of the IDV.2 standard.

The standard was derived by collecting two years' worth of dust data through these monitors and toting up the total dust units captured by the monitors over that period.

We then calculated a standard which applied to individual trains would determine how much the dust could be reduced if it did not exceed a particular level of dust as measured by IDV.2.

BNSF is determined that compliance with the IDV.2 standard will reduce coal dust emissions by about 85 percent. And by the way, the 2 in IDV.2 refers to the fact that it's a revised standard, the second version which takes account of dust emitted by lead and trailing locomotives as the train passed the dust sensor. In other words, we eliminate those in the IDV.2 calculation.

The shippers raise a number of issues with respect to BNSF's use of the electronic dust monitors which are referred to as e-samplers. But the manufacturer of that equipment has specifically approved the way BNSF is using the dust monitors. BNSF is using the best equipment currently available to monitor coal dust. None of the parties to

this proceeding has suggested a superior alternative exists. If an improved monitoring device is developed, BNSF will be receptive to adopting it. But there's no reason to delay implementation of monitoring with the technology that's currently available.

There's plenty of evidence that BNSF's coal dust emissions standards can be met through a combination of load profiling and surfactant application. Coal dust can be reduced by loading coal to a more aerodynamic profile as illustrated in this slide on the right hand side. BNSF estimates that coal dust can be reduced by about 15 percent through proper load profiling. And in fact, that process is currently in place in the Powder River Basin, although we have learned that simply using the profiling chute that has been designed for this process is not sufficient. The people operating the equipment have to be trained and have to do the job carefully to make sure the benefits of

load profiling are realized.

Although shippers are free to choose how they will restrain coal dust emissions, surfactant application has proven to be a viable approach as it is a method that's already used in Canada and Virginia to reduce coal dust emissions. Queensland Railroad in Australia is preparing to implement an extensive surfactant regime in the near future. Surfactants work by forming a crust over the loaded coal that keeps the coal dust in the car during transit.

The video clip here shows surfactants being applied to a Powder River Basin train. The still picture in this slide shows the Chinese surfactant application process. And as we noted in Mr. Bobb's rebuttal statement, he was informed by the Chinese that they had adopted surfactant application not as an environmental measure, which as you may know they're not particularly noted for, but actually as a means of saving

money by keeping coal dust in the car. And there is a value to the shippers there.

Thank you.

MR. WEICHER: Thank you. Chairman Elliott, Vice Chairman Mulvey, and Commissioner Nottingham for the opportunity to address this issue and air this thing out. We know this is somewhat novel and unusual, but very important and very important to a vital part of our economy.

After studying this coal dust problem for several years, BNSF concluded that the best approach to curtailing coal dust was to establish a performance-based standard that established a specific limit on coal dust emissions from loaded trains and left the decision to each shipper and its mine agent how best to meet that standard.

As was alluded today, the relationship between the parties here are a bit complex. We have no direct contract for shipment of coal with mines as you've probably

heard. We have tariffs and contracts with shippers who are usually utilities and so the utilities, to our knowledge, have arrangements with the mines for the loading and so forth. Those parties own the coal. We do not own the coal. They transfer ownership somewhere in the shipment. The vast majority of things that move today are in shipper-owned equipment. We do own some equipment, but the vast majority is theirs. And we concluded that these decisions, what actions should be taken would be best sorted out by those parties, they have the coal, they have the boilers, they have the mines, how best to do it.

Embedded in this process, there is -- we haven't talked much about it, but there is an element of an activity-based standard. That's the profiling, the chute monitoring, which has been widely adopted and widely accepted and doesn't seem to be in controversy.

We are not aware of any shipper in this proceeding that suggested they would have preferred we made an activity-based standard as a general rule such as putting on a topper. And I want to address one thing that was alluded to and we can come back to it, in terms of cooperative effort. We had 10, 12 forums over 2 to 3 years, lots of shippers participated, lots of mine people came. Ultimately, it's our responsibility to address this.

We have the railroad and we're in charge of the joint line with that other railroad that operates on it as well, but under a long-established agreement that we'll come back to, we're the responsible party for this as the railroad. So we went forward to set a standard to let the mines and utilities work out the best way to adapt to.

We think it's the best way to go because we're not in a position to choose the type of chemical surfactant to use for a

particular coal. We've obviously done a great deal of testing and shared this information and we think there's an incentive here for those parties to work out the most efficient and best way to do it.

After the May 2005 derailments, many shippers raised concerns about the reliability of coal transportation in the Powder River Basin. They realized it was of critical importance to make this a reliable and efficient source of coal with an efficient and reliable transportation network. They even convinced the Federal Energy Regulatory Commission which obviously, to our knowledge, does not have jurisdiction over coal transportation, you do, to convene a hearing to consider all liability issues. BNSF and many other parties testified at that hearing.

The somewhat laid back attitude of some of the shippers to this problem today and this evidence, is a great contrast to the crisis atmosphere that existed during that

period.

The STB was involved in addressing this crisis by establishing a Rail Energy Transportation Advisory Committee where the Board specifically acknowledged that it "views the reliability of the nation's energy supply as crucial to this nation's economic and national security." That's a quote from your order setting that up. We participate in that effort to this day as do many parties.

Shippers now seem to ask -- the shippers opposing and we're working with many shippers who are not parties to this, that you ignore these reliability issues. We think that that would not be responsible to accept a short-sighted desire to minimize cost to curtail coal dust emissions. Something must be done now to keep the cars in the -- to keep the coal in the cars loaded like every other commodity.

We decided to establish our coal dust standards as a rule that would be

generally applicable to our shippers, remembering that we are talking about common carrier shippers here. The vast bulk of our coal moves through contracts which are not part of this proceeding which may or may not incorporate as we work with those shippers.

Should I continue or do you want -- we'd be happy to respond to questions.

CHAIRMAN ELLIOTT: You have ten more minutes on rebuttal and then we will actually go to Union Pacific now and then we'll have questions after.

MR. WEICHER: That's fine.

MS. RINN: Good morning, Chairman Elliott, Vice Chairman Mulvey, and Commissioner Nottingham. It's an honor to appear before you this morning to discuss coal dust rules.

I'm Louise Anne Rinn, Associate General Counsel for Union Pacific Railroad. And I'm accompanied by Joe Rebein who is also representing Union Pacific who is in the

audience.

The Board now has the benefit of a very extensive record with vigorous and divergent comments. In accordance with your notice, UP wishes to focus on three points in my comments.

First, preventing deposits of coal dust on the joint line and UP's coal corridor is the best way to assure reliable, safe, and efficient transportation.

Second, coal customers play a critical role in prevention because railroads cannot directly prevent coal dust deposits.

And finally, mutually beneficial collaboration to achieve prevention will be advanced only if railroads are allowed to adopt reasonable coal prevention rules.

Accordingly, in the interest of facilitating discussion between UP and its customers on how to deal with coal dust, we urge you to reject the request that you find the BNSF rules unreasonable or otherwise

unduly restrict their application.

Turning to my first point that coal dust prevention is the best strategy for reliable and safe service. We have consensus on at least two points, I think, on the record. And that is that coal dust is a dangerous fouling agent in ballast. And the second is that ballast integrity is essential to reliable and safe railroad transportation, particularly on high density corridors.

The difference is between those parties who claim that it is sufficient for railroads to just keep cleaning it up and those who conclude that preventing coal dust from escaping cars in the first place is the only sustainable way to ensure reliable and safe transportation. UP is convinced that prevention is superior.

I begin by asking that you keep in mind that those who ship no coal, still have a real stake in the outcome of this proceeding. Coal dust removal -- could you

pass the clicker or if you could advance to the next slide, please?

Coal dust removal disrupts service to shippers who do not ship coal and who do take responsibility for loading their freight so that it stays within the cars or containers. The diagram illustrates the UP coal corridor from the end of the joint line through Nebraska and into Kansas. The yellow boxes show the train count by train type in 2007 before the recession dropped our volume. And you can see that once you get to OþFallons and go east, that our coal customers, yes, a very high density flow, share a corridor, a high-density corridor that had a lot of traffic that is not coal. For example, North Platte to Gibbon in 2007 averaged 140 trains a day which is roughly one every 10 minutes. And almost half of those, 65, did not transport coal. They transported grain, auto, auto parts, intermodal, beer, lettuce, and those customers shared the track with the

track that the coal customers are moving over. They should not have their shipments delayed and their cars slowed down because they have to wait for us to clean up after coal customers.

In addition, coal dust presents risk of right of way fires and it's not welcomed by land owners whose property is beyond the right of way, certainly not the organic gardener who is adjacent to BNSF. Their interests are best served if coal remains in the cars and is not left behind to be cleaned up later.

But they aren't the ones who benefit from prevention. Coal shippers also will benefit because if the coal remains in the cars, they get all of the coal that they paid for to burn at destination. And substantial and wide-ranging ballast, bridge, and switch maintenance curfews and slow orders to remove coal dust are eliminated as well as the associated delay to their trains.

Now the opponents of the BNSF rules say that there's more coal dust to be maintaining because the volume of PRB coal has grown and they imply that this is an unavoidable and a simple linear relationship. I beg to differ.

They overlook that the sheer volume of PRB coal has multiplied the need for coal dust removal and that that volume also increases the cost of disruption.

And Chairman Elliott, I think that this may partly answer a question you had raised earlier, why did this suddenly become a manifest problem in 2005 when UP at least has been transporting coal out of the Powder River Basin since 1984?

If we could go to the next slide, please.

More coal trains required more track. On the slide, the red lines show where single track became double track, double track became triple track, and even quadruple track

in order to meet the demand. As the number of tracks increased, in response to an increase in the volume, the amount of coal dust that would be caught instead of blowing off into the high plains also increased and the amount of track to be maintained also increased. And as more trains were running on parallel tracks, that increased the number of passing trains. It is clear that passing train episodes are high dusting events. So that means that when you had a train that was going down a single main line and it would pass a standing train on a siting, it would only emit the normal amount of dust, if any, at that particular location. But when you have two trains passing each other, that creates enough turbulence that more coal dust is, in fact, being emitted.

So I suggest to you that this is not a linear relationship. Whether it is geometric, I don't know if it can be proved, but I do not believe that it is a linear

relationship.

And one other factor departing from my prepared remarks. We also found in 2005 that this was at the end of a prolonged and very severe drought, the worst drought in that part of Wyoming in more than 100 years. And subsequent research by Dr. Tutuma has indicated that coal dust is particularly prone, that if it's been dry and you suddenly inundate it with water, that its physical characteristics make it go from solid to plastic to liquid in a very dramatic fashion. And we did have a major blizzard at the end of April of 2005 that was sufficient to shut down the highways so that the coal mines were closed, followed by rain, followed by in the week before the two derailments which were on a Saturday and a Sunday. There was a blizzard followed by rain and that weekend is when the joint line literally started falling apart.

Not only is there, I suggest, a more than linear relationship with volume in

coal dust, but there's greater disruption with more volume. More coal trains means more recrews, greater locomotive idle time, and longer cycle times for cars because trains are delayed by the coal dust maintenance. Adding track maintenance increases the coal dust problem. It does not solve the problem. Only prevention reduces the coal dust problem.

So in summary, prevention preserves service to all and presents less risk of property damage and personal injury as a result of derailments.

My second point is that coal shippers play a critical role in preventing coal dust. Coal shippers own the coal. Coal shippers own the cars that the coal is loaded in to. The mines own the infrastructure that loads the coal and in addition, they are equipped when coal shippers request them to, as some currently do, to add a suppressant to control coal dust at destination or they will add a de-icing agent in order to prevent coal

from freezing in cold weather or certain customers have them add soda ash to deal with the sulfuric acid problem. So they are, in fact, equipped to do treatment after the loading of the coal.

In contrast, the railroads lack legal status to apply a foreign substance or equipment like a car cover to the shipper's property. The railroads also lack the legal status to construct and operate a spray or compression device on the mine's property. We can't just unilaterally go in there and do something about it. We would need permission and authority.

The clearest proof that any prevention method is beyond the direct control of the railroad is that all of the tests have required the willing participation of coal shippers and one or more of the mines.

And my last point is that mutually beneficial collaboration to achieve prevention will be advanced only if railroads are allowed

to adopt reasonable coal dust prevention rules. While prevention is the best strategy for dealing with the amount of coal dust associated with the SPRB coal, and coal shippers are best situated to implement prevention, this proceeding provides ample proof that left to their own preferences, the shippers will not change their behavior. This is not a moral criticism, it's a recognition of inertia.

Allowing the coal dust prevention tariff rules to become effective will facilitate constructive discussions between the railroads and their respective customers on how to deal with the dust. As Dennis Duffy likes to say, "you want to find the problem before it finds you." And we want to find a solution that works for both us and our customers.

Such discussions offer real opportunities for the collaborative development of alternative prevention methods

such as compression or car covers. It is notable that the BNSF rule proposed do not require a particular method because they, in fact, do provide for that opportunity to explore and try to develop the most cost effective and lower cost opportunities.

But if the Board were to decide that BNSF may not establish these rules regarding coal dust dispersion that would freeze shipper and producer cooperation and the research and development of alternatives. For example, we are planning a test to begin in September for a mechanical compression device. That requires the participation of the mine and at least two coal shippers in addition to BNSF, UP, and the vendors. All of the participants are contributing cash or in-kind resources or both. And we, of course, will be sharing the data with each other.

But if there is no possibility that future shipments of coal must comply with the coal dust prevention rule, then what

incentive does a shipper or a mine have to participate with us? And what ability do we have to try to develop the most effective prevention method by ourselves.

That is why ICTA recognizes that railroads must be able to establish tariff rules regarding the terms and conditions for the transportation they provide. Rail transportation is a chain of shippers, receivers, ports, and terminals and connecting railroads to move freight from an origin to a destination. Each link depends on the others to do so safely, efficiently and reliably. Only the rail carrier, however, has a common carrier responsibility for that chain. In addition, we have common carrier responsibilities and contractual responsibilities for other chains that frequently share some of the very same resources.

Therefore, the rail carrier is in the best position to encourage behaviors that

optimize the rail network and safety and discourage behaviors that disrupt service or are otherwise inefficient or unsafe. So the railroad must be allowed to set reasonable terms under 10702.

I submit that the Board should allow the BNSF tariff rules to become effective because they have not been shown to be unreasonable and because we think that they will clearly promote safe and reliable transportation. Thank you for your attention.

CHAIRMAN ELLIOTT: Thank you for your testimony. A couple quick questions regarding I guess the interplay between UP and BNSF on this line. And this is directed to Union Pacific. If, hypothetically, we find this tariff to be reasonable, would Union Pacific also have an identical tariff at that point? Would they follow the same guidelines as BNSF with respect to the suppression of coal from these open cars?

MS. RINN: No, for two reasons.

First of all, the BNSF has promulgated an operating rule which applies to Union Pacific which is materially the same as the joint line tariff item. So we have already encouraged our customers to comply with the BNSF rule, but we have not adopted the same rule. We have also undertaken to begin to compile the same research on our lines because one of the things we have learned from the BNSF work is that if you were to adopt an IDV standard that it needs to be location specific. For example, the IDV standard that they have on the joint line is 300 whereas the IDV standard that they have on their Black Hills subdivision I think is 154.

So we are in the beginning stages of getting to develop the data by putting a TSM on the South Morrell and we would have to develop the data.

But beyond that, we are frankly waiting to see what this Board is going to say and that will influence our behavior and we're

also thinking that this gets into pricing issues which I tend to not share. In fact, not tend, I do not share with the other railroad about how we would approach our customers in terms of encouraging them to engage in the behavior that we want them to do.

CHAIRMAN ELLIOTT: And then just as a follow up, what percentage of the traffic on the joint line does UP carry of the coal traffic?

MS. RINN: Currently, I think it is a 48-52 split, but we have a higher share of the cost of the joint line. Our share is 60 percent because all of our trains come in from the south and leave from the south, and the costs are split on a car mile basis.

CHAIRMAN ELLIOTT: That would bring me to BNSF, if Union Pacific isn't exactly on board with the tariff that's been proposed here, wouldn't that almost make it at that point inherently unreasonable if UP is

running across with 48 percent of their trains without the surfactant going, wouldn't the coal dust being blown off their trains at that point and until there's some kind of joint decision between the railroads, wouldn't there be a problem here with the coal dust blowing off the Union Pacific if it wasn't in place simultaneously with BNSF?

MR. WEICHER: If I may address this, the rule -- we had a slide on the operating rule that we have in place. The relationship between Union Pacific and BNSF is governed by a joint operating agreement, approved by the predecessor. It has its own system of remedies including were there to be an issue, arbitration, enforcement or whatever, were it to come to that. There's more of a problem of if we don't get going having a smaller number of shall we say free riders because -- excuse me, a larger number of free riders, because no one starts because there's no rule. The operating rule with

Union Pacific which we anticipate over time, this is an incremental process, also be effected, we don't know that will be faster or slower than with our customers.

The majority of our customers, well over the majority are not subject to this tariff rule other than by incorporation through our contracts and I will also not go into the details of those contracts, but as you know, the vast -- well over 60 to 70 percent -- excuse me, over 75 -- I don't want to get too precise here, but you've seen before you some of the common carrier moves we have. They are the far minority. They're less than 20 percent. This is being implemented through our contracts and will be in effect.

How Union Pacific does it with its customers is not our concern. Obviously, we're talking about some of the same mines and some of the same big utilities and customers. The lead customer in this complaint is not

really a BNSF customer. We are having some dealings with them, which is to say no, we believe it's just as likely if this rule goes into effect and far more likely and really the only way it gets into effect over time in an iterative process through our various customers.

MS. RINN: And if I could clarify, please, Chairman Elliott?

CHAIRMAN ELLIOTT: Sure.

MS. RINN: I am not saying that UP is going to tell our customers you can blow it off and ignore the BNSF rules.

CHAIRMAN ELLIOTT: Okay.

MS. RINN: How we approach our customers to encourage them to, in fact, comply with that rule is a matter that we are going to be working out in customer to customer interactions. And to a certain extent we can't. One, we aren't going to reveal that in front of our competitor. And secondly, it's hard for us to formulate

exactly how we might do that until we know the results of this proceeding. But we are shoulder by shoulder with the BNSF in believing that prevention is, in fact, in the best interest for all stakeholders on the joint line.

MR. WEICHER: May we put up the operating rule, Chairman? It's one slide.

CHAIRMAN ELLIOTT: That's fine.

MR. WEICHER: This is not an attempt to take more time from the parts we didn't cover.

CHAIRMAN ELLIOTT: You're not on the clock now. You're okay.

MR. WEICHER: This is published pursuant to the STB-ICC approved joint operating agreement. You'll notice the first words "as soon as practicable." We know this is a haul here to get this thing done, although it could move very quickly within the next year or two, but it is not automatic. And the "as soon as practicable" is an

explicit acknowledgement of the complex relationships we're all facing here.

It is our responsibility, we believe, that is BNSF Railway, as the lead operator, dispatcher, maintainer, of this vital facility to shall we say manage this process. But our vehicle with the other carrier is an operating rule with its own separate enforcement mechanism.

CHAIRMAN ELLIOTT: That's actually very helpful. Thank you.

And just one other question I had with respect to the compliance and this is to BNSF. As I see the compliance method, you have these machines that monitor what type of coal dust comes off the trains and you use a traffic cop analogy and that some trains will blow off the dust and go over the number and some may not.

Wouldn't it be, I guess, using the term of the statute, more reasonable, if you had I guess an activity-base safed harbor

where say coal shippers would put the surfactant on it and that in itself was sufficient enough to pass the tariff as opposed to this monitoring system that may not be entirely consistent?

MR. WEICHER: I would argue that it is not necessarily more reasonable. Some parties may say it's less reasonable because we were compelling activity. However, having said that we are perfectly willing to do that. We are quite open and I will just say without getting into particular things, you can imagine us having a discussion like this with a contract customer.

If the Chairman is suggesting something along the lines of should there be or could there be or would we publish or amend to say there would be a presumption that if you used one of the approved surfactants, you were in compliance, certainly. We are not close to that. For a given period of time this is going to be an evolving process, two

to three years. You did it right and it worked, certainly.

I would flip it around a little bit, it would be just as reasonable to say all the coal should be in the car, forget about this measuring thing, if it's too complicated. But in terms of what you were saying, would an activity be a reasonable substitute? Not taking away, we don't think we should take away that option for the shipper to find another way, whether they want to explore compaction of covers or something else, certainly.

MR. FOX: I guess the only thing I would add to that over the last five years we've been in active dialogue with our shippers through a variety of forums. At the end of the day they told us they wanted a choice. They wanted the choice in terms of how to comply and that's why we thought the performance-based standard was a reasonable start.

CHAIRMAN ELLIOTT: And my thought would be that there wouldn't be -- you could have an activity-based safe harbor, but also still have the measuring to encourage possible economic discovery of what is most efficient. That is good to hear that you would be open to that.

Vice Chairman Mulvey?

VICE CHAIRMAN MULVEY: Thank you, Chairman Elliott.

The accidents that occurred in the PRB were five years ago now and I assume that quite a bit of coal dust has escaped from cars over the last five years even with the maintenance. So coal dust builds up. I'm sure that the weather in Wyoming has been cold since then and there has been rainfall again.

The shippers have argued that the problem with the Powder River Basin were due largely to construction problems, maintenance problems, inadequate maintenance problems, some ties that were not as good as other ties,

also to blocked drains and the fairly unusual weather pattern that developed. But there hasn't been an accident since. Doesn't that speak to the issue that perhaps it was not coal dust that caused these accidents, but rather somewhat unique problems with both the structure and maintenance before that and weather?

MR. FOX: Well, clearly, no derailments is a good thing. And our overall network service interruptions due to derailments are down across all categories.

The two derailments, the back to back derailments in May, we believe, were caused by a confluence of events that was included, coal dust, absolutely, positively included coal dust, as well as significant precipitation and spring frost coming out of the ground at the same time.

We have increased our maintenance since then. We've doubled our undercutting and we think that's appropriate. All that

said, there is still coal dust in the ballast section on the joint line. And at the end of the day, as long as that coal dust is in the ballast section there's still a risk of a service interruption with the right confluence of events. We're going to work hard to prevent that, but there's a real risk of a service interruption and a disruption to the supply chain is present today.

VICE CHAIRMAN MULVEY: It is true that up to now there has not been another derailment due to the fouling of the ballast because of coal dust because of your maintenance activities, in part anyway.

MR. FOX: That is true.

VICE CHAIRMAN MULVEY: You mentioned about and showed the picture of that organic farm and when I buy organic vegetables I have different assumptions about what that meant.

(Laughter.)

That's a little disturbing because

we talk about the shippers, the coal mines and we talk about the railroads, the carriers who are all affected by this. But clearly, there's also impacts on farmers operations along the rights of way and there's quite a bit of that I would think, and animals that could be exposed to some of this dust as well.

So we know that coal dust is probably toxic if ingested or inhaled or what have you and certainly not healthy. Has the EPA ever gotten involved in this issue? Have they weighed in saying this is an environmental problem and that there ought to be something done to limit the amount of coal dust in the atmosphere?

MR. WEICHER: Well, the Wyoming DEQ has expressed interest in this issue in a general manner. The EPA, to our knowledge, regulates actually dust at the mine in the loading process and/or at the utility, excuse me, at the utility. But the answer to your question directly is no, insofar as our

transportation.

We are very much aware of the larger societal and I would call them externalities involved in this. This is an operating rule dealing with the railroad, we think, and have discussed with our customers and the mines that this would be a very, very rational thing for the private sector to work towards compliance of dealing with the problem that could have much broader impact beyond our narrow right of way and their mine. And we think that's the right way to go.

Having said that, this is a rule directed at dealing with these coal cars on our railroad, but we're not mindful of a broader Big E out there.

MR. SIPE: I was just going to mention that I believe our evidence, our opening evidence references recently adopted EPA rules related to stationary coal sources. So far, and this I think is the thrust of Mr. Weicher's comment, we don't know what's coming

down the road. So far, they haven't been looking at mobile sources of coal dust.

One could imagine that might be a concern down the road.

VICE CHAIRMAN MULVEY: Thank you. It was referenced before that this represents some sort of negative externality. A characteristic of negative externalities is that they don't have a ready market and that market solutions tend not to work for externalities and that is why the Government gets involved when there are negative externalities or external dis-economies. That would suggest, of course, that perhaps there is a role for the EPA, whether it be the federal EPA or the Wyoming Department of Environmental Quality.

MR. WEICHER: If I may, Vice Chairman, we are not suggesting that ourselves, but I would say you're quite right in terms of the externalities. This issue, this sort of circular issue, oh just maintain

the right of way more, do more maintenance. It's obvious that there is nothing that we can do about that farmer or the animals or the general ambience, to be honest.

VICE CHAIRMAN MULVEY: There are also data that have been gathered by BNSF that indicate that while coal is a major constituent of ballast contamination, other contaminants are also present including dirt, other debris, et cetera, and here we are out in Wyoming where the weather is hot and dry in the summer. There are strong winds and of course, a lot of this dirt and other debris can get into the ballast as well.

If you put this tariff in place, it would not take care of the problems caused by other contaminants and you would still have the need to clean the ballast periodically, et cetera. So does this really replace or does it really reduce very much the need to clean the ballast? I know you said it's about twice as common, but I think the weather out there

is also unusual as well as the fact of this coal dust.

MR. FOX: Our testimony clearly outlines the significant amount of science that we put up against determining that coal dust is the number one foulant of the ballast section on the joint line. I think that's well documented in our testimony.

As I said earlier, for a 400 million gross ton railroad, the joint line again is the heaviest railroad in the nation, 400 million gross tons travel across that railroad every year. That requires a 10 to 15 year undercutting cycle to remove ballast, broken down ballast, dirt, dirt that gets in from blowing events, those kind of things. And now we're on at least twice that cycle.

We've got one location on the joint line, Knock O Bridge (phonetic) which is at a key junction into one of the mines. We cleaned coal dust there a year and a half ago, taken out the entire 24 inches of ballast off

that bridge and we're going to be back there again in less than two years to do it again. So again, the amount of coal dust is time staggering.

VICE CHAIRMAN MULVEY: One other question for this round. I know you've employed consultants to look at this and engineering firms, et cetera and so has the other side. I don't mean to disparage the work of these consultants. I think a lot of us have done consulting at one time or another. It is also true, however, I find very few consultants who will say well, while this party paid for me, I'm afraid my results do not agree with its position. And so typically consultant reports tend to verify what the party paying for them wishes to hear or the reports don't get presented.

Was there any attempt at what I would call an unbiased group or the university researchers, or whether it be the National Academy of Sciences Transportation Research

Board -- has any, what I would call objective, unpaid for, groups looked into this problem of the coal dust and made any findings? Or have there been any meta analysis -- meta analysis is when you gather a whole bunch of disparate analyses and see if you find common threads -- as to what the overall truth might be?

MR. SIPE: If I may try this one, Vice Chairman Mulvey? I think there is a distinction between some of the consultants in this proceeding which is we are relying very substantially for purposes of this proceeding which is in the nature of litigation, upon people whom BNSF retained in the real world to try to solve a real world problem.

In fact, the person from Simpson Weather Associates, Mr. David Emmett was retained by BNSF because we understood that he was the foremost coal dust expert available. He had worked with NS on dealing with their problems in Virginia. So he got in this thing not to support a position, but to help us find

an answer to a problem.

Now given that he thought he found an answer or an approach to the problem it's not very surprising that he would come into this contested proceeding and support the results that he achieved when he was under contract to solve the problem. So I think there's a distinction.

To my knowledge, there has not been the sort of fully independent, academic enterprise although the professor from the University of Illinois, Dr. Tutumbo, BNSF did fund some of his work, but I believe he views himself as an impartial academic who was studying this coal dust issue for academic reasons. And I would say he's sort of in the same camp as Dr. Emmett, that is, he did the work to try to come up with some answers to what seemed to be a problem, and now in the context of this contested proceeding, he's not backing away from the conclusions that he previously found.

MS. RINN: And if I could volunteer, in our opening evidence we put in the testimony of an engineer by the name of Mollesky. He works for a nonprofit organization. They have done a great deal of work involving coal dust and other airborne emissions including for the Powder River Basin mines, including studies for the Government. And it was a very different process working with them than most of the consultants we had worked with because it was peer reviewed in his organization and had to be approved.

And if you'll notice it's not in a typical format. So this is not your typical litigating consultant. And basically, the gist of his testimony was that he thought that the mechanisms and the process that BNSF was using for its IDV standard made sense to him.

VICE CHAIRMAN MULVEY: Well, that's good to hear and I do recall reading the testimony submitted referring to him and I was following up on that. And I was just

asking the question as to whether or not there were other peer reviewed -- very often research that even when it's done for private firms, there's also work that gets published. University professors interested in tenure try to get their things published in reputable journals that are peer reviewed. And there are cases where it's been peer reviewed at least by the organization he or she works for.

Is there a list of any journal articles that you are aware of, whether it be in the environmental literature, the economics literature, or the transportation literature that addresses this issue and comes up with findings? I can address this also to the shippers on the other side, that there is this evidence out there that we ought to be aware of, it would be very, very helpful to the Board.

MR. WEICHER: We'll certainly pursue that. And as I said, these experts have developed these standards. We were going

down this path two to three years ago, two or three years before we had any idea that there would be this proceeding and we'll continue to keep the Board advised.

VICE CHAIRMAN MULVEY: Thank you.

CHAIRMAN ELLIOTT: Commissioner?

(Pause.)

VICE CHAIRMAN MULVEY: As you can see this is not particularly a technically oriented group.

(Laughter.)

COMMISSIONER NOTTINGHAM: Sorry about that. My light wasn't going on. It worked earlier, but these -- we're still working the sound system. I did want to mention it may help -- maybe I should not say this now, but I deactivated mine by pushing the button so I wouldn't distract my colleagues or you if I were to ruffle papers and I was going to suggest that everyone adopt that, but maybe I shouldn't, because look what it resulted in.

A couple of questions, Mr. Fox, thank you. Your testimony was very interesting. A lot of interesting numbers. Did I hear you correctly, you said that approximately 500 pounds of coal dust are lost per car on average, based on your experience and your observations or your staff's observations?

MR. FOX: Our field studies have shown that the range is 250 to 700 pounds are lost from the top of the car. Obviously, we took the mid of that range with the 500 estimate.

COMMISSIONER NOTTINGHAM: And you further stated that approximately 2,000 tons of coal are lost each day if you look at the traffic volume?

MR. FOX: And the math there was clearly 70 loaded coal trains a day between BNSF and UP, assume an average of 120 cars a train. You do that math out at the 500 pounds and up to 2,000 tons of coal are lost on the

joint line and other rail lines every day.

COMMISSIONER NOTTINGHAM: And we saw some statement in the -- I forget which panel has mentioned this that $30 a ton is sort of a typical or not unusual rate for delivered ton of coal? Do I see that correct? I know that can vary.

MR. FOX: That was delivered cost. Freight, plus the cost of the coal.

COMMISSIONER NOTTINGHAM: Okay, and Ms. Rinn, thank you. You helped us by reminding us that one of the concerns here is to make sure that shippers get all the coal that they pay for, if I paraphrase what you said.

MS. RINN: Yes.

COMMISSIONER NOTTINGHAM: It seems to me we've got a lot of -- and also, you helped us understand that the coal was, of course, paid by the shipper based on the volume and weight at the beginning of the journey, at the mine. So basically we now

know and I guess people have known for a long time that shippers are not getting a significant amount of the coal that they paid for.

Have the railroads or either of the two railroads here before us today taken measures to reach out and communicate with customers to try to offer rebates or refunds or credits or some other -- if you factor, if it's a 365 day a year operation based on my understanding of the Powder River Basin, 2,000 tons lots a day, it starts to add up to be real money.

Can each of the railroads speak to that question?

MR. WEICHER: I don't necessarily want to refer to any particular detailed discussions, but clearly the issue, from our standpoint, the value of the coal being lost should be an incentive on its own to the customer. There's a little bit of a dynamic here. There have been issues of whether who

is really harmed more, us from our parochial standpoint by the impact on our railroad or the nuisance this causes to us.

We do not view ourselves as being responsible for the loss of the coal. We think that is the customer's responsibility and we would think that would be their own incentive to address it.

COMMISSIONER NOTTINGHAM: Now Mr. Weicher, I did take note that you did say that it is the railroad's -- and you said "our" so I wrote "the railroad's" -- responsibility to address this situation. So how do you reconcile that statement with your statement a minute ago that the railroad is not responsible for commodities that are lost during rail transportation?

MR. WEICHER: I think I should differentiate. BNSF is the primary operator of the jointly owned line, it's the party responsible for the actual implementation of maintenance, for the dispatching and for

having appropriate rules to defend the integrity of that asset, that vital national asset.

That makes us responsible if there needs to be a rule which makes it clear that the coal should be in the cars, that does not make putting the coal in the cars our responsibility. We believe that is still at core, just like for every commodity on the railroad, the shipper's responsibility.

But we're the one that has to go publish the rule, the operating rule for this asset. This is not, in our mind, a loss or damage situation or if we have a derailment with a container full of widgets some place we are responsible to the owner of that commodity for damage to the widgets. We do not view ourselves as responsible to the shipper for the coal that is being lost because it's blown off of their cars.

COMMISSIONER NOTTINGHAM: Putting aside for the moment the question of how

specifically this problem should be solved, do you agree at the end of the day if this problem persists it is ultimately the railroad's responsibility to ensure that the problem does get solved?

MR. WEICHER: It will be ultimately our responsibility to continue to pursue it to protect the railroad and our transportation for all of our customers. There are limitations, which is why we have this rule for a performance-based standard on what we can do. We ultimately cannot be responsible to put surfactants on the coal cars or have them loaded properly because we don't own the cars. We don't control the mines. We don't own the coal.

We have to promulgate the rule. This touches a bit on your enforcement question, what do we do next? And that comes down to if we do not have voluntary compliance further action will be subject to the jurisdiction of the Board, but we knew that

this is a problem that has to be solved. We have to go down that path.

So in that sense we have responsibility. We do not have control of the many aspects of this. We can't require people to ship. We have contracts, of course, for people who want to ship and we have tariffs for people who want to ship. So I guess I'm not quite sure of your question in terms of ultimate responsibility. We think this problem has to be addressed and we're going to continue to move forward to address it insofar as the railroad and what we can do and then publishing rules for the other parties of the transactions.

COMMISSIONER NOTTINGHAM: Perhaps my question was overly complex. What I meant to get at is every day, all over the country, railroads are in the business of inspecting cars and making sure that cars are safe and are compliant with railroad requirements before they head out on to the railroad right

of way and throughout the system of interstate railways. Rail cars can be pulled or moved, detailed, the whole host of different options and remedies.

Isn't that basically the railroad industry's, if not best, perhaps last course of action if a negative situation is posing risks of various sorts that we've heard about today continues to persist, that you have the option to deny service?

MR. FOX: Given our mutual interest, we do expect the customers will comply with the operating rule and I think over the last five years we clearly demonstrated a willingness to work with a variety of stakeholders along those lines. So we talked about good faith effort here. At the end of the day effort will go a long way, I believe, in terms of what our ultimate decision is.

MR. WEICHER: And to answer your question, if I may, on the theoretical, legal,

regulatory sense, yes. It is ultimately our responsibility. If we have a piece of equipment that has a faulty bearing that does not comply with national rules for safety, it is our responsibility to look for it, set the car out. If we have an overloaded car of coal or of any commodity of coal, coiled steel, we have an obligation to look for that, inspect, and do something about it. We have an obligation to comply with a variety of FAR rules for the safety of our employees, for the integrity of equipment. We have to keep track to standards. Those are all our responsibilities.

We have not threatened anybody with anything here. Back to your "or else" question. We recognize, for example, if I may, we have rules that say if a car is overloaded, we can set it out, charge the shipper for the set out and have it offloaded or whatever. Some rules, we have lots of rules for blocking and bracing that don't

necessarily we expect them to be complied with. They don't necessarily say exactly what happens if the car isn't done right, if that situation is recurring, we might publish such a rule.

Have we thought about such things here? Of course. Would that be subject to your continuing jurisdiction? Insofar as it didn't come through a contract, but it came through a common carrier publication to come back to you which is why we think that issue that rolls around in the background is premature. We think the rule itself that says the coal should be in the car is clearly reasonable where we do propose some remedy that was questionable as to common carrier shippers, you clearly have jurisdiction over that and it's in fact on the customer.

COMMISSIONER NOTTINGHAM: Mr. Weicher, or any of the panelists, this seems to me to be, broadly speaking, putting aside the technical nuances of coal dust and its

various characteristics and attributes, this is not really a new issue, is it, in its broadest terms? The AAR has an entire structure of technical committees that are comprised of my understanding of car owners and sometimes shippers and certainly railroads to deal with all kinds of challenges related to rail cars and necessary improvements and technological improvements. And at the end of the day we often get visits, I'm sure my colleagues do too about some of the participants on those technical committees who don't work for the railroads and don't always feel they have an equal vote when the votes get counted, but that's for a reason because at the end of the day, as I understand it, the railroad is ultimately responsible for what happens on the railroad and the railroad right of way and you've got to make decisions, but that's an effort to at least get input in an informed way and give people typically some time line whereby change or a new standard

will be adopted. And this has gone on for hundreds of times over the years as I understand.

What's the problem here? Why hasn't the system worked related to coal cars? I'm just having trouble. Help me understand. Every other commodity has had its cars altered, adjusted, improved, standards imposed. And then there's this mysterious coal car situation that somehow has slipped through the cracks, no pun intended. What's going on here?

MS. RINN: If I may, this is not about the car design. This is about loading practices. And both the AAR open top loading rules indicates those are minimum standards. They're not the only standard. They're the minimum standard that has to be complied with.

They also incorporate the uniform freight classification rules. I think Rule 27 that basically it says here's the principle. Shippers are responsible for loading the

freight so that it can move safely and not cause any property damage. I mean that's the principle.

It then recognizes that carriers, specific carriers, dealing with their particular circumstances, have the ability to adopt a particular rule and apparently, because let's face it, CSX and NS have been transporting substantial quantities of coal long before UP was a major coal player. They apparently haven't run into this circumstance and haven't felt a need to do it.

We were not aware that we had this problem with coal dust until the events of 2005.

COMMISSIONER NOTTINGHAM: Mr. Fox, you helped us understand a little bit more of the details of how the railroad, how your railroad actually goes in and removes the -- periodically removes the coal dust from your track bed. What do you do with it when you remove it? Where does it end up going? And

it looks like you were putting some of it back on rail cars. Can you help us understand that a little better?

MR. FOX: It's a combination of both. Oftentimes, we'll load in rail cars and take it to a disposal site. Other times, frankly, we put it on to the right of way roads well away from the track structure.

COMMISSIONER NOTTINGHAM: And you bring it to disposal sites for -- are those regulated? Are those for unsafe materials? What type of sites are those?

MR. FOX: I can't answer that. I know we take them up to North Dakota and I assume it's a facility that can handle that type of commodity.

COMMISSIONER NOTTINGHAM: But you also load, you actually sort of in an odd way, but out of necessity, it sounds like you're in the business of originating train loads of coal, it sounds like.

MR. FOX: Again, in 2008, we had a

specific effort around coal on the right of way around stream beds and water ways. That was 300 car loads of coal taken out of those water ways on the joint line and those were hauled --

COMMISSIONER NOTTINGHAM: And so when you originate coal loads, how high do you load the coal up in the rail cars? Here's a great example to understand it. Maybe a best practice. When you have a chance to control the source and the loading and everything else to do it, do you stack it above the height of the actual rail car?

MR. FOX: I can't answer that.

COMMISSIONER NOTTINGHAM: Would you be -- it would help -- Mr. Chairman, with your permission, can we ask that the record -- if it would be possible to address -- that question be addressed? I think it would be important to know whether a railroad that originates train loads of coal actually has a practice of stacking the coal above the height

of the rail car, if they have another practice that seems to possibly work better to reduce the release of coal.

MR. WEICHER: We're certainly looking into what happened with these -- this is a somewhat unusual situation for us. We have no mines and we buy no coal. So we're not in the business. But we will follow up with that.

If I could, Commissioner Nottingham, briefly on your prior question --

COMMISSIONER NOTTINGHAM: Before we leave that completely and I don't want to pretend to be an expert on all the dynamics of rail cars and coal heights, but I'm guessing when your maintenance people, your professionals were asked -- were told that their job was to get rid of this coal and put it in rail cars, that they probably didn't fill the rail cars up above the height of the rail cars themselves with coal. Because if your job is to actually get the coal off the

railroad right away and make sure it doesn't blow away, you probably don't load it above the rim of the rail car. But I look forward to the record getting clarified there. It does kind of beg the obvious question why do you load rail cars above, with a material that's known to blow away above the rim of the car?

MR. FOX: As LouAnne mentioned earlier, we are going to -- we have a pilot of some new compaction technology that will start next month on the joint line.

COMMISSIONER NOTTINGHAM: I guess I should rephrase the question. You're not actually loading the commercial, every day mine practice, I should say why do you allow your customers to load material? Because I don't think you allow your grain customers to load their grain in a way that routinely blows away or any of your merchandise or your flat screen TVs come into LA/Long Beach or your cases of wine or the beer we heard about.

MR. WEICHER: To some extent this is a product, the situation of the growing coal shipments and the nature of the loading has probably evolved from everyone's attempt to seek efficiency. Obviously, the more coal you can get in a car in a certain length of train, the more utility you can get from the expensive equipment the shipper buys, the train's crew and the locomotives can haul more coal in the train. There's a balance here. There's no question there was a lot of pressure in recent years to be as efficient as possible. Trains got longer, loads got longer.

Having said that, that doesn't eliminate the need for proper loading. And tying into that prior concept, we have now found ourselves in a unique situation in the Powder River Basin that requires great scrutiny, tighter rules on how this coal is loaded here which could be different than what's happened nationally.

The coals are different, it just came out, some different questions, so it may not be the same for NS, CSX or whatever. But here, we see this as a real problem for this source.

COMMISSIONER NOTTINGHAM: Mr. Weicher, is your client, is BNSF -- your company, are you basically -- have you adopted -- is this part of the adoption of a no spill? You used the phrase earlier for a reason, but sort of a no spill policy? Are you going to be applying this across the board to all your customers over a reasonably -- in a reasonable time period?

I guess I will say practices look, tend to look less reasonable. That doesn't mean that they're unreasonable, but they tend to look on the scale of extreme unreasonableness to extreme reasonableness, they tend to look less reasonable if they're applied to some shippers and not others who are similarly situated.

MR. WEICHER: We clearly have a policy of pursuing this compliance through the Powder River Basin. We've extended it. We have the north route. We have standards going in there. We are looking at it very closely in New Mexico.

If you mean in terms of customers, in general, for all commodities, well, you know, it's made us much more acutely aware of gosh, commodities should stay in the cars, whether it's caustic soda, chlorine, wood chips. It doesn't have to be something hazardous. Plywood things shouldn't roll off. We're smart sensitive to that. But more related to coal shippers, we are looking at it on a broad basis and as some of the slides show, the coal dust problem isn't limited to just this section of railroad.

Having said that, what makes this unique and unique for this particular stretch of railroad with its 22, 24 mines is probably the largest single concentrated source of coal

certainly in the United States, maybe in the world, and therefore by addressing this problem at its source we are really coming to grips with something unique that is very focused. But we're looking at it across our system on coal.

MS. RINN: We have certainly, as situations have come to our attention, where the loading practices are not consistent with keeping the freight in the car, we have taken action. For example, we adopted a netting requirement for wood chips. We have previously adopted, I think in the last five years, a requirement for soda ash customers to make sure that they're not leaving loose soda ash on the outside of the car, because we found that the soda ash which is a caustic was interacting and it was throwing off our signal system, so we finally said we can't have this. You need to do it.

So when we become aware of a situation that is causing us a problem, we are

prepared and they have been adopting rules that are necessary, but I think as Mr. Smith indicated for the Department of Transportation, most customers have an incentive to load the freight to stay in the car because it's their right, so they already have an economic incentive and I think that most people are trying to do the same thing.

So what we're probably dealing with are the exceptions, not the norms, but there was just a different practice for coal and for whatever reason we are learning that the consequences are much more significant than anybody assumed when at least we began moving coal out of the Powder River Basin in 1984.

COMMISSIONER NOTTINGHAM: Mr. Chairman, I'll wind up in a second. One or two more questions, if I could.

Mr. Fox and maybe Mr. Weicher can help with this as well, you've described it in very detailed words the expenses and the costs

and the processes that are required to remove coal dust from the railroad right of way. How are those maintenance and they sound like increased costs. They're not the same costs you have on your southern tier line going west, east-west through Arizona, for example. The costs are somewhat unique, extra maintenance costs unique to the Powder River Basin. How are those costs recouped and accounted for as you look at your rate structure to all of your customers? Are they uniquely targeted and applied to the rates of electric utilities who ship coal? Or should grain farmers, who also share some of the same track, down track, should they be a little bit concerned that they're paying a little more because of this problem?

MR. WEICHER: We think all of our customers should be concerned about the possibility of increased costs across the whole system and affecting both service reliability and cost for other shippers.

Having said that, we don't make cost-based rates. Clearly, costs are a huge part of the regulatory structure and when we have upon occasion had a rate case even on coal before this Board, you know, the costs are very, very important to justifying those rates. But that's not where they come from. We do not have direct flow throughs or cost nexus for the maintenance on particular shipments.

Clearly, we look at costs internally when we consider rates because our goal is to have margin and to have revenue in excess of costs, not speaking now in terms of the SAC because that's -- we're business and what we're in. But there is to some extent we almost view it from our standpoint that this growing problem in the last few years has been shifting additional and anticipated costs on our company through a growing problem coming from the coal dust coming off of the cars. That is not to say that we don't fully

recognize that and we've seen this thread in some of the documentation that if we save money by not having to do excess maintenance, what should happen about that?

You have -- what happens in our contracts happens in our contracts and when the contract is in effect that's not an issue for the Board with all due respect. And of course, if it isn't in a contract, they have their remedies, as we well know, to approach the Board for the general or specific level of rates for a specific customer.

COMMISSIONER NOTTINGHAM: That's all I have for now.

CHAIRMAN ELLIOTT: Thank you very much. Do you have any more?

VICE CHAIRMAN MULVEY: Yes, a couple more questions. Again, I said I'm interested in this IDV.2 issue. And why doesn't the railroad release to the shippers the computer code that produces these values so that they can verify, they can see how it's

being calculated?

There's also some concern that maybe the IDV.2 values don't really correspond very well to the amount of coal dust in the ballast when you see the stuff blowing off the tops, but it may blow past the ballast and be doing more harm to the countryside than to the ballast per se. So how do we know that there's a correspondence between the amounts coming off the trains as measured by these receptors which I believe, by the way, are not nearly -- the receptors tend to be some number of feet away from the rights of way, so again, you would expect to get a heck of a lot more of the coal dust not fouling the ballast, but rather be fouling the environment near the ballast?

And I guess the final part of that is do you have any idea what percentage of the coal dust -- you mentioned 500 pounds of day gets blown off a car, 500 pounds per car, rather. How much of that goes into the

ballast and how much of that goes into the general environment? Is there any way of calculating that?

MR. WEICHER: Do you want to start with that?

MR. FOX: I've seen no calculations of that percentage.

VICE CHAIRMAN MULVEY: The calculation that is being done by the receptors, is a receptor that is 60 feet from the right of way?

MR. FOX: It is off the track, yes.

VICE CHAIRMAN MULVEY: So we don't know whether or not it's measuring what's off the track or what's going down to the ballast. We know that it's not 500 pounds a day per car going into the ballast that's being blown off, but that's dispersed all over the place.

MR. WEICHER: So it may be on those farms.

VICE CHAIRMAN MULVEY: May be on

those farms.

MR. FOX: Five hundred pounds was calculated using a different method than the IDV.

VICE CHAIRMAN MULVEY: Oh, it was.

MR. FOX: IDV is a point measuring device at one location.

VICE CHAIRMAN MULVEY: And so that does not measure at all the amount.

MR. FOX: It does tell you the train dust.

VICE CHAIRMAN MULVEY: Okay.

MR. WEICHER: Your question about the computer code. We don't own the code. This is sort of like -- we don't own Minitab. We don't own Excel.

Having said that, data can be available, but there is an issue of where we hired someone who had a proprietary system two or three years before this litigation and we don't have the right to necessarily give that system to somebody else. It's something we

bought.

VICE CHAIRMAN MULVEY: It's proprietary?

MR. WEICHER: Yes, it's proprietary.

VICE CHAIRMAN MULVEY: You showed a slide of China using surfactant and I assume that's nationwide in all of their mines perhaps. But what do the Canadians do? We have the two western railroads, the CN and CP. Do they have any processes in place and what about the short lines? I know the eastern railroads also had this problem, but to a lesser extent because of the nature of the dust, but has anybody else taken the tariff route that BN is proposing?

MR. FOX: The Canadian Pacific does treat their coal. The Norfolk Southern treats some of their metallurgical coal as well and there's coal that's being treated in the Powder River Basin, as we speak, for select customers.

VICE CHAIRMAN MULVEY: But no one else has taken the tariff route that BNSF has?

MR. WEICHER: Well, I believe there's some form of CP item, but frankly, I don't think we -- we don't necessarily know the commercial relationship between that railroad and that customer. Two thirds of our tonnage is actually -- actually more than two thirds, moving through contracts that will be reflecting this by the end of next year, but that won't necessarily show up in a tariff. It will presumably, without getting into details of this, it's kind of mirrored what we're trying to do here in some respects, and similarly, I don't think we can speak authoritatively to how the other railroads have implemented per se.

If we had a precedence specifically of a rule that had been ruled on somewhere, we would show it to you.

VICE CHAIRMAN MULVEY: You also noted that the railroads' rates are based on

costs. We now have demand-based pricing, yet on the other hand there are things like the fuel surcharge issue where a cost factor was applied to the demand=based rates. The case here is one that also seems to relate to cost. And some of the shippers feel that the rates that they're paying already account for maintenance and that these maintenance costs are picked up in their rates, and this would involve a sort of double dipping or charging again for the same service. The cost of maintaining the track is already in the rate. Now there's going to be an additional cost on top of that. How do you respond to that charge that this could become something of a profit center as they might have also done with the fuel surcharges?

MR. WEICHER: We have a relentless drive in our company to improve productivity, lower costs, improve efficiency. That ultimately gets reflected in the nature of the business we're in and our market based rates.

It does not mean that there is some sort of automatic pass through.

If you take the flip of what you said, if, for example, hypothetically, we tried to impose some sort of charge to apply a surfactant, there's packed into that question, into that hypothetical, a couple of things. We can't do that. We don't have the right to. It's not our coal and so forth. But trying to mirror your surcharge question, were we to do that, you'd have jurisdiction over that charge, how ever it fit into rates or not. You have jurisdiction over the basic rates we publish if someone thinks they're too high. We don't think we owe a customer something for clarifying and confirming a duty to keep a commodity in the car, including if the fact that that were to be done were to reduce our costs.

VICE CHAIRMAN MULVEY: One last question. Some of the shippers have pointed out that spraying surfactant leaves a sticky

residue and since shippers are the ones who own the cars, they're concerned that that sticky residue, et cetera, could ultimately do damage to the cars.

We talked about what the railroads are willing to trade off in terms of safe harbors and all of that, but would the railroads be willing to absorb the cost of repairs on shipper cars that might be caused by the use of surfactants to keep the coal dust down?

MR. WEICHER: We believe that the responsibility to keep the coal in the car is the shippers'. One of the reasons we have gone to a performance based, as opposed to an activity based standard is we are not mandating. We are open to if a shipper wants to say does this comply with, presumably will go that way, but we don't want either to accept that liability or to have that control over someone else's car and equipment.

We believe the tests are showing

and have shown in the experience and in other countries and other parts of the world, we know that this can be done and we think it can be done safely. Having said that it should ultimately we think be the shippers' prerogative to control that process.

VICE CHAIRMAN MULVEY: Thank you.

COMMISSIONER NOTTINGHAM: Thank you, Mr. Chairman.

Mr. Weicher, I want to make sure I understand the sort of proper alignment of responsibility and accountability here. You just said, if I heard you a minute ago in responding to Vice Chairman Mulvey's question, that the railroad, if I heard you, is not responsible for this coal dust leakage.

Help me though. When you accept a rail car onto your system and transport it, at that point you become responsible for the safe transport and for getting what the shipper has paid for delivered to the ultimate destination, are you not?

MR. WEICHER: Yes, we are.

COMMISSIONER NOTTINGHAM: And you have a very strong, and I think often reinforced by this Board in our process, the tool to protect you from unreasonable risk in that responsibility sharing because you have the right to inspect the car and refuse to put it onto your system, correct? If there's a problem with leakage or safety, for example, if a grain car shows up and the door is broken or hanging loose and grain is leaking out, your people are trained to actually take that and put it aside and refuse service, correct?

MR. WEICHER: Right, if it's not properly handled, yes.

COMMISSIONER NOTTINGHAM: And I won't even go into the whole -- all the hypotheticals regarding hazmats and of course, you will refuse, your people will refuse and understandably so to move a chemical car if it was leaking.

So putting aside what the right

solution is here, ultimately, do you agree that once the rail cars are moving along and being accepted and placed and accepted by the railroad and moving on the railroad right of way, the railroad is responsible for any leakage that occurs?

MR. WEICHER: We are not responsible for the consequences of the leakage or the leakage if a loading rule hasn't been complied with or if the equipment is defective. The relationship between the railroad and its customer and the loading entity is multi-party and is multi-faceted. We're not responsible for the supply of the equipment for coal in the vast predominance. We have some equipment we supply, but that's the nature of the industry.

A car maker makes that car to industry standards, federal FRA standards, often that have been promulgated through the AAR. We have a variety of responsibilities to inspect, to deal with equipment that is

improper and take it out.

If we are the cause of a derailment, God forbid, then we are responsible, in general, for the commodity and the damage from that derailment. Our responsibility in this situation includes, as the operator of the joint line, to have the rules in place that we think are appropriate for this unique territory and if implied in this question is it some point to properly enforce them, certainly.

I guess the resistance is that we are not quite -- I believe the legal doctrine was res ipsa loquitur, or whatever it is. The fact that we take a car and it's good at the beginning, if it's a car of widgets or chemicals or something, doesn't make us universally responsible for the effects of improper equipment or defects in the equipment. There's a multi-party relationship there. I don't want to get into finger pointing. So it's very complex.

But I think our role here is we've got a problem here and we're managing this joint line, a vital national asset, and we see this problem. And it's time to do something and it's time to say it's a big source here. Coal is coming off the top of these cars. Let's tighten up the rules.

MR. SIPE: If I understand Commissioner Nottingham's question correctly, I think what we're saying through this rule is we don't want to start down the right of way with a coal car that's going to leak.

COMMISSIONER NOTTINGHAM: Well, Mr. Sipe, that's a very worthy intention, but with all due respect, your clients and other railroads seem to have been doing this for hundreds of years, so that aspirational goal seems to be falling a little short.

MR. WEICHER: We clearly are in a process of continuous improvement and if -- we would have to acknowledge this is a problem that has grown and it wasn't recognized in the

past.

We probably share some of the blame both for not recognizing it at a given time or not acting sooner, more aggressively with our customers. 2005 was a huge wake up realizing what had happened in a dry environment and the confluence of events. And we want to move forward to address it.

MR. SIPE: And the Board has recognized in comparable situations the fact that a particular approach has not been pursued in the past, doesn't make it unreasonable when you decide that circumstances are such that it's now time to adopt this approach.

The North American Freight Car case, the Board decided in 2007, specifically stood for that proposition and others as well.

The way the world is today, BNSF has come to a judgment that we no longer want to start down the road with these coal cars that are going to have dust blowing out of

them.

COMMISSIONER NOTTINGHAM: And I certainly don't quarrel with that statement. Basically, from the vantage point of this one solitary Commissioner, I believe that the railroad industry has all the tools it needs to solve this problem and I certainly hope you do it in the way that's collaborative, as collaborative as practicable and gives people some notice. And of course there's a lot of money involved in car design and loading techniques and relationships with coal mines that are of business significance and a relationship with utilities. But with all due respect, I think multiple parties here are breathing a lot more nuance into this situation than is necessary.

It seems to me this is a pretty simple problem to solve. Obviously some solutions will cost more than others, but the railroad industry has figured out a way to solve 99.9 percent of all the other commodity

leakage and loss problems over the years. I'm highly confident you can see to it this one gets solved and maybe I'm just missing something. This is not the proverbial rocket science.

Coal is being loaded well above the rim of rail cars in windy, bumpy terrain and surprise, surprise, some of it is blowing out and surprise, surprise, it's causing some negative externalities. And surprise, surprise, pardon my sarcasm, the railroad industry has decided that that's probably not a good thing and we should probably adopt more of a no spill policy.

I'll wind up, but Mr. Weicher, you mentioned contracts and I understand some of this is sensitive, but you did say that you would expect that in the near future, over the next year or so, if I heard you correctly, your contracts with your coal customers will, in fact, mirror the tariff that's at issue today.

What caught my attention with that is in a contract we usually see on the few occasions that we get an opportunity to see in the course of our work rail contracts, which is not too often. Terms -- but in other business transactions, contracts tend to be looked at by lawyers, especially if they're new, involving the types of contracts, involving the types of money involved here. And the terms and conditions and sanctions or penalties or consequences are usually pretty well spelled out so the parties know exactly what they're getting into, what they're being held responsible for and what the penalty, for lack of a better word, would be if they don't meet that responsibility.

With all due respect, when I read the tariff at issue here, it doesn't read like a contract, perhaps it doesn't have to. It's a tariff, not a contract. But it's rather open ended. I used the expression earlier about the "meet this standard or else" is kind

of my way of dumbing down the tariff.

Do you have any sympathy or can you understand why your customers might sort of want a clarification on what do you mean by the "or else"? Basically, this is the only -- presumably parties either don't want a contract or can't reach a contract, so they're going to do business by tariff. And there's this pretty important provision that seems to hint at possible negative ramifications to a railroad customer if they don't meet a standard, but those consequences are not explained.

MR. WEICHER: The rule doesn't say "or else".

COMMISSIONER NOTTINGHAM: It just says meet this standard, right?

MR. WEICHER: Yes, it does. And it does not say any particular remedy. There's a complex series of things going on here and there's a certain issue of who is the free rider and where.

Our contracts, without going into detail, as a general proposition, we have rules like that. We have a big rule book. Every contract we have doesn't spell out every single rule. It might hypothetically incorporate rules for a given period of time. Contracts have a term. They roll over. They are renewed. Things happen, a corporation changes, lot of people don't sign up for a blank check.

So I'm trying to describe the sort of why this will be a gradual implementation.

By the same token, we don't think there's anything unreasonable about the rule that says you'll keep the coal in the car. Okay, we stop there. We didn't say precisely what the consequence would be or whether there could be a charge some day because we recognize if we do that or publish another thing, that will be subject to your jurisdiction. We don't think the shippers

should be cavalier that we're going to ignore the rule or not pursue appropriate enforcement eventually. But depending upon what it was it will not be without oversight. Again, we're talking about the common carrier.

COMMISSIONER NOTTINGHAM: I just want to say the tariff was drafted in a way to try to avoid STB jurisdiction?

MR. WEICHER: Absolutely not. The tariff was drafted in a way to try to encourage where some of this discussion started at the beginning of the morning, with voluntary cooperation, with cooperative cooperation, and to parallel our efforts in our contracts to negotiate and implement appropriate phases and timing and implementation.

We know the Board has jurisdiction over the rule and we know the Board will have jurisdiction over enforcement mechanisms that we may implement or pursue or publish as this goes forward. We fully respect that.

As to the common carrier shippers, as distinguished from the contract shippers, of course, I don't think it's right. It's premature. We haven't threatened anybody with anything. We have said it's time to act. It's time to get a standard. It's time to have a rule that the coal stays in the car. The rule could say all of the coal. It doesn't. It leaves leeway to this measuring process to get to a reasonable element of compliance as quickly as we can.

COMMISSIONER NOTTINGHAM: So your customers, in looking at the tariff provision, have several interpretations they can arrive at, that this is just an aspirational statement of an aspiration objective that has no teeth to it whatsoever and can be ignored for all intents and purposes. That's not really consistent with the spirit of the testimony.

You said frequently today, all of you, that this is a problem that should not be

ignored and can't be ignored. Or they could surmise that the railroad will either raise rates to address this problem or charge some type of penalty or refuse service. Is that basically the menu --

MR. WEICHER: I don't want to leave that implication. This is an operating rule. This is a serious rule. We expect it to be complied with and we will have to enforce it in due course.

COMMISSIONER NOTTINGHAM: With serious consequences, correct?

MR. WEICHER: Yes. But that's not going to happen tomorrow. We haven't threatened anybody with a charge. I hate to say this, we don't want the money. We don't want to have to treat the coal cars. We don't want a surcharge for it. We don't want higher rates for it. We want an efficient, reliable plan that operates with the coal staying in the cars. And that is our goal and that is what we will continue to pursue.

If voluntary compliance doesn't evolve, if, for example, this rule were not allowed to go into effect, we think the STB would share the responsibility to some extent for not addressing this problem. That's not intended to be a challenge. That's just the reality. We take the responsibility for enforcing it and for your oversight of when enforcement eventually comes.

But having said that, operating rules do need to be enforced. This doesn't now have the force and effect of federal law that an FRA rule for a grab bar or a wheel-bearing standard. It's an operating rule being mirrored in a common carrier tariff rule that the coal should stay in the cars. And we're committed to that and we're dedicated to that. It's not about the money.

MS. RINN: If I may, it's the sort of rule that you need to have nearly universal compliance with, but it's also something where, I think, Mr. Weicher has indicated

earlier this is an evolving situation. We're in a transitional mode. And it is sometimes valuable to begin with here is a standard of conduct we need you to -- a behavior, we need you to partake in. And you educate and you encourage with the idea that you will lead to a rule that becomes mandatory. And during that period of time as you see compliance, voluntary compliance or lack of voluntary compliance, you can then gauge and design, let us say the incentive mechanism, whether you're going to use an encouragement, whether you're going to be doing a discouragement, based on what the response is. And sometimes it's just -- it's better to wait and get more information so that you can adjust that to what the voluntary compliance is.

So I can certainly understand that if I were a shipper, that they would like to have the consequences spelled out much more clearly in black and white. Looking at it from the point of view as somebody who advises

my clients on either in a contract or a common carrier, how do you get a customer to change their behavior in a certain way? There are times when patience and a dialogue are helpful in coming up with what is the best solution.

So while I certainly did not consult with my colleagues in Fort Worth about how they did it, what they did made sense to me. I could understand the logic of it. But I can also understand the logic of others looking at it and saying well, if you mean it why don't you say what the consequences are?

I think it underscores the fact that we recognize we're in a symbiotic relationship with our customers where we need to have a collaborative dialogue to get us to where we want to be.

COMMISSIONER NOTTINGHAM: Ms. Rinn, and I'll wrap up, I recognize we're not talking today about a tariff that was created by your railroad, so maybe you're a better person to ask about this, slightly less

partial. Is this type of tariff, in your view, a preferred alternative to sending a letter, a polite letter to all your coal customers that on X date in the future, if there's not an industry collaboratively agreed-upon solution, the railroad will have no alternative but to begin taking protective actions that could include and then listing, include not loading, not allowing rail cars loaded above the rim of the car, requiring all loads, all the solutions, blunt as some might be, that we've heard about today, but we haven't heard much actually about not, arguably, these rail cars could be looked at as being overloaded since they're routinely spilling coal, just sort of stop the overloading by not letting it get above the rim.

Would that be another way to get at this? Do you see this tariff as sort of an alternative to sending out that letter which I realize would not always be received well by

customers either, but at some point, the railroad is responsible for what happens on railroad right of way and needs to protect itself and the one tool that I think you have that's pretty clear is you don't have to accept overloaded cars that are spilling stuff.

MS. RINN: That is correct. And one example we cited on another safety rule that we conducted, we found that we were having a lot of derailments because the axles were failing on these cars because not only do they carry a lot of freight, they put more miles on than any other population of cars.

After we investigated those incidents and what we thought was leading to it, we identified requirements in terms of inspection, and requiring that new components be installed as opposed to just a recycled component. And we basically engaged in education by telling our customers this is what we were seeing and that we were going

that way.

We then published what we considered to be what we said were guidelines. We are recommending that you follow these practices. And we indicated that after a certain period of time, we expected to adopt that and make that a mandatory rule.

Well, we did transition that over a matter of years during that period of time. We basically got compliance with it and I believe that we ended up not having to say "or else" in the rule because to be quite frank, if there is, in fact, a derailment now and it goes to failure of a component because they didn't follow what we have in the rules, we're going to say here's the bill. And so we didn't need to get there.

Perhaps this will -- I don't know that we could get into that situation, but it's one of those things where you kind of, you learn and you work with it over time. But if, in fact, we'll see as we develop the

information and figure out how we want to do it, if our customers tell us we want to have an "or else", we'll come up with an "or else."

COMMISSIONER NOTTINGHAM: Ms. Rinn, with all due respect, you're not really here today saying that the best solution to this is to come up with a risk-sharing proposal or rule that helps to assign liability once a train wreck has happened and an accident has happened. Surely we can do a little better than that.

MS. RINN: No, that was a somewhat similar situation, but not analogous, no. We are not looking for that. As I said, we are into prevention. We want the coal to stay in the car. And there are mechanisms that encourage and there are mechanisms that discourage and you may need to do a combination. So that's why we are interested as we get a better idea, do we do a performance-based standard? Do we do an activity-based standard?

We are going to be in a dialogue with our customers about what they think. Now we're not going to take necessarily a vote, but we're going to find out what they believe would work and what their concerns are as we're trying to develop this. But if we can get there by voluntary compliance, we're all for that because we think that that's part of a collaborative relationship and we hate to be in a situation where you have to dictate, but sometimes that's what you have to do.

COMMISSIONER NOTTINGHAM: Thank you, I have no further questions for this panel.

CHAIRMAN ELLIOTT: Thank you very much. We appreciate your time and we'll see BNSF in a little while.

(Pause.)

Why don't we, since this has gone a little longer than we thought, why don't we take a little break and come back around 12:30. That will give people a chance to get

situated and do what they need to do.

All right, thank you.

(Whereupon, at 12:05 p.m., the hearing was recessed, to reconvene at 12:30 p.m.)

A F T E R N O O N S E S S I O N

12:37 P.M.

CHAIRMAN ELLIOTT: Welcome back, everyone. We will continue the hearing with

the third panel, the shipper interests. And we'll start with Arkansas Electric Cooperative Corporation. You have 30 minutes and you will have then ten minutes on rebuttal.

MR. VON SALZEN: Thank you very much, Mr. Chairman. I'm Eric Von Salzen on behalf of Arkansas Electric Cooperative Corporation. With me is Steve Sharp, AECC's principal engineer of fuels and civil and we will divide our 30 minutes.

On behalf of AECC, and I'm sure I expressed the sentiments of the other shipper parties as well, we thank the Board for commencing this proceeding to consider the reasonableness of the BNSF's coal dust tariff. As a result of this proceeding, a great deal of information has come to light about maintenance and operating practices on these lines and the extent that fugitive coal plays a role in those matters.

What we have learned leads to the conclusion that BNSF's coal dust tariff is not

merely unnecessary, it would, in fact, be counterproductive. It would increase the risk of disruption to service on the joint line, not reduce it.

In this argument, I intend to address the following three issues. Can I be heard?

CHAIRMAN ELLIOTT: You're fine.

MR. VON SALZEN: Okay, first, the evidence shows that airborne coal dust which is what is measured by BNSF's track monitors is not principally what fouls the ballast. The fugitive coal that falls onto the track is substantially caused by the railroad's own operating practices and maintenance practices. Spraying toppers on coal cars won't affect that process.

Second, I intend to discuss briefly the two derailments in 2005 which BNSF repeatedly holds up as justification for its coal dust tariff, but which were not caused by coal dust.

Third, coal dust is not what threatens the safe and reliable operation of the joint line. What does threaten the safe and reliable operation of the joint line is inadequate maintenance. If the Board approves the coal dust tariff that will lead the BNSF to reduce what it considers excessive maintenance efforts on the joint line. That's what threatens repetition of the events of 2005, not the existence of coal dust.

Starting then first with the issue of airborne coal dust, BNSF says that it can't tell in advance whether a particular coal train will violate its coal dust standards or not. Coal dust deposition, BNSF claims, depends on complex relationships among a number of factors. So rather than trying to figure out what causes some trains to generate excessive dust while others don't, BNSF wants to impose requirements that in effect would compel all shippers to spray surfactants on all coal cars.

Now that's a red flag right there. If BNSF can't figure out what it is about a particular train that will cause an excessive coal dust reading in the monitoring system, then perhaps BNSF doesn't really have an adequate understanding of what the problem is that it's trying to address.

I'd like to quote the great Justice Frankfurter who said "putting the wrong question is not likely to beget right answers, even in law." And I would add, even in railroads.

BNSF focuses its attention on airborne dust and what it measures is dust that remains airborne when it reaches the monitor 60 feet away from the train track. Based on a detailed analysis of BNSF's own dust fall data, AECC has shown that such airborne dust accounts only for on the order of 10 percent of the coal that actually lands on the ballast. You didn't hear that this morning, but it's in the record.

Where does the rest of the coal dust that lands on the ballast come from? During the early stages of this proceeding, BNSF's witnesses acknowledged that the deposition of coal dust is particularly found on bridges and switches. But BNSF has scrupulously avoided any consideration of the reasons why. Fugitive coal deposition would follow the pattern that its own witnesses had observed. And I believe they mentioned it this morning.

Thanks to the analysis that AECC has provided in this case based on BNSF's own evidence, we now know a lot more about what causes fugitive coal to be deposited under the joint line track in the pattern BNSF's witnesses have described. We know that to a substantial extent fugitive coal that accumulates on switches and bridges isn't the airborne dust that's picked up by the track side monitors 60 feet from the track. Rather much of it is coal that is shaken out of the

cars by vibration as the train passes over rough track or over track where the modulus, the stiffness of the track, changes. That's one reason why you find a lot of coal dust and coal at switches and bridges, because that's where vibrations arise from changes in track modulus as the track goes on and off the bridge or over a switch. And BNSF has not taken adequate steps to mitigate the effect of such modulus changes.

AECC's evidence also shows a deposition of fugitive coal is caused, in part, by BNSF's own poor maintenance practices on switch frogs which has been documented extensively and photographic evidence supplied by the railroads. One of BNSF's own videos shows vibration as each car passes over a switch with minimal other emissions from that train.

AECC has documented for the Board the fact that BNSF's own dust fall monitors, and these are the dust fall monitors, not the

ones that are at mile post 90.2, I think. These are the ones that actually measure the dust as it falls on to the ground. They show much higher accumulations of coal dust on the descending sides of big sags. By big sags, we mean sustained and pronounced descent followed by a pronounced ascent. These are typically places where the line makes a perpendicular crossing of a valley.

The evidence documents an apparent operating practice of running trains fast down the descending side of big sags. One of the videos BNSF cites as an example of high coal dust emissions, in fact, shows a train running down the descending side of a big sag at 50 miles an hour. Even the new table of coal dust accumulation, which is in BNSF's rebuttal, shows that much more coal accumulates on the descending sides of big sags than on the ascending sides of the same big sags and elsewhere.

Running trains down the descending

side of big sags at high speeds generates much of the fugitive coal that is at issue in this case. The same topographic features that create the opposing slopes of the big sags also tend to move water to the low point. In other words, if you're crossing a valley, you tend to find water at the bottom of the valley. And where you find the water, you tend to find the bridges.

On the joint line, AECC's evidence has highlighted how the bridges that BNSF identifies as focal points of fugitive coal accumulation are primarily those near the bottoms of big sags. So in addition to high downhill operating speeds, and the resulting amplification of modulus changes at the bridge, AEC has also identified so-called slack action as an apparent causal factor in the deposition of fugitive coal on bridges.

A single PRB coal train can easily have 19,000 or more tons of coal in rail cars between the locomotives at the head end and

the DPU at the trailing end. At the bottom of the big sag, the train is basically transitioning between a breaking mode to a pulling mode, to move the train up the following ascent. During this transition, an individual car can move freely for a short distance until it imparts an accelerating motion to the next car in the train. This process of repeated shock wave propagates through the train.

AECC has identified in the record a BNSF video that shows a mild slack action incident as well as statements from BNSF's own experts to the effect that slack action redistributes the coal within a rail car and photographic evidence that appears to show clumps of coal, not airborne coal dust, clumps of coal spilled out of a rail car on a bridge.

The evidence indicates that slack action is a factor in at least some of the deposition of fugitive coal within BNSF's jurisdiction.

The evidence identified by AECC in this area, and I've only summarized a small portion of it, but I hope to hit the highlights, the evidence shows (1) most of the fugitive coal on the roadbed results from processes other than the aerial suspension of coal dust measured by BNSF's monitoring system. Only on the order of 10 percent of the coal dust that lands on the ballast comes from the airborne coal dust.

Second, most of the fugitive coal deposited on the track is the result of actions largely or entirely under the control of BNSF as the operator of the line and as the party responsible for maintaining the line, maintaining the switch frogs, maintaining the areas of modulus change, training the crews regarding high-speed operation down descending slopes, and various other methods to minimize slack action.

BNSF is trying to hold shippers responsible for actions and circumstances BNSF itself

controls.

Third, these actions and circumstances would undermine the effectiveness of chemical toppers even if they were applied. BNSF's own evidence shows that high operating speeds and the redistribution of coal in the car can compromise significantly the effectiveness of chemical surfactants. It's not what the toppers are designed to do. They're not designed to hold clumps of coal from being vibrated out of the car by a train that's going 50 miles an hour down a slope and then its slack action as it goes up. The surfactants are intended to keep dust from drifting off.

BNSF is focusing on the wrong issue. Airborne coal dust is not what fouls the ballast. BNSF's tariff doesn't address the coal that falls onto the ballast and that it therefore cannot significantly reduce coal depositions.

Secondly, I'd like to turn briefly

to the 2005 derailments which BNSF cites as a justification for its tariff. BNSF, throughout this lengthy proceeding, has presented no real proof that coal dust caused the derailments. They repeatedly said so in conclusory statements over and over again. Of course, coal dust caused the derailment, but they provided no analysis to how those accidents occurred and how coal dust supposedly contributed to them happening.

AECC has presented evidence. First, we presented the evidence of Douglas DeBerg, an independent railroad transportation consultant with over 40 years' experience in track construction and maintenance, who inspected the derailment sites and reviewed relevant documents produced in discovery. He concluded that coal dust did not cause the derailments. Poor maintenance and inspection practices by BNSF caused them. He describes his reasoning in detail.

We presented another witness,

Michael Nelson, who provided additional support insights into the causes of the derailment, based on the analysis of documents produced by BNSF and UP in discovery. He found that in 2003, UP learned that BNSF had been deferring maintenance on the joint line. UP encouraged, I choose my word carefully, BNSF to change its practices. BNSF did increase maintenance in 2004, but not enough to prevent the derailments, when several years of drought in the area -- we heard about that this morning -- ended with the return of more normal precipitation in the spring of 2005.

Mr. Nelson examined records of communications between BNSF, train dispatchers, and train crews at the time of the derailments. They're classified highly confidential and besides they use a lot of salty language, so I'm not going to quote them for you, but in essence, what they show, and they are part of the record in this case, is that rough track had been reported at the

location where the UP train was later to derail. The crew was sent to fix the condition. They reported it had been fixed. The site was tested with a helper locomotive and then the first train over that stretch over that track derailed.

As Mr. Nelson said, under these circumstances it is difficult to imagine how a rational person could ascribe this derailment of coal dust rather than inadequate maintenance practices. Whatever the original source of the rough track may have been, BNSF had forewarning of the problem and ample opportunity to remedy it before the passage of the UP train.

At the other site, Mr. Nelson found that it had been scheduled for undercutting in 2004, but this was not done. As Mr. Nelson said, as is the case with the UP derailment, BNSF knew in advance there was a problem. Its references to coal dust did not alter the fact that it failed to perform

maintenance it knew was needed.

There's a lot more evidence like this in the record, but I want to focus on evidence from BNSF about where coal dust gets deposited on the track. Because although BNSF's rhetoric would lead you to think that the entire joint line is covered with coal dust, in fact, their evidence shows that much more coal dust is deposited in certain locations than in others. BNSF's own data, including the dust bowl jars and the CRA assessment that was presented in rebuttal, show that the coal dust accumulations on the downhill sides of big sags are much higher than they are on the uphill sides. This is confirmed in BNSF's final evidence in this subject of chart of dust bowl concentrations on page 4 of Mr. Emmett's rebuttal verified statement which I commend to your attention.

This is significant because each derailment occurred on the uphill side of a big sag. How could coal dust be the cause of

the derailments if the derailments occurred where coal dust accumulations are near or at their lowest level?

Before the derailments BNSF was already beginning to develop plans to impose dust suppression obligations on PRB coal shippers. When the derailments occurred, it is apparent that BNSF decided to use those derailments to strengthen its rhetoric against coal dust and obscure the fact that BNSF had deferred maintenance to the point the only thing keeping substantial portions of the joint line infrastructure stable was a lengthy drought in eastern Wyoming which ended in the spring of 2005. And when rainfall returned to near normal levels, the derailments happened.

The third point I want to stress is that coal dust is not the problem. Inadequate maintenance is the potential problem. For the last five years we have not had a derailment on the joint line because BNSF picked up the pace on maintenance of that

line, so we have not had a derailment so far. But BNSF desperately wants to cut back on its maintenance expenses, failing to recognize -- and we saw these statistics from DOT this morning -- this is the highest density rail line in this country and perhaps in the world.

And it has grown at a phenomenal rate. From 1984, 76 million tons to 2008, 375 million tons of traffic on that line. A huge volume of traffic. A three and four tracked line -- there's a train that goes by I think every 12 minutes. It's an incredible growth of traffic. And of course, with that level of traffic you need a high level of maintenance effort because it's the traffic over the line that makes the rails wear out, ties wear out and particularly, it stresses the ballast, causes ballast to break down and requires undercutting track surfacing and so forth.

One of the most striking things about the testimony, and I think this is in BNSF reply testimony, is to read the testimony

of Mr. Slogett, General Director of Maintenance at BNSF; and Mr. Smith, General Superintendent of Transportation for the central region, who talk about the fact that they are just barely now keeping up with the maintenance requirements on this line. They're talking about having 14 months of work to do in only 7 to 10 months of working season to do it in. They're talking about inspectors being 40 percent overtime at times.

BNSF is barely keeping up with the maintenance demands on this line and they desperately want to be relieved of those requirements that come with the blessings of all of the revenues that they get from all of the traffic. And they think that by getting this Board to approve their coal dust tariff they'll be able to save tens of millions of dollars in maintenance efforts every year.

If they do that, it's what they did prior to 2003, and we know where that resulted in 2005. Coal dust is not the

problem. Maintenance is the problem. The last thing in the world for this Board to do is to encourage BNSF to believe that they can go back to the bad old days and cut back on their maintenance efforts.

Thank you. Mr. Sharp will now address the Board.

MR. SHARP: Thank you. I'd like to follow on from Mr. Von Salzen's last point and respond to BNSF's assertion that coal shippers must be forced by BNSF and its tariff to act responsibly with respect to coal dust.

The fact is that PRB coal shippers have made tremendous investments to enhance the efficiency of coal transportation, such as purchasing aluminum car fleets and constructing longer unloading facilities at our power plants to support longer trains.

I think even BNSF acknowledges that coal shippers have improved the maintenance of coal cars which reduces coal lost through the sides and bottoms of those

cars. We've adopted the profiling of the top of the coal surface as recommended by BNSF and as it's been revised and certainly may be revised again, we are happy to work with the mines and try to accommodate that and accomplish what coal dust reductions may come from that.

Many shippers have changed over to the use of larger coal sizes which is also believed to reduce fugitive coal dust. From Day 1 as a coal user, AECC has willingly invested substantial resources to improve productivity and lower the railroads' overall cost of transporting the coal we use. But we and other coal shippers oppose the BNSF tariff for two reasons. First, as discussed by Mr. Von Salzen, coal shippers do not want to provide BNSF an excuse to cut back on the maintenance of the joint line. We believe that's where the real risk of service disruption lies.

Second, coal shippers don't want

to waste money, either ours or anyone else's. We do not believe that spraying toppers on coal cars is the prudent way to address the coal dust issue.

We urge the Board to reaffirm the principle that minimizing overall costs is the central objective and reaffirm BNSF's statutory duty to maintain the performance capabilities of its infrastructure. If the Board does so, this will provide a sound framework within which shippers and carriers can work cooperatively towards solutions that minimize total resource costs.

AECC, like other coal shippers, is ready to participate in reasonable efforts to improve the efficiency and reliability of the joint line, including reducing fugitive coal dust. Coal shippers have does so already as I've mentioned. It is possible that cost-effective measures can be developed to reduce fugitive coal dust, including changes in operating and maintenance practices of BNSF

and UP, and through identifying what causes some trains to generate a lot of airborne coal dust.

AECC favors cooperative and voluntary action by railroads and shippers towards that end. But the BNSF coal dust tariff takes this down a dead-end road. Spraying surfactants on tops of coal cars will not prevent coal dust from being deposited on the track, but it will encourage BNSF to do what it desperately wants to do, cut down on the expense of maintaining this extremely high-density rail line. The continuation of safe and reliable rail service on the joint line would be fostered by disapproving BNSF's coal dust tariff. It would also be a good first step towards starting a cooperative process among coal shippers, mines, and railroads to improve the maintenance of the joint line.

Thank you.

MR. VON SALZEN: We are done. I

guess we are the first party to use less than our allotted time.

CHAIRMAN ELLIOTT: I will congratulate you. That might be an all time first. Thank you very much for your presentation.

And now we will have a presentation from the Western Coal Traffic League. And you have ten minutes.

MR. LeSEUR: Thank you, Mr. Chairman. My name is John LeSeur. I'm appearing here today on behalf of the Western Coal Traffic League. The Coal League is an organization of utilities that ship coal mined west of Mississippi River. Currently the Coal League membership transports approximately 140 million tons of coal annually.

The Coal League appears here in support of AECC's request that the Board find BNSF's proposed coal dust standards constitute an unreasonable practice. The Coal League, along with a group called the Concerned

Captive Coal Shippers, has submitted extensive evidence in support of a finding by this Board that the tariff is unreasonable.

I'm going to refer to the filing jointly made by the Coal League and the Concerned Captive Coal Shippers as the Coal Shippers' filings since that's the terminology that is used to describe ourselves in our filings.

One of the points that BN made repeatedly in its written comments to the Board was the proposed IDV standards are supported by sound science. And Coal Shippers put in substantial evidence supported by a number of experts demonstrating that the proposed coal dust standards are not supported by sound science. And what I'd like to do in the time allotted to me today is to hit some of the high points in our testimony.

First of all, what we're talking about here are two BNSF tariff items and they both provide, effective October 1, 2010, coal

shippers transporting PRB coal trains over the joint line or the Black Hills line need to meet specified IDV.2 standards, the cap on the joint line is 300 IDV units. And the cap on the Black Hills subdivision is 245 units.

Returning to our theme of sound science, we believe the first principle of sound science is that if a party is going to be making studies and proposing standards that the folks that are impacted by that should be able to replicate the study procedures, replicate the study results, understand how the calculations are made from a number of purposes. One, to see whether they are any good, the second, possibly to restate them. And the BN's calculations all reside in a computer program put together by one of its consultants. The IDV standard is one that BN made up. It doesn't exist anywhere except on this computer program.

In discovery, in this case, Coal Shippers asked BN to produce the program. BN

refused to do it. Without the program, we can't replicate what BN is doing. We can't understand it. Our experts can't critique it. We certainly can't restate it. As one of our experts noted, what we're dealing with here is a classic black box. And we submit that in a case involving potentially expenditure of hundreds of millions of dollars in compliance costs, it's unreasonable for BN to refuse to turn the program over and certainly if we don't have it, we can't share it with you. And the Board also can't figure out what this IDV standard is all about.

We would point out an analogous context in cases where computer programs are used to generate evidence. The Board has consistently ruled that if a computer program was introduced, the other side needs to turn over the program so that opposing sides can review the data and review the answers.

Now the next sound science point I'd like to hit on is a basic point. That is,

sound science requires use of study data suitable for its intended purpose. The principle input data in BNSF's Black Box IDV calculations is E Sampler data. The E Samplers are located a mile point 90.7 on the joint line and mile post 558 on the Black Hills subdivision.

The asserted purpose, according to BN of the E Sampler data is to measure accurately coal dust deposited in the ballast by each passing train. And as our evidence demonstrates, the E Sampler data is simply not suitable for this purpose for three principle reasons. First, the E Samplers are located at a minimum 60 feet from passing trains. They're not measuring coal dust getting deposited in the ballast.

Secondly, the E Samplers, as they're set up, measure all particulates in the air when the air is being sampled. It could be dirt. It could be diesel soot. It could be bugs. It could be other

particulates. But it's not just coal dust, if there's any coal dust there.

And third, the E Sampler output used by BNSF is not being developed correctly. The E Samplers that BNSF has purchased can measure particulate concentrations using two methods, a laser light scatter approach or a gravimetric filter approach. It's generally recognized, it's actually universally recognized by experts in the field that when you're measuring particulates using lasers, you may not get accurate results because of limitations in the technology.

On the other hand, experts in the field all recognize that if you measure particulate emissions using filters, you will get accurate answers. So for example, EPA, in most of their air monitoring, uses the filter approach. And these E Samplers, the purpose of the filter is to provide a check or reference standard to make sure the laser results are accurate. Now BNSF isn't using

the filters, claims it's not necessary to do so. BNSF has presented no studies demonstrating when they're measuring particulate emissions in the Powder River Basin that the laser methodology will produce accurate results and don't need to use filters.

Coal Shippers, on the other hand, presented extensive evidence primarily through Dr. Mark Vis, one of the nation's leading experts on coal dust emissions demonstrating it's absolutely essential if you're going to use data from one of these lasers, that you check, the data against a known reference. If you don't do it, you have no idea what you're getting out and basically, there's no way in the world to determine whether the data itself is accurate or not.

The last sound science point we'd like to make involves BNSF's so-called variability analysis. BNSF performed a number of what they called side-by-side tests where

they put two E Samplers next to each other in order to attempt to measure a common particulate emission. Sometimes they had a common air intake and basically they would have these side-by-side tests. They would develop IDVs. They're basically trying to see whether the same two machines would produce the same answers. And what they found was in most cases they weren't. They could produce wildly different answers. For example, you could have in one of these side-by-side tests, one E Sampler, when you take the output from that, run it through the IDV formula, produce an IDV to 50, you take the second parity sampler and produce an IDV that's 10 times higher. It's roughly equivalent to a police officer having two speed guns in his hand and a car going down the road, one registers the car is going 20 miles per hour, the other register is going 120 and you really don't know which one is correct.

To address these variability

results, BN attempted to run a regression of approximately 400 side-by-side pairs. And based upon this regression the BN concluded that if the IDV is 300 or higher, there's a 95 percent chance that the IDV actually being -- the train actually possesses is above 134.

The variability analysis is severely flawed. Our experts have put in a substantial amount of evidence. Our basic problems are again, you're using an IDV formula. We don't understand what ties into the regression. The data going into the IDV calculations is unsuitable. We also took a pretty close look at the data pairs BN was using and while most of this data is stamped confidential or highly confidential, our experts concluded from a statistical standpoint the vast majority of paired data that BN was using is not suitable for this purpose. There's a number of other problems with BNS regressions, our experts discuss in their testimony.

So from the Coal League's perspective focusing exclusively on the IDV standard, we submit the Board shouldn't approve it for three reasons. One, the underlying program wasn't turned over. Two, the input data going into it. It's severely flawed. And three, BNSF's variability analysis also was done in a very nonscientific manner. Thank you.

CHAIRMAN ELLIOTT: Thank you very much, Mr. LeSeur. And now we will hear from the Concerned Captive Coal Shippers.

Mr. Loftus, you have ten minutes.

MR. LOFTUS: Thank you, Mr. Chairman. My name is Michael Loftus. It's my privilege to appear this afternoon on behalf of the Concerned Captive Coal Shippers, the members of which appear on the projector before you. Each of these companies is a large consumer of coal and relies upon rail transportation to move that coal to their power plants.

I would ask you to note that several of these entities are eastern utilities and are involved in this proceeding because of their concern about the implications for their traffic if the Board were to approve the proposed tariff items at issue in this proceeding.

I intend to focus primarily on one area of the evidence and arguments submitted by the Coal Shippers and that has to do with the comparison of the costs of dealing with coal dust through spraying all PRB coal traffic as opposed to through traditional maintenance. But first, I would like to show a very brief video clip and you saw this morning a clip from BN or two that showed a lot of dust blowing off of trains on the joint line in the Powder River Basin. There you see a train that is not emitting any visible dust. This came to us in the form of production in discovery by BNSF. We submitted this along with several other clips of similar scenes in

our rebuttal evidence.

We also submitted a number of photographs that we had taken at various stages over the joint line and I'd like to just flip through those quickly to show you that although you might, based upon what you heard, think that the entire joint line is covered with black dust, as you go through these at various mile posts throughout the joint line, you see what appears to be clean ballast in otherwise good condition.

Returning to the point that I want to focus on, namely comparative costs, the Coal Shippers have developed an extensive analysis of the costs of dealing with coal dust through traditional maintenance techniques and we are talking about costs here in our estimation. This case, we believe, is largely about BNSF's efforts to shift maintenance costs on to its coal customers. The costs for spraying coal trains originated in the PRB as we have calculated them, are

multiples of BNSF's costs to deal with coal dust through maintenance procedures such as vacuuming, shoulder cleaning, and ballast undercutting. The actual numbers which are confidential, appear in Coal Shippers' rebuttal argument at page five, among other places.

From a public policy perspective, the Board should find unreasonable a tariff requirement that seeks to deal with coal dust at a significantly greater cost to shippers and to society at large, than BNSF's costs to deal with coal dust through normal maintenance activities.

Applicable Agency and Court precedent support the Board's consideration of the economic efficiency of a tariff-imposed requirement such as those at issue here.

DOT, as you know, has affirmed the principle that coal dust should be dealt with in the most cost-effective way. And it also, as I read it, accepts either maintenance or

spraying as an acceptable manner of maintaining the ballast in a safe and satisfactory condition.

Coal Shippers and BNSF have both presented calculations, but they are substantially different.

I'd like to focus first on the cost of spraying, but I'll say that as to both types of costs, the spraying costs and the maintenance costs the Coal Shippers have relied primarily on materials obtained in discovery from BNSF. BNSF, by contrast, has backed away from the materials they produced in discovery, and utilized a number of new, and we believe arbitrary, assumptions about costs that have, not surprisingly, substantially increased the amount of their cost estimates.

For the cost of spraying, Coal Shippers' expert relied on an extensive analysis of the cost of spraying coal throughout the basin that was produced by BNSF

in discovery. And that was not developed for litigation purposes. BNSF and UP have based their costs of spraying on what I would describe as guesstimates from their employees for which no support has been provided when you review their testimony.

Turning to maintenance of way costs, Coal Shippers have again relied primarily on analyses of coal dust related maintenance costs obtained from BNSF in discovery. BNSF disavows those studies and utilizes a number of new, arbitrary assumptions.

It is widely acknowledged that ballast contains other ballast contaminants such as breakdown of ballast and concrete ties, dirt, brake shoe dust, traction sand, etcetera. It was striking to me this morning that the railroad panel completed their prepared remarks without any mention of any contaminant other than coal dust. It was not until Vice Chairman Mulvey asked a question

that there was an acknowledgement that there are other contaminants in the ballast.

One of BNSF's own witnesses stated and I quote, "to assess the impact of coal dust in ballast, it is also important to know what other contaminants are present and the amount of the other contaminants." That's Van Hook reply verified statement at page 11.

Yet, BNSF has not submitted any comprehensive analysis of the amount of different contaminants in the ballast of its PRB lines, nor has BNSF analyzed the rate of accumulation of other ballast contaminants. Instead, BNSF simply assumes that all additional coal dust-related maintenance is caused solely by coal dust and that all these other contaminants don't have any contributory effect and share in the causal element.

I'd like to close by addressing briefly the precautionary principle. Now first, BNSF only introduced this concept in its rebuttal testimony. As a result, we have

not had an opportunity and there is no responsive expert testimony addressing the point.

If you review the rebuttal statement of Calt and Mitchell, a few things are very clear immediately. First, they accept as gospel virtually every single element of BNSF's evidence and reject uniformly all opposing evidence. The most critical fact that they assume is that the maintenance option is incapable of assuring safe and satisfactory ballast condition. We believe that is simply incorrect and that because maintenance is capable of maintaining a safe condition, that the Board must consider the relative cost and when it does so, it should find the standards unreasonable. Thank you.

CHAIRMAN ELLIOTT: Thank you, Mr. Loftus.

Now we'll hear from the National Coal Transportation Association. Mr. Wilcox,

you have ten minutes.

MR. WILCOX: Thank you, Mr. Chairman, Mr. Vice Chairman, Commissioner Nottingham. This hearing testimony, as was NCTA's written statement, is presented on behalf of the NCTA's Board of Directors. The Executive Director of NCTA, Mr. Tom Canter, who I think you all know, familiar with, is here at the hearing in attendance.

NCTA is a broad-based association of coal industry stakeholders based in Denver. It has 140 members and they include virtually all of the parties of record in this proceeding, including the Petitioner, AECC.

NCTA's participation in this proceeding is limited in scope and purpose which is the inclusion of facts related to the coal ballast issue and also relevant aspects of a NCTA-sponsored scientific study on coal dust suppression into the record of this proceeding.

NCTA's written submissions

describes how since 1973 NCTA has served the role of an educational organization, a facilitator of solutions of coal transportation issues, west and east. And its efforts have included all stakeholders including Class 1 railroads.

NCTA has been involved in the overall coal dust issue from the beginning when it actively worked with BNSF, UP, and NCTA members to deal with the impacts and aftermath of the joint line derailments. And also BNSF, I think in the person of Mr. Fox, first announced that BNSF was exploring coal dust suppressants on coal cars at NCTA's annual meeting in the fall of 2005.

When BNSF announced in 2006 its intention to formally adopt the performance standard requiring 85 percent of coal dust emissions from coal cars to be eliminated mostly through chemical spraying, this is the IDV 300, the beta version of the current IDV.2 standard, doubts and concerns among NCTA's

members and also BNSF's decision to stop participating actively in a joint effort with NCTA led NCTA to eventually commission an independent study of the coal dust issue by Exponent, Inc. And the study was funded by NCTA members and the final study was submitted in August 2009 entitled "Rail Car Loss and Effectiveness."

In its final form, the study scientifically evaluated the performance of a variety of dust suppressant sprays and in doing so also evaluated and analyzed the coal dust monitoring methods BNSF had employed along the joint line to enforce the standard.

NCTA produced the Exponent study to parties in the discovery phase of the proceeding and has attached key portions of it to NCTA's written statement to add to the record of this proceeding.

I'm going to highlight three basic points from the written statement. First, NCTA is, was and is, keenly aware of the

significant cost shifting, legal, and public policy issues associated with BNSF's proposed standard. And its original study scope included some of those issues, particularly the cost and benefits of various means of controlling coal dust ballast fouling.

However, as our statement explains, primarily due to budgetary constraints and because NCTA's goal was to contribute to an industry solution to the overall ballast problem, NCTA narrowly focused Exponent's efforts on some small pieces of the overall issue and that included the testing ability of the chemical sprays to contain the coal dust and critiquing BNSF's methods.

Second, based on data from field tests of a limited number of coal trains, the study did conclude that the tested suppressants, I think there were nine or ten of them that were tested did, in fact, control coal dust blowing off of coal cars with varying degrees of success. However, the

study also concluded that even if the 85 percent goal was met for a particular train test, that didn't necessarily mean that that correlated with compliance with BNSF's standard due to this IDV.2 300 standard due to monitoring problems and data deficiencies.

Third, the Exponent study identified in the second part of its mission, limited mission, which was to critique the methods BNSF was proposing to enforce compliance, its standards that Mr. LeSeur talked about. It raised numerous concerns and questions about the methods and devices BNSF was using to measure the enforcement of its proposed standard of the TSM array that they're using along mile post 90.7 and the various collecting devices.

These concerns which were put in the initial report of BNSF have been repeated and elaborated on by Dr. Vis in his verified statements submitted on behalf of WCTL and Captive Coal Shippers.

In conclusion, while necessarily limited in scope and purpose, NCTA believes that the Exponent study nevertheless does provide the Board with some relevant and useful information about the effectiveness or non-effectiveness of using chemical sprays to actually control the loss of coal dust. And it also provides the Board with a summary, well, more than that, but a discussion of the issues and concerns identified by Exponent for NCTA concerning the means by which BNSF would attempt to accurately and reliably measure and enforce its standard.

One final point in response to a statement by Vice Chairman Mulvey on the objectivity of experts, I would note that Exponent was hired at a time when this proceeding was not underway and NCTA is traditionally a non-adversarial association. And so I do believe that it's not a study prepared in anticipation of litigation, so I think it is afforded a degree of objectivity,

a little more than if it was. Thank you.

CHAIRMAN ELLIOTT: Thank you, Mr. Wilcox. You also get a gold star for beating the clock.

Now we will hear from the American Public Power Association, Edison Electric Institute, National Rural Electric Cooperative Association.

Mr. McBride, you have ten minutes.

MR. McBRIDE: Thank you, Mr. Chairman, Mr. Vice Chairman, and Board Member Nottingham. I do want to start by saying that it probably bears reminding everyone that we are the best customers of the railroads. Mr. Rose is quoted in the record as admitting that coal was their most profitable commodity. We've been accused of being dumpers, litterers, and trespassers in this record, and I think it's important from a legal standpoint to realize that our traffic is on the railroad lines by their consent. And therefore, we cannot be in legal violation under any of

those doctrines.

Board Member Nottingham, you asked a very important series of questions this morning, you wanted some commentary on how it was that the coal cars got to the point where coal was coming off or spilling from the cars. It occurred to me that you might benefit from a little bit of history here as to how this all came about.

In the 1990s, as you all know, the railroads went through a series of mergers. Some of them were not very successful from an operational standpoint. Wall Street was not happy. Wall Street put a lot of pressure on the railroad boards and CEOs to cut back on their capital expenditures. Some of the railroads resisted better than others.

BN and Mr. Krebs tried to resist, but those pressures applied to this whole industry. And at the same time the economy was booming and coal demand was increasing. And my clients, and everyone up here's

clients, wanted as much as coal as they could get, especially from the PRB because it's the clean air compliant coal of choice.

And as a result, by 2003 to 2004, as I think you all know, there were capacity constraints in the Powder River Basin. The railroads were in a very happy situation. Rates were going up. That's not the object of much of today's discussion, but they had more demand than they had supply for their transportation. Everyone wanted to move as much coal as they could move. The railroads dictated the loading requirements. The railroads even imposed a four hour rule to load a train of as many as 135 cars. If you think about it, that's not very much time. And as a result, it's not surprising that coal would be out over the tops of the cars, on the sills of the cars, over the sides of the cars.

You also heard acknowledgement on the record earlier today from BNSF that some of these cars are the railroad's cars. And

more coal, in many cases, is coming out of the bottom of the cars than out of the tops because the railroads are not doing as good a job of maintaining some of those cars as we do of ours. We have to maintain our cars according to their standards.

So we got to this situation because of a whole confluence of events. People learned from them when those derailments occurred. The loading profiles are better. You heard about that. UP is talking about mechanical suppression. BN didn't do adequate maintenance because it was moving all the coal trains that it could move. You've heard a lot of evidence about that. I don't think there's any question about it. And the FRA, in its studies of what caused those derailments, blamed inadequate welds, too wide gauge, inadequate maintenance, inadequate inspections. There's no doubt about it. That's what your sister agency concluded. I'm surprised they did not come

here and testify about them, but that's what happened.

Everybody is moving on from there, but BN is trying to blame its customers for the problems that it itself created on its own property. That's what happened.

Now, even older history which I think is terribly important for you to know, and forgive my voice, I've been ill. But I got up for this because I realize that we're reliving a little bit of history here. Thirty some years ago, the railroads tried to refuse to carry our nuclear materials. And the ICC stepped up to the plate and said you can't do that. And the 6th Circuit affirmed in the Akron-Canton case that you've seen cited in the record and agreed with the D.C. Circuit that the ICC should defer to its sister agencies including the DOT and accept the FAA-DOT positions on safety as establishing both an inner and outer limit on its safety jurisdiction. That was relying on the D.C.

Circuit's opinion in the Delta Airlines case.

Then we got to the D.C. Circuit after the railroads tried to impose special train service on us. They said we're not carrying your nuclear materials unless we can impose special train service which the D.C. Circuit noted in the decision of Conrail v. ICC. It's cited in the record at 646 F.2d at 642. And I would urge you to read both of these decisions. The first one I cited, Akron-Canton, 611 F.2d at 1162. Please read especially Conrail v. ICC, 646 F.2d at 642.

The Court of Appeals went on at great length about the law here. It noted that DOT and in that case the Nuclear Regulatory Commission, had not required special train service. It adhered to the ruling of the 6th Circuit that I've just described to you which followed an earlier D.C. Circuit rule. And it said that when DOT and NRC did not require special tariff service in that case, a presumption arises that

expenditures for safety measures not specified by those agencies are unnecessary and fail to satisfy the criteria of reasonableness. That discussion is around page 648.

It goes on. The Court held that a particular safety measure must produce benefits commensurate with its cost and be economic in order to be reasonable under the statute. Later, the Court said there was a presumption, it concluded, against special train service arising from both the DOT-NRC regulations and they believed that the Commission should have taken those regulations into account.

And the Court finally concluded that the railroads failed to present concrete evidence that safety benefits accruing from special train service would be significant enough to match its high cost. It's this case all over again.

It reminds me of a story about a wonderful old lawyer named Charlie McCarthy

who used to practice here. He was General Counsel of the TVA before then. He once told me about a farmer in Tennessee in the '30s who used to represent -- a lawyer who represented farmers in Tennessee in the '30s whose mules were being taken by Courts under the Doctrine of Replevin because they couldn't pay their loans. And one week he was in defending a farmer whose mule was going to be taken and the Judge ruled against him and in favor of the lender. And the next week he was back again representing another farmer. He made the same argument all over again and the Judge said, "Sir, weren't you in here last week making the same argument against replevin?" He said "oh, yes, sir, but that was a spotted mule case." See, in other words, any case can be distinguished slightly on its facts.

But the radioactive materials case, if you will, are the spotted mute cases. The law is under the doctrine of reasonableness under the act that you may not

uphold a railroad safety standard that FRA or DOT have not imposed on the railroads unless it's reasonable. And its benefits have to be in excess of its costs. And I put a bunch of questions into the record with my opening file and I would urge you to think about this case in this sense. If this standard that BN was proposing was a proposal in a notice and comment rulemaking proceeding, would you three be comfortable with adopting this standard and asking the Court of Appeals to uphold what you did?

We don't even know where the standard came from. You've heard a lot of evidence about that already on this panel. But you couldn't do that. You don't have the program. You don't have the data. You don't know if it's reliable. So you couldn't defend it. And I think that the special train service case that I've cited to you and the earlier Akron-Canton case stand for the proposition that you have a duty to require

the railroads to overcome a presumption against additional safety precautions when they seek to impose those kinds of costs on us. And they haven't met that burden. It is their burden. They've tried to argue in their papers, oh, that it's our burden because we're the petitioner. Well, they've asked for declaratory relief along with Arkansas Electric.

Or because we're asking that this be declared an unreasonableness practice. No, the D.C. Circuit held in Conrail v. ICC case it is their burden when they seek to impose additional precautions on us to justify those standards and they can't do it when they won't bring in the program, when they won't produce reliable data, when the data they've produced is suspect, when we don't even know what we're measuring.

So I would ask you, I would urge you to think hard about whether this is the right way to go about this, to have a

monopolist put in its tariff what the standard will be and then tell you to trust them when they're trying to shift their costs on to us. That's what they're trying to do here. It's not reasonable. It's not right. And you're the only people who stand in the way of keeping them doing that and we urge you to do that. Thank you very much, Mr. Chair.

CHAIRMAN ELLIOTT: Thank you, Mr. McBride. Thank you, panel. Now I think we'll have a few questions here. I don't know exactly how you want to answer because obviously I just encourage you not to give the same answers since you have so many clients represented here today. But it sounds like you're a little organized in your presentation.

My first question is earlier in the proceeding I was asking Mr. Weicher from BNSF if they were willing to do an activity based standard here which would be I think largely surfactants and let's say

hypothetically we found this to be unreasonable. They put in an activity based standard say a surfactant at a sufficient level and then that would be enough. And if you do that, there wouldn't be any need for enforcement because you've satisfied what's required in that instance.

Would that hypothetical appease the shippers in this instance?

MR. VON SALZEN: I'll try a shot at that.

CHAIRMAN ELLIOTT: Sure.

MR. VON SALZEN: Speaking, I think at least for my client, no, it would not, because the activity that would be mandated or would be an option is still not going to solve the problem. It's still going to be a waste of money and the practical effect of what BNSF is seeking to impose here is to require everybody to use surfactants. They say it's a performance-based standard, but the fact of the matter is the only way that anybody is

going to be able to satisfy BNSF, and they made this quite clear, if you send a train past their monitoring site and the bells and whistles go off, they're going to take you aside in the back room and tell you you've got to spray. That's how they enforce it. And so I don't see that it would make any benefit whatsoever.

CHAIRMAN ELLIOTT: In hearing your answer, I think the hypothetical would assuage you with respect to the compliance and the enforcement issues, but what you're saying is that the unreasonable part in that situation would be just the fact that spraying surfactants would not be reasonable in itself just because it just wouldn't be effective.

MR. VON SALZEN: It wouldn't be effective and also you have to recognize that according to BNSF's own data only 14 percent of the trains that pass their monitoring site are in violation of their standard, and yet they have a program here that's intended to

require all the cars on all the trains to be sprayed.

CHAIRMAN ELLIOTT: What I've struggled with here is BNSF has imposed this tariff and based on the science that I'm hearing from the shippers with respect to surfactants and whether or not coal dust is such a pernicious -- has such a pernicious effect on the ballast, what I'm concerned about is why are we here if the science is not accurate? I mean why would BNSF be doing this other than that they felt that this was a reasonable thing to do?

Is there something I'm missing here that there's a reason otherwise that they're doing this that you can surmise?

Mr. Loftus?

MR. LOFTUS: Mr. Chairman, they spent a lot of money on maintenance as well they should because they haul a tremendous amount of coal over these tracks and they make a huge amount of money in doing it. But

they'd like to stop paying so much for maintenance and they'd like to simplify their physical maintenance operations and shift those costs to the coal shippers themselves. That's why they have a very strong financial and operational motive to do it, regardless of the merits of their proposal itself.

CHAIRMAN ELLIOTT: So if I'm following your reasoning, they would be shifting the cost by requiring the surfactants to be put on and then that would decrease maintenance and that's the thought why we're here today?

MR. LOFTUS: From my perspective.

CHAIRMAN ELLIOTT: And I'm just --

MR. McBRIDE: May I respond just a little further to that?

CHAIRMAN ELLIOTT: Sure.

MR. McBRIDE: There's a principle in good regulation, seems to me, and it's applicable in good business too. And that is the person who benefits ought to be the one

who bears the cost. You've got an asymmetry here where the monopolist is trying through his tariff to impose on the customer costs that the monopolist then won't have to bear and it will benefit from.

Now let's just analogize for a minute to something the three of you, I think, in your statute are acutely aware of, PTC. Congress is imposing a requirement that the railroads put on PTC on a good bit of their networks. That's still in flux, of course, and still being argued about, but the railroads are arguing that the costs are something like ten times the benefits. They have a great incentive to either get the cost down or try to show that they're right, that the benefits don't equal the costs when they're bearing those costs.

They have no incentive here to get the costs of spraying down or otherwise control the dust, whether it's through profiling, mechanical suppression, as UP

talked about, reducing the amount of coal in the car, Board Member Nottingham, whatever it may be, because we end up bearing those costs.

You should be very concerned here that the people who are trying to benefit from this are not the people who are willing to bear the costs.

CHAIRMAN ELLIOTT: And I guess my last point on this line of questions is with respect to my first question about the hypothetical and the answer being the surfactant is the unreasonable part.

It seems to follow then that if they're using it to save on maintenance that the surfactant actually is having an effect in decreasing the maintenance. I mean it still seems like there is some reason behind what they're doing here. If they are using the surfactant, it's cutting down on what they're trying to do with the coal dust and the maintenance, that there is some reason behind that.

Do you care to respond to that? It would probably be good because it addresses what you said.

MR. VON SALZEN: It's the issue that I was trying to stress. I think when they started all of this, BNSF may very well have believed that they would get a big bang for our buck in terms of reducing maintenance expenses. But the fact of the matter is the evidence we've analyzed it as evidence from BNSF itself that most of the fugitive coal that falls onto the track and fouls the ballast isn't the airborne stuff that would be prevented by the surfactant so you end up wasting our money.

I mean the fear is, the fear on our side is BNSF may very well believe stuff that isn't true. That may be the answer to your earlier question. They may believe it, and they may cut back on their maintenance because they say oh, the coal dust is gone. Now we don't have to resurface. We don't have

to clean our ballast as often as we used to. And they're going to turn out to be wrong. Most of the coal dust, most of the fugitive coal is still going to be there. And the other contaminants which they didn't mention at all this morning, they're going to be there. And we're going to get 2005 all over.

CHAIRMAN ELLIOTT: I'm following what you're saying. The disconnect is not in the logic that you're putting forward. Your view is the disconnect is more with the science is what I'm hearing.

MR. VON SALZEN: We're all of us imperfect and BNSF is a human institution. I think they're mistaken. I don't think they're evil. I think they're mistaken, but their mistakes could lead to terrible consequences.

CHAIRMAN ELLIOTT: Just on another line of questions, with respect to the cost benefit analysis that I saw kind of in the various filings. My only concern about the cost benefit analysis was its failure to take

into consideration the pass-through constraints with respect to maintenance. Is there any reason why that wasn't taken into consideration or I know it was said you couldn't evaluate those numbers and come up with something. But is that everyone's position in this matter, that that wasn't possible?

MR. LOFTUS: If I may address it first?

CHAIRMAN ELLIOTT: Sure.

MR. LOFTUS: There are two reasons it was not included. Number one, it is not a maintenance expenditure and a maintenance cost in that traditional sense. Obviously, when you must perform maintenance on a line, it is not available for other use, or at least during the window the maintenance is being performed and so on. It has been ever thus and always will be.

And so it's just a normal operating consideration in operating a railroad.

Now there's another reason and that is that the carrier, BNSF, did not submit any comprehensive analysis of what the costs actually were. It had some very generalized plugged numbers in, but they were not well defended. And in fact, if you look at the rebuttal filing, when as part of their precautionary principal shift, they decided, they'd say it would really be hard to try and figure out how much that would cost and it would be hard to figure out how much of any given maintenance window was really attributable to the coal dust. Instead of, all the other ballast contaminants or whatever might be involved in making the -- in performing the maintenance and so on. So they themselves acknowledge that -- it's hardly clear what those quote capacity costs are.

MR. McBRIDE: Mr. Chairman, it's also the case since 2008, coal demand is down, and I believe there's excess capacity out there.

CHAIRMAN ELLIOTT: And my last question, I've heard the term cooperative effort kind of bandied about in this proceeding. Do the shippers see any benefit in some type of cooperative effort here to reach a solution and if so, if there's any suggestions, that would be nice to hear also.

MR. McBRIDE: I'll be happy to take a crack at that first, because in each of my filings I mentioned to you that there are voluntary efforts ongoing between the shippers and the carriers and the mines here. There have been several meetings. I think BNSF alluded to some of them this morning.

People have been talking to them. Some people have been talking to them. Some people have been spraying. People are making their own choices in these matters. We don't discourage those. We encourage those.

This has been a cooperative venture in the Powder River Basin, as Mr. Sharp earlier mentioned, for a long, long

time. You have the AAR committees and rules, which I think the Board Members asked about this morning, where the cars are designed in accordance with specs that people at least get to talk about, even if the railroads are the only ones that get to decide.

We load in accordance with their requirements or their dictates. We work with the mines on how things are loaded. And as I've said to you and volunteered that some people are spraying and they don't want to be interfered with in doing that. They want to help work this out.

I think that if I were in your shoes, I'd wait for a while here and keep this open and see whether any of these things that are ongoing might actually be more productive than just letting BNSF bring down the hammer on us as of October 1 or whatever and say thou shalt do it the way we want you to do it.

We all have a stake in this and I frankly think it's inappropriate for the party

that gets to publish the tariff to tell everybody else how to do it. That's why you're here.

MR. WILCOX: Let me add here. NCTA was part of a collaborative effort with its members and UP to a lesser extent. But BNSF, when the derailments occurred and the immediate aftermath, there were several committees set up, which are described in our filing, to talk about the ballast fouling issue in terms of not just spraying, but in terms of other measures that can be taken, some of the mechanical measures that have been discussed here in terms of profiling and cars and things like that. But those discussions sort of trailed off around the 2006 time frame when BNSF announced its first IDV standard which was very heavily emphasized on using suppressants. And that put, for want of a better term, a chill on the discussions and then with the amount of stakeholders, it's hard to get a consensus in the first place, so

you had NCTA members who were actively involved in the discussions about a variety of measures were not excited about specifically focusing on suppressants.

But Mr. McBride is correct. BNSF, to its credit, did participate in the Exponent study by helping set up the trains that were used in the on-road testing. They were part of that study. And testing is occurring today. So it's ongoing, but of course, NCTA would welcome a more collaborative effort to have an industry solution.

MR. LeSEUR: I would say on the part of the Western Coal Traffic League, the Coal League first got involved in this when the president of the League sent a letter to the BN and the UP, we saw this tariff coming and we said perhaps we could discuss, rather than having something rammed down our throat and encroach where both the cost and the benefits might be shared.

As I recall, we received no

response from the BN and the UP said they couldn't talk because we'd be violating anti-trust laws. So the olive branch that we extended didn't go very far.

CHAIRMAN ELLIOTT: Thank you very much.

Commissioner Nottingham?

COMMISSIONER NOTTINGHAM: Thank you, Mr. Chairman.

I guess if I could quickly go down the panel and see if we can find some common ground, something that we can all agree on and if we can't, so be it. But would each of you be willing to stipulate, based on what we've heard today and the record and the history and your and your clients' experience in this matter, can you stipulate that significant quantities of coal are being routinely spilled by the railroads and that this causes a number of negative externalities, including the fact that less than 100 percent of the coal that's paid for actually gets delivered, and other

negative things that happen including what we saw today about the organic farm and those kinds of negative externalities? Can I get a yes or no to that suggested stipulation?

MR. VON SALZEN: I'd have to say no to that suggested stipulation. I'd be happy to elaborate on that.

COMMISSIONER NOTTINGHAM: Please, briefly. Which aspect, that there are not significant quantities being spilled by the railroads or there are not significant externalities?

MR. VON SALZEN: The issue -- there's no doubt, look, let me take the organic farm, okay? Coal that leaves the Powder River Basin travels on average around 1100 miles to its destination. BNSF has been able to find one organic farmer to complain about the adverse effects of coal being blown off a coal car onto an organic farm. Now I have great sympathy for the organic farmer and the organic farmer's customers. But that is

not a significant problem.

COMMISSIONER NOTTINGHAM: Just so I'm clear, you're not prepared to stipulate that there are a range of negative externalities related to routine coal spillage off of railroad cars?

MR. VON SALZEN: The externalities are not, but coal getting into the ballast is a contaminant and it is something that costs money, railroad's money to deal with.

COMMISSIONER NOTTINGHAM: It's not a positive externality, but you're not prepared to say that it's a negative externality?

MR. VON SALZEN: It's a negative, but the question is what do you do about it?

COMMISSIONER NOTTINGHAM: So it is a negative. And then do you take issue with the stipulation I proposed about that routinely coal is being spilled out of rail cars?

MR. VON SALZEN: By various

mechanisms including actions by the railroad --

COMMISSIONER NOTTINGHAM: No, I wasn't getting into causation. Thank you.

Mr. Sharp, can you take a crack at that, that two-point stipulation? Would you agree that significant quantities of coal are routinely spilled by the railroads and that that spillage produces a range of negative externalities including the fact that your company and others don't actually get all the coal they pay for?

MR. SHARP: Well, as part of my concern, Commissioner --

COMMISSIONER NOTTINGHAM: You don't have to answer it. If you can say it's too tough a question or too sensitive, yes, no, or can't answer.

MR. SHARP: I'll just say very briefly, it gets into what you define as significant. There's certainly some coal that leaves the rail cars on its 1200 mile journey

to our power plant.

COMMISSIONER NOTTINGHAM: So we heard earlier today 2,000 tons lost every day. Is that, in your business, if you had to report to your colleagues that you had lost 2,000 tons of coal today, would that be significant?

MR. SHARP: That would depend on how much coal I was shipping that day.

COMMISSIONER NOTTINGHAM: You're bigger than I thought. I knew you were big, but that's impressive.

MR. SHARP: There again, this is a hypothetical. We have over the period of time we've been shipping coal out of PRB since 1978. Over this period of time we have on several occasions looked at is the small amount of coal that leaves the cars in the form of dust or gets shaken out on rough patches or hills or whatever, a problem? We have compared the weights that we get after the coal is loaded, it's weighed on a scale

and that's the basis on which we pay for the coal. When the coal arrives at our power plant, and is off-loaded and fed into the plant, it's measured on a belt scale and then we, from time to time, perform as accurate an assessment of our coal piles as we can. And we've compared those numbers. We cannot find anywhere that we're losing a significant amount of coal. In fact, in some cases when we've done those studies, we show we received more coal than they shipped us.

COMMISSIONER NOTTINGHAM: That does underscore a worry I have about overloading of coal cars. We'll get to that later. So you're saying you're not prepared to stipulate that this really is a problem of the spillage, that there is spillage but whether or not it's a significant problem you're not ready to say yes to that?

MR. SHARP: Correct.

COMMISSIONER NOTTINGHAM: That's fair. Mr. LeSeur?

MR. LeSEUR: We address this issue in our filing in terms of how much coal is coming out of the cars. We've heard statements say from BN about how much they think is coming out. To the best of our knowledge, BN really hasn't done a meaningful study on this issue. And we pointed out some of the flaws in some of the studies they have used.

Utilities keep pretty good track of how much coal they're getting. And some utilities have prepared studies. And we introduced that evidence into the record. I would point specifically to page 16 of Mr. Crowley's rebuttal statement. Unfortunately, all the numbers we have are stamped "highly confidential" and "confidential", so we can't publicly disclose them.

COMMISSIONER NOTTINGHAM: In the interest of time, I didn't mean this to be -- it really was meant to be a pretty simple yes or no --

MR. LeSEUR: The answer to your question and how much we think is coming out of the cars is on this page I just referenced.

COMMISSIONER NOTTINGHAM: Okay, so is it your opinion that this is a problem, a significant problem or not? In other words, are routinely significant amounts of coal being spilled out of rail cars? And the second part of that is does that create a range of negative externalities?

MR. LeSEUR: If you use BNSF's number of 500 tons or whatever that number was as significant, then our position would be the amount coming out is not significant based upon the evidence that we put into the record in terms of an externality. I'm not even sure I know what the definition of an externality is, but there's no question that we understand that coal dust along with other things gets into the ballast.

COMMISSIONER NOTTINGHAM: Okay, thanks.

Mr. Loftus?

MR. LOFTUS: We filed the same testimony that Mr. LeSeur has just referred to. It was a joint filing by the two groups and I would give the same answer.

COMMISSIONER NOTTINGHAM: But there is not clearly a problem, not clearly causing negative externalities?

MR. LOFTUS: We certainly don't agree with what BNSF has claimed as the magnitude and as to the externalities, I, myself, am a little fuzzy on exactly what they are and there is certainly -- I didn't see any farmers appearing in this case complaining about coal dust on their lands. That's not to say that it's not a problem of some nature, but I haven't seen anything in the record that's meaningful.

COMMISSIONER NOTTINGHAM: Mr. Wilcox?

MR. WILCOX: Well, NCTA did not submit any evidence on this. However, I think

we would agree that current industry practice allows coal to spill out of rail cars. That's not posited if it's not cleaned up out of the ballast and the extent to which it extends into negative externalities, I don't think, in fact, NCTA has an opinion on that.

COMMISSIONER NOTTINGHAM: Okay. Mr. McBride?

MR. McBRIDE: Mr. Nottingham, a coal shipper who has been following this as we go today, sent me an email to answer your question. He said that Mr. Fox mentioned that 750 pounds were lost at the high end of the range which would be 0.3 percent of 120 tons of lading in the car. What is reasonable to manage 0.3 percent shrink? So I think the answer to your stipulation is not significant.

COMMISSIONER NOTTINGHAM: Okay, thanks. Are any of you aware of any requests to the Board, I'm not aware of any, for the Board to mediate this problem? I think the Chairman touched on the possibility of

alternative dispute resolution. I'm not aware of anybody, but if anybody is aware speak now. It just seems to me that part of what we have here is I'll say a trust issue. That's not a new thing for this Board to hear and it's not trivial and I don't mean to trivialize it. Trust is incredibly important, especially when business relationships involve tens and hundreds of million dollars a year.

But maybe Mr. McBride, I'll ask you, if we were to have a mediation and we were to get the railroads to sign a proverbial blood oath, enforceable, to be inspected and monitored by neutral experts that your clients could approve of, that the railroads would guarantee that they would maintain all current efforts plus add with inflation or other adjustment, current maintenance efforts along that right of way, that they truly are, honestly, interested in trying to adopt a "no spill" and a "we guarantee the customer that they get what they ordered" policy? Would

that put us on the path, do you think, of some resolution to this?

MR. McBRIDE: Well, I don't know about the last part about you get what you ordered part, because I'm not sure what that would require. But I want the record to note that I filed a petition for mediation recently in Docket 35302 with BNSF in another matter. So we're perfectly in favor of Board mediation when the parties are willing. I've used it in other respects as well. I think it's a highly commendable part of your process. You have to have willing parties.

But I think I've indicated that there are members of the groups that I represent who have been part of discussions with the railroads over all these many years on all kinds of PRB matters and on these matters in more recent years I think those people would much prefer to see a collaborative process than this kind of process. And so I suspect there wouldn't be

unanimity on this, but I think there would be a number of people in the industries that I represent who would applaud you for doing that.

COMMISSIONER NOTTINGHAM: So would you say that one way or another we or someone could extract an enforceable agreement that would be able to be monitored that the railroads would not cut back on maintenance along these rail corridors at issue, that that would go a long way towards resolving sort of what I'll call the trust problem here?

MR. McBRIDE: Yes, and we'd have to make sure that that tariff didn't go into effect on October 1. With those two conditions, I think people would be prepared to have a neutral party preside over these discussions and see if we couldn't get somewhere. We haven't had that. We'd welcome that.

COMMISSIONER NOTTINGHAM: Okay. Mr. Von Salzen, you mentioned that railroad

operations are basically the major cause of -- I wrote "the problem," but I realize you're not quite ready to stipulate that it's a problem, that of coal spillage.

If it's railroad operations, why don't we hear about other commodities being spilled? Are you saying that railroads operate their trains dramatically differently when they're carrying coal versus when they're carrying other commodities?

MR. VON SALZEN: I honestly don't know about other commodities. One of the things that I think we have to bear in mind is coal is a commodity that is carried in open top cars and has been forever.

COMMISSIONER NOTTINGHAM: We are becoming increasingly painfully aware of that. Thank you.

MR. VON SALZEN: And the same document, the same tariff document that is at issue here on a different page, BNSF requires that the shippers tender them open top cars.

That's the kind of car that has been approved through an AAR process and so forth and so on, far beyond the scope of what AECC and BNSF might agree on. So you start from the proposition that at least for coal, you're going to transport it for good, logistical and economic reasons that the whole industry seems to agree with. You're going to transport it in open top cars.

It is inevitable with that technology you're going to have some loss. You're not going to have a zero spillage standard. You can't meet zero spillage standard under that approach. You can have a reduced spillage standard. And we're already making substantial progress in that regard with respect to profiling the top of the coal pile, with respect to having better maintenance on the cars themselves so that there aren't seams that coal or dust can slip out of, so for bottom dump cars, the doors are fitting more tightly, using number three coal

instead of number two coal.

COMMISSIONER NOTTINGHAM: I think I get the gist of your answer, thanks.

MR. VON SALZEN: All of that is progress towards the goal that you're talking about.

COMMISSIONER NOTTINGHAM: I just wanted it to be clearly understood and you have helped clarify that it's not just railroad operations. You're not saying that it's only railroad operations and behavior like speed. Are you basically saying today that the railroads are going too fast, that they need to slow down?

MR. VON SALZEN: Certainly, in certain locations and certain instances, they're clearly going too fast and there's at least one video in this record that shows that. You can see it dramatically. And the fact that -- again, it's BNSF's evidence, that most of the coal dust in the ballast is on the descending side of big sags has got to reflect

the way that the trains are operating in that area. There's no other reason why you would have that pattern of coal deposition along the line.

COMMISSIONER NOTTINGHAM: It couldn't be the fact that the coal is piled way above the height of the car and then you're going downhill and the wind blows.

MR. VON SALZEN: It's not supposed to be piled way above the top. It says --

COMMISSIONER NOTTINGHAM: Why is almost every picture we've seen today shows coal piled above the edge of the rail car?

MR. VON SALZEN: It's not way above. When it's properly profiled it doesn't -- I mean it's not -- the cars that you've seen in these pictures, I don't think anybody has claimed any of those cars are overloaded. It's the way those cars are intended to be loaded and intended to be used, so that you get an economic level of product into the car that's been designed by the railroad and power

industry acting together.

COMMISSIONER NOTTINGHAM: I want to get to the question of harm. I think it was touched on by Mr. Weicher earlier. Where's the harm here? Have any of you had to pay a fine or had a rail car detained or held back? What's been the injury caused by this tariff? I'll let anybody who would like to speak.

MR. McBRIDE: Some of the shippers are paying for surfactants because they've felt some obligation to do that because of the back room conversations that have gone on. I'm not going to say that they were required to, but I think they felt in order to stay in good graces with the railroad that serves them that they should cooperate. They haven't necessarily been eager to do so, but they've been spending a fair degree of money to do that.

I've estimated, you saw BNSF estimated today 20 cents a ton. I've seen

estimates higher than that as much as 25 or 30 cents a ton, but even at 20 cents a ton, you've got people spending millions and millions of dollars for somebody else's benefit. And BN hasn't offered to reimburse those expenses, so that's certainly a harm.

COMMISSIONER NOTTINGHAM: Anybody else want to speak to harm?

MR. LeSEUR: Yes, I would say at this point the tariff hasn't gone into effect and so there haven't been any specific compliances costs associated with the tariff itself because it hasn't gone into effect yet and obviously what our clients are concerned about, among other things, are the costs that they have to incur in order to attempt to comply with this tariff. That's addressed in our testimony, the range of expenses that we think are out there.

The other thing that's costs incurred is this proceeding, to be quite honest with you.

MR. McBRIDE: There's one other thing, Mr. Nottingham.

COMMISSIONER NOTTINGHAM: Was requested by the parties.

MR. McBRIDE: True, but if you noticed in the video that Mr. Loftus showed, the BN train was not overloaded. That coal was a little above the sill of the car, eight in the middle as I looked at it, but well below the sill of the car at either end. It was flat at the top which is clearly a product of the way the car is loaded. And what's happened is I tried to recount for you in the history of this, is people were jamming in every ton of coal every pound of coal they could get in the car back in 2003, '04, '05, even afterwards, you know, because we were well short of coal after those derailments. I'm sure you recall the circumstances. People have cut back. There is less coal going into the cars in order to try to accommodate the profiling. That's an expense that the

shippers bear for the most part because whether they pay for their own equipment and get less use out of it or pay for the railroads' use of the railroads' equipment, they're paying for more turns to get the same coal delivered.

COMMISSIONER NOTTINGHAM: Mr. McBride, do you believe the railroads stand to profit if they can squeeze more coal onto all their rail cars?

MR. McBRIDE: I think that's why they did it up until 2005. And then, I think they may have realized the error of their ways. And yes, it would be to everyone's benefit, if we could put more coal in the cars now, ours, theirs, the coal companies. But everybody has learned from the mistakes that led up to 2005 and we're taking the hit, but I don't think the railroads are taking the hit because they end up transporting the same amount of coal and more trains.

COMMISSIONER NOTTINGHAM: I'm just

wondering maybe that helps me understand why I haven't heard any party today advocate for reducing the volume of coal in each car as a way to get at this problem. It seems that obviously that goes against all the parties' immediate financial interests.

Possibly, it could make good public policy, but it doesn't behoove any party here today to actually advocate for that.

MR. McBRIDE: Well, not quite. That was true up until 2005. That's what I'm trying to tell you and even into 2006 when people were desperate to get every pound of coal they could get delivered, but I think today, as I understand it, and some of this is done by the mines. I don't represent them. Others here may be able to comment on this, but as I understand it, people have been doing better profiling, reducing the amount of coal in the cars.

And I think the video Mr. Loftus

demonstrated that to you. There wasn't coal sitting on the sills of that car. We can go back to the video, if you want to look at it. That car was clean, whereas I've seen pictures of coal cars with coal on the sills. This is probably back in the '03 to '06 or '07 period when people would jam in every pound of coal they could. I don't think that's going on any more. I think people are being somewhat more careful. But do realize that it's still the railroads that demand that these trains be loaded in four hours and inevitably, I'm sure some coal doesn't get into the car.

We are at the mercy of the coal mines and the railroads here. We don't load these trains.

COMMISSIONER NOTTINGHAM: I appreciate the history lesson, Mr. McBride, that was helpful and I certainly picked up at least a few kernels in there. And I won't go on and on about the history, but there's, of course, a pretty important ICC and STB history

related to the joint line, too, right? This is a joint line because of the ICC?

MR. McBRIDE: Absolutely.

COMMISSIONER NOTTINGHAM: And we also, in more recent years, the STB actually has approved the construction of a third line, called the DM&E, fought very valiantly in the Courts, our lawyers to prevail over all kinds of arguments, including arguments that the mere concept of moving more coal through our society was an inherent evil and should therefore -- construction should be stopped. Fortunately, we prevailed.

So we have a lot at stake here, our Agency. We're not just a mere observer or -- we have made this line competitive. We have helped make it work to the extent it's worked all these years with the two major railroads operating. We've approved the construction of a third line to go in.

So if it takes, in my humble opinion, if it takes a little bit of mediation

or involvement by this Board to address some of the trust issue, guarantee that the line continues to get maintained, but also ensure that the railroads involved can guarantee that what they promised will be delivered to their customers gets delivered and that they don't spill the commodity along the way, I think to me that's pretty doable. And I hope that we can continue to play a positive role in that regard.

I guess that touches on my last question which is just, Mr. McBride, at the risk of picking on you, but you have a good way of getting to answers fairly quickly, so I'll stick with you. If the railroad just decided to adopt -- put aside the safety arguments and the -- I know it's hard to, but and -- but if a railroad just wanted to say look, we're adopting a new business plan/principle that involves two key components. One is no spillage. There's a lot of negative news out in the world about

spillage of energy-related products recently. I can think of a whole host of very reasonable reasons why a business would want to decide to adopt a no spillage policy when it comes to raw energy materials. And on top of that the second prong in the railroad policy could be that they want to guarantee that their customers as close to 100 percent as reasonably possible of what they paid for delivered. And that this no spillage policy goes in that vein as well.

Help me understand how that would be unreasonable? Now granted, you don't find what I just said in the tariff at issue here. So work with me on that.

MR. McBRIDE: First of all, remember that the guy who loads the car may be responsible for the spillage. The tariff under your paradigm arguably extends to the coal mines and I don't think you have authority over them necessarily here. Maybe you do, but --

COMMISSIONER NOTTINGHAM: I'm saying once it leaves the mine.

MR. McBRIDE: Okay, once it leaves the mine, fair enough. I still think that it's unreasonable, but could be worked through in collaborative discussion and here's why it's unreasonable just to impose it. First of all, as Mr. Von Salzen indicated, the tariff requires open top cars. The railroads want open top cars. There's discovery in the record and I don't want to go into it in great detail, but there's some BN internal communications about acknowledging what a disaster it would be if covers were required on cars. Nobody in this industry believes you can put covers on coal cars because if you've ever been to a power plant to see how the coal is unloaded, particularly in a rotary unloader, you can't do it with a cover on the car. It simply won't work.

COMMISSIONER NOTTINGHAM: And I have seen that operation.

MR. McBRIDE: So you know what I'm talking about. So covers won't do it. So even if the coal is below the sill and recognize that there's an economic disincentive for probably all sides here, the mines, the railroads and the shippers to have -- to require that the coal be below the sill of the car, because now we're imposing inefficiencies on the most efficient coal loading and handling operation in the world. And I know you've been out there recently and seen it. So I'm sure you know what I'm talking about.

And the railroads were the ones that imposed the four-hour loading requirement. They want this to be efficient.

At a certain point, they might be squawking if we could only put say 90 tons or 100 tons of coal or 110 tons of coal in a car that now gets 120, because think about the capacity constraints that that might start to produce.

So this is a difficult thing to just let one party impose on everybody else and say no spillage, because incidental loss has always been a product of this. Anybody who has ever walked on a coal line knows that there's a lot of things on that line besides coal dust. And so again, it's hard to say yes to something that sounds reasonable at first blush because it's going to impose all kinds of dare I say in presence of Vice Chairman Mulvey, negative externalities.

COMMISSIONER NOTTINGHAM: Thanks. And one last question. You mentioned this spotted mule analogy. I guess I just would propose for thought and I'm not making up a judgment here, but you mentioned the importance of some of our case law like the Conrail case of the special train service arguments and line argument. That could be turned on its face though in this case, couldn't it?

You got me thinking as you raise

that and it probably wasn't your intention. One could probably argue that for many, many years the coal industry and electric utility industry has been the recipient of special train status. You and only you have been able to receive these trains with commodity that falls out of the rail car, open, uncovered and loaded above the rim of the car and after a lot of time and effort and discussion and dialogue and some analysis, the railroads are finally coming around to the point saying wow, that special train car service you've been getting all these years, we kind of can't provide it any more. You're going to be treated like all the other rail customers and be asked to keep your stuff in the car.

MR. McBRIDE: First of all, in the special train cases, the ICC found, and the evidence was irrefutable that the special trains were not safer, so there was no benefit. And I understand you're asking me to hypothesize that there would be a benefit.

One of those many questions I put into my opening pleading was to point out to you that there are a number of other things carried in open top cars that do escape from the cars. They carry sand and gravel. They carry various ores. They carry soda ash. They carry all kinds of things.

So ours isn't the only thing that may be leaving the car, but I understand what your frustration is here. If there's a simple, economic way to keep something in a car, why wouldn't anybody want to do it? We're paying a lot of money for the coal. We're going to pay more for surfactant than we are for the coal, by the way. But that's what the collaborative efforts that I think people have been working on for years really are best designed to get to. The bottom discharge cars are going to be better maintained. We may do the better profiling. We may get to the point, that UP gets to the point, that people do mechanical suppression. Some people will

voluntarily spray. Maybe the cost of spraying will come down. Maybe all kinds of things will happen. Maybe BN will agree to bear the cost since it's getting the benefit. And all of a sudden maybe that would change the whole conversation.

So I'm not opposed to trying to keep the coal in the car. I'm just suggesting to you that this problem is a lot more complicated than just letting one party impose its way on everybody else.

COMMISSIONER NOTTINGHAM: Thank you. That's all I have for this panel.

CHAIRMAN ELLIOTT: Thank you, Commissioner.

Vice Chairman Mulvey?

VICE CHAIRMAN MULVEY: Thank you, Dan. I have a few brief questions.

Mike, you mentioned FRA's assessment of the accidents that occurred back in 2005 and you said they assigned blame, they assigned cause, and there's a list of things

including maintenance and the like. Did they also mention the coal dust at least as a contributing problem or did they completely ignore that?

MR. McBRIDE: I'm going to ask Mr. Loftus or Mr. LeSeur to back me up on this, but I'm relying on the analysis that they put in in Appendix B of their opening pleading of the FRA studies. And as I recall, coal dust was not mentioned in those reports.

VICE CHAIRMAN MULVEY: Is that your recollection also, Mr. Loftus and Mr. LeSeur?

MR. LOFTUS: It is my recollection, but I wouldn't swear to it because it's a fairly lengthy appendix.

VICE CHAIRMAN MULVEY: I was also wondering if the NTSB at the time when they did their investigation of that accident, since it obviously was one that met their threshold regarding damage, and the NTSB does investigate some railroad accidents, I was

wondering if they investigated that one because they usually do a very thorough job when they do an accident investigation.

MR. McBRIDE: I know they got a lot of information from UP and BN. I believe they also did their own, but I'm not certain of it.

VICE CHAIRMAN MULVEY: That would be worth looking at just to see whether or not they also felt that coal dust was not a contributing factor or in fact, if they did.

You might want to note that the Board up here consists of two lawyers and an economist and none of us are scientists or engineers. And while I appreciate the fact, Mr. Wilcox, the consultant that you hired did the work, is an expert, I'm still always concerned about whether or not the results of these kinds of studies are as objective as possible.

Commissioner Nottingham mentioned the possibility of the Board doing some kind

of mediation on this. Another possibility might be if the shippers, as a group, and the railroads want to get together to fund somebody like the FRA, or for that matter the TRB or some other group, to do an independent study and to abide by the findings of that independent analysis. Is that something that any of you would be comfortable with?

In other words, trying to find out exactly what the numbers are here. On the one hand, the railroads are saying the coal dust is the worst possible ballast foulant, that's a new word, foulant, we learned this time. On the other hand, you're saying that well, only a small fraction of the coal dust gets onto the ballast. Most of it is dispersed. It's not the principal problem. That's one question that might be answered more scientifically than simply employing consultants.

Who should pay may be another issue entirely. That could be a policy

question. But at least some of the scientific disputes might be resolved through an independent contractor, an independent study paid for by the shippers and the railroads. Does anyone want to comment on that?

MR. LOFTUS: Vice Chairman Mulvey, my hesitation was attributable to the fact that I'm here representing clients. I can't respond to a question like that as to what my clients would feel because I haven't discussed that with them. So I can't answer.

VICE CHAIRMAN MULVEY: I guess the Arkansas Electric Cooperative Corporation is probably closest to being a client. Would that kind of thing appeal to you as opposed to a trade association?

MR. SHARP: As you said, being the only client sitting here at the table, I'll try to address that, but we wouldn't be against considering that, but there again, I mean it kind of gets into the trust factor. In other words, who would this be that would

do this? I mean we'd have serious concern about the party. I mean if it truly could find someone who we would all agree would be objective and would have all the scientific knowledge needed to not have to just accept information from one party or the other on face value and try to go forward on that kind of basis, we certainly would be interested in looking at that concept.

VICE CHAIRMAN MULVEY: So can we find an honest man, I suppose is the question.

MR. SHARP: Yes.

VICE CHAIRMAN MULVEY: An honest engineer. I'm not going to speak for my fellow lawyers, but an honest engineer anyway.

Mr. Von Salzen, you talked about -- and this was addressed earlier, but I want to follow up on it, and that is the BN, if indeed this tariff was approved the result could be perverse that the BN might actually begin cutting maintenance rather than improving it. But wouldn't that be

counterproductive? I mean if they cut maintenance, and they realize how important maintenance is, but if they cut the maintenance and you had an accident, that affects them. That costs them as well. It means delays. It means fewer shipments. It costs them money and time if they don't maintain the line adequately, no?

MR. VON SALZEN: Absolutely correct, but they've done it before. It may be short sighted, but it's very clear, I think particularly if you look at their reply evidence, the testimony of Mr. Sloggett, Mr. Smith, Mr. Van Hook, they are committed to the idea that if they can get the shippers to put surfactants on top of the coal, they can cut back on their maintenance costs. I mean they don't believe it's going to cause a disaster, but they didn't believe it would cause a disaster when they cut back in the early 2000s either. But we believe that the objective evidence shows that that is indeed what would

happen if they cut back on the maintenance. If they didn't cut back on the maintenance, then they wouldn't have any benefit from imposing this tariff on us.

VICE CHAIRMAN MULVEY: Anybody else? Interesting that BN was the railroad, as somebody mentioned here, when the railroad was under Mr. Krebs', Matt Rose's predecessor, that they kept up their investment in the infrastructure probably as much, if not more, than any other Class 1 railroad. And so it's interesting that you feel they might cut back maintenance.

MR. McBRIDE: Vice Chairman Mulvey, I acknowledged that Mr. Krebs was the one who resisted the most when I recounted that history for you, but even he fell behind in the Powder River Basin.

VICE CHAIRMAN MULVEY: Thank you. What about the tradeoff between the cost of surfactant and the railroads allege that these cause them to lose 500 pounds of coal for each

car and the amounts were 14,000 rail cars of coal a year? That seems to be a lot of money worth of coal. What about the tradeoff between the cost of that coal and keeping that coal in the cars, versus the cost of the surfactant, assuming the surfactant would seriously reduce the amount of coal that was lost?

MR. VON SALZEN: Vice Chairman, there's actually an analysis of that very question in AECC's filing. I believe it's in the rebuttal filing and it shows that the tradeoff between the cost of the surfactant, the amount of coal that you actually lose, you can't put in quite as much coal in the car because you have to take into account the weight of the surfactant, if you can imagine such a thing so small, and you run it through, it comes out almost an exact wash. You don't get any benefit out of retaining that tiny additional amount of coal.

I should say that analysis uses

225 pounds of coal loss, not 500, which is from a study that was put into the record by UP and the difference between the 225 and the 500 is that the BNSF study failed to take account of the fact that there's water loss during the course of the trip and so it overstates the amount of coal loss.

As Mr. Sharp said earlier, from actual real world experience, it's kind of hard to find any measurable effect in terms of the actual loss of coal.

MR. McBRIDE: Vice Chairman Mulvey, if we can use BNSF's own data from its PowerPoint this morning, using Mr. Fox's average of 500 pounds per car, which I think is too high for the reasons Mr. Von Salzen just indicated, but let's give them their average for purposes of the analysis. That's a quarter of a ton. They said $30 a ton, that's $7.50 worth of coal. They put up a figure of 20 cents per ton for surfactant, 120 tons in a car, that's $24 for surfactant. You

spend $24 to save at most $7.50 worth of coal. It's not reasonable.

VICE CHAIRMAN MULVEY: So the tradeoff has been calculated and the benefit cost ratio is not a favorable one.

MR. McBRIDE: That's why BNSF didn't defend this case on cost benefit grounds.

VICE CHAIRMAN MULVEY: There's also the issue of the chemical that's sprayed on, the chemical that's sprayed on the coal. And when you burn chemicals in combination with other materials, carbon materials, there's always a question as to whether or not there's some kind of interaction and whether or not burning coal that's treated with surfactant doesn't have unexpected environmental consequences.

Has anybody looked at the problem of burning the coal that's treated with surfactant or is that pretty much of a benign product?

MR. SHARP: I raised this issue when we were having some of the discussions in the NCTA study. AECC was one of the utilities that participated in the NCTA study funded a small portion of that. And I got a call from a couple of surfactant suppliers and they said well, what are you talking about? No one has ever raised this issue. I said well, okay, what chemicals are in your surfactant? And they said well, that's proprietary, we can't tell you.

VICE CHAIRMAN MULVEY: Along with the model.

MR. SHARP: Exactly. So I said okay, well, how do we know that that's not going to react in the boiler? It's a very complicated chemical situation and all going on in a boiler. No one has to date been able to correctly model that. You model it the best you can, but almost every time we try something new we learn, we get a result different than the models indicate.

So the real answer is from all that we've been able to ascertain is no one knows. There may be negative externalities. It may affect our pollution control equipment. It may affect the metal in the boiler. We just don't know.

VICE CHAIRMAN MULVEY: We always get surprised. I mean just this morning it was announced that McDonald's was recalling all of these glasses because while they were thought to be benign products that were supposed to be gifts for children, it turns out that they contain some very serious metals which, if they were to get loose in the washing machine, could in fact cause serious harm to children. So we keep finding out that more and more of what we do is not as benign as we may first think.

I noticed that you were talking about some of the problems with why the coal comes out above and beyond the airborne dust from the rattling and the shaking, et cetera,

and why it concentrates in certain places where you're liable to get more rattling and shaking and you especially mentioned the train going too fast going downhill. And while I appreciate that lately there's been some increased capacity available because of the downturn of the economy, nonetheless I believe your company, in particular, has complained about the failure of the railroads to deliver all the coal that was needed. And wouldn't reducing train speeds actually cut capacity out of the PRB and create another set of problems?

Getting those trains moving even downhill as fast as possible strikes me as something the coal companies and the utilities would like.

MR. VON SALZEN: I haven't seen an analysis that's obviously an issue that would have to be looked at. But just on the face of it, I don't see that it's necessary that the overall trip time should be materially

impacted by simply slowing the train down on the down slope for ten miles an hour or whatever it would take. You'd have to do an aerodynamic study, I think, to figure out how much you'd have to do that.

What it might do is increase the railroad's fuel costs, because then you'd have to -- you would need more power going up the up slope. I think the reason -- this is speculation, but I think the reason they speed down the down slope is the same reason you might do it with your car to save a little bit of gas on the up slope. And that might be one of the countervailing costs for the railroad in reducing the amount of coal dust on the down sides of the big sags. That's speculation.

VICE CHAIRMAN MULVEY: I guess they can't throw it in neutral and just coast down.

(Laughter.)

It's interesting to speculate

because the fact of the matter is it's a well-used corridor, very, very heavily traveled and just adding extra time for each train when you've got 70 trains, 120 cars long, with the required spacing distance that they have, it could, in fact, cut into capacity. So that would be a concern that the railroads might have. You also suggested that spraying surfactant would not reduce any of the coal lost from rattling. Do you want to explain that a little further? It would strike me that a surfactant being a sticky material might effectively reduce both the airborne dust, as well as the lost coal from shaking.

MR. VON SALZEN: As I understand it and there is evidence about this in the record, so I'm not trying to tell you what -- I'm a lawyer and I don't know anything about physics or anything like that, but my understanding is that the surfactants that they're talking about put a very thin crust on the top of the coal pile in the car that is

supposed to be sufficient to keep very light dust particles from being blown out by wind, either the wind, the passage of the train or actual wind going across, laterally, across the track.

But we're talking often, particularly when you're talking about slack action on these down slopes, we're talking about actual pieces of coal, not necessarily a whole lump, but real pieces of coal and they're too big to be held down by this thin layer of crust as I understand it.

VICE CHAIRMAN MULVEY: Anybody else?

MR. McBRIDE: Yes, I've had people tell me that there's been a problem in the past with the railroads maintaining some of the bottom discharge cars from the doors and I think the vibrations may cause some of that coal to come out of poorly maintained doors. Hopefully, they're on to doing better maintenance there, but it's interesting that

they propose to put surfactant on the top of the car. They didn't propose to do anything about the bottom discharge when they're the ones that own those cars.

VICE CHAIRMAN MULVEY: The cars that are bottom discharge cars are basically railroad-owned cars?

MR. McBRIDE: Correct.

VICE CHAIRMAN MULVEY: Most of your cars are open top?

MR. McBRIDE: Open top.

VICE CHAIRMAN MULVEY: Thank you. That's all I have.

CHAIRMAN ELLIOTT: Thank you very much, Vice Chairman and thank you very much, panel, for your help today. And we will call our final panel, Panel 4, so Arkansas Electric Cooperative, you can stay up front, as long as you two can behave yourselves up there together, BNSF and Arkansas Electric.

(Pause.)

Next up, we'll have BNSF on

rebuttal. You have ten minutes.

MR. WEICHER: Thank you, Chairman. A lot of things have been raised. We're going to try to focus on the big picture, initially, of whatever time we have. We made a massive record. The shippers seem to say either this last panel, it's really not happening or it's not a problem or it's all about the cost, the shifting of cleaning it up, the money. For us, it's not about that. It's about the integrity of the railroad, service and reliability, and the need to reliably supply those stock piles and do the right thing and keep the coal in the cars.

Initially, we've got a lot of things we could address, but initially we will address some of what I find frankly the most obnoxious and offensive accusations in this last panel about our railroad and our maintenance practices and how we maintain and plan to maintain this vital national asset which we take with the utmost seriousness.

This is not just shifting around minuscule amounts of cost. This is about a vital national asset, so we'll defer first to Mr. Fox to address some of these operating accusations and then whatever time is left for Q and A, you raised a lot of other things, but we'll start there.

MR. FOX: First off, on the maintenance issue, the joint line is absolutely maintained at very high levels, world-class levels. We utilize the best railroad technology available. We utilize the best equipment available, and we've got the best people available to do that.

Our maintenance is condition-based and when you've got a 400 billion gross ton railroad like the joint line, we will always have a high level of track maintenance on the joint line. We take that responsibility very seriously. That's why we're here today. At the end of the day, this is all about eliminating the release of one of the worst

fouling agents, coal dust. To infer that our purpose here today is to reduce track maintenance is absolutely wrong and it's frankly insulting.

In terms of the discussion around airborne dust as the issue, it's all about coal falling off due to changes in track modulus, switches and bridges and slack action. Well, with the rate load profile, the profile we talk about as a bread loaf that has the right angle of repose in terms of how the coal is loaded, the coal will not fall off the car. In fact, it should not fall off unless it's on the sill of the car which would be in violation of our activity-based profile standard.

Also, from a car design perspective, we talked about bottom dump cars. Bottom dump cars are 35 percent of the fleet and we found through field tests that releases through the bottom dump cars on average was around 35 pounds. That is not the issue. The

majority of cars on the joint line, 65 percent are rotary dump and stuff doesn't fall out of rotary dump cars as they traverse switches and track modulus at bridges.

Finally, we're in the midst of doing a field test, as we speak, with additional topper technology and in this case we've treated cars with toppers and then we've put on train monitoring devices, devices that are hung on the cars. We found that topper in that application can reduce dust by 92 percent. That's measured on the train. It's not measured track side. So clearly airborne dust is the issue here. It's not an issue of dust falling due to the track modulus and slack action.

Finally, with regards to running our trains faster downhill, it's a ridiculous accusation. We do not have an operating practice of running trains faster downhill than uphill. At the end of the day our train engineers are very well trained and we have

very robust electronic oversight process of train handling as well as speed compliance that goes on 24 hours a day, 365 days a year. We utilize our version of a black box on every locomotive to do that kind of monitoring.

MR. WEICHER: A couple of basic points. We think the core principle here is it's not all right for the coal to spill out of the car. The solution isn't to clean it up.

Mr. McBride's suggestion, referring to the old cases on special handling, it's not okay for nuclear materials to leak. It's not okay for chemicals to leak. It's not okay for coal to spill out. We have to do what we can within the realm of science to advance this. The surfactants are not an unproven technology. Things will get better. But the rules should not be delayed. The rules should go into effect. We have been working cooperatively with shippers. We will continue to do that. Solutions need to be

jointly found, but it is time to act, not to defer the problem. Not to defer it as some sort of stall to put this off into the future.

We do have an obligation to move forward from BNSF's standpoint and put into effect a rule that keeps the coal in the car that uses the best standards we have available today, not to delay. It's not okay to pick it up. It wouldn't be okay for BP to pick up that oil faster. It's not okay. We now know much more about ballast than we did 100 years ago. We know much more about coal dust. You heard DOT today say it has a pernicious effect. I don't think that should be in serious dispute whatever the parties before were willing to stipulate to, it got a little confusing to me. But we will stipulate that coal ballast is a pernicious effect that should not go there in the first place.

Therefore, we think it is time to move forward to put this rule in and not delay it further.

MR. SIPE: I would like to address an issue that several of the members here this morning and this afternoon have expressed interest in and that is what possibility is there that we can reach a -- let's call it a negotiated resolution of the issues presented in this hearing.

The process that BNSF envisages, and I believe from what I heard from Ms. Rinn that UP envisages as well, is a process of voluntary bilateral negotiations, discussions, and arrangements between the railroads and their individual customers as opposed to, let's say, one big kumbaya under the auspices of a mediator. There are a couple of very compelling practical reasons why it has to be done that way. First, we have a majority of customers of both railroads are contract customers. The contracts, as you know, are typically of multiple years and duration and they expire at various times. We have to deal with contract customers on the coal dust as

the contracts expire. Because they're contracts also, they're privately negotiated between the railroad and the particular customer. So it's really got to be a sequence of bilateral negotiations for that compelling commercial reason.

Second, there's a compelling legal reason why it has to be a sequence of bilateral negotiations. And that is BNSF and UP are competitors on the joint line. We share the facility, but we compete vigorously for a lot of the traffic which by the way is one of the reasons Mr. McBride's gratuitous characterization of the railroad as a monopolist is hogwash. We compete vigorously for a lot of this traffic and we're not going to get in a room together with UP and the coal shippers and talk about a comprehensive solution to coal dust that entails commercial considerations. You can't do it.

One could imagine, I suppose, a proceeding that got prior to anti-trust risk clearance

from this Agency and DOJ, but I don't see that happening.

From the beginning, BNSF has envisaged a process in which we get to the point of resolving this dispute, resolving the coal dust issue, as soon as practicable, by working with the individual shippers as the opportunity arises. The only way we're going to be able to get the shippers to agree to do something about the coal dust issue is if this Board says we have the right to adopt rules that prevent the shippers from dropping the coal dust on the right of way.

They have to believe we have the right to do what we're trying to do or they're not going to sit down and talk with us. They're going to play Rope-a-dope and if you go back and look at their pleadings in this hearing about 90 percent of what they've done here is one version or another of Rope-a-dope. We don't want any more Rope-a-dope. We want to move forward.

MR. WEICHER: This whole argument about cost shifting is what's really going on here. It's time to implement a rule. We respect the Board's jurisdiction on the enforcement issues to come back if something can be challenged there. But the rule says the coal should stay in the car like every other commodity should go into effect.

CHAIRMAN ELLIOTT: Thank you very much, BNSF, and why don't we finish with Arkansas Electric Cooperative.

Mr. Von Salzen, you have ten minutes on rebuttal.

MR. VON SALZEN: Thank you. I will try during my ten minutes not to be any more obnoxious than necessary, any more insulting than necessary. I will try not to make any ridiculous arguments.

I think approaching this issue with that kind of over-heated rhetoric is probably symptomatic of the problem that we're facing here.

There's a huge record in this case. I've given you some highlights of it in my 23 minutes of fame earlier this afternoon. What I've told you is about evidence. It's evidence in the record. Much of it is based on facts provided by BNSF, almost necessarily because they're the ones who have control over the facts about the joint line. It's their property that they operate. So we've had to get the facts, the data from them. We've analyzed it. It is in the record. It's very well to say it's ridiculous to say that coal dust falls out of trains because we're running them downhill and causing slack action. It may be ridiculous, but it's a fact and the evidence is in the record. I think BNSF may be hoping that the Board will not read the record, but I have confidence, because I know this Board, that you will do so.

It is not ridiculous. It is true.

I also would like to take issue and umbrage at the suggestion that the coal

shipper community is so narrow minded, short sighted, selfish and stupid, that the only way that they can see reason is if you give BNSF the power to force the shippers what BNSF wants them to do.

Mr. Sharp made very clear in his remarks and I'll just second them, the coal shipper community has invested hundreds of millions of dollars to improve the efficiency of coal rail transportation. These are not people who are sitting back on their hands being negative. We have legitimate disagreements with BNSF's theory of how things work and what to do about them.

Saying that the only way to make us act reasonably is to give BNSF a club to beat us over our heads, perhaps sounds good to them. It doesn't sound very reasonable to me.

Mr. Fox tells you that BNSF has maintained to world-class standards and it's insulting to suggest otherwise. As a matter of fact, what we've said throughout this case

is that BNSF is maintaining their railroad adequately. I wouldn't say world-class standards. We've had some criticisms of some of their aspects of maintenance over the last five years, but they have been maintaining their railroad and we think in a generally satisfactory manner. I hope that's not an insult.

But bear in mind, this same railroad tells you that they were well maintaining their railroad all the way up until May 2005. That's in the record, too. In fact, this railroad tells you that given what they knew, they did nothing wrong. Two coal trains derailed within a few minutes and a few miles of each other and BNSF tells you on the record, under oath, in this case they did nothing wrong.

I think you have to look at the evidence. I think you have to look at the facts in this case and not just listen to the rhetoric including my rhetoric by the way.

I'm not asking you be swayed by my golden tongue oratory. But the facts are, the facts are the shippers don't cause this problem. The railroad causes this problem. I was trying to avoid using the word "problem" as Commissioner Nottingham noted. I should probably call it an issue. But sure, there is a maintenance issue.

There's a maintenance challenge that has to be carried out when you have the huge volume of traffic on this rail line. Coal dust is one of the contaminants. It is, according to the record, 29 percent by volume of the contaminants in the ballast on the joint line. That's what we've been talking about. It's 29 percent. That leaves, if my math is right, 71 percent of the contaminants in that ballast we're not even talking about today. And most of that coal dust does not get on that ballast through being blown by the winds off the tops of coal cars. It gets in there through the other mechanisms that we've

talked about today and that are well documented in the record. Thank you.

CHAIRMAN ELLIOTT: Thank you, Mr. Von Salzen.

Do you have any questions?

VICE CHAIRMAN MULVEY: Just a couple of minor questions. To the railroads, Mr. McBride testified and he was seconded by others, Mr. Loftus, about the FRA's study of the 2005 accident. And he said that the FRA found that the accident was caused by maintenance issues and others, but never mentioned coal dust as being part of the problem.

Do you want to comment on that? Is that your recollection of the FRA report as well?

MR. FOX: I'll answer your quick question as well that you didn't ask and did the NTSB investigate.

VICE CHAIRMAN MULVEY: Yes, that was the other part of my question.

MR. FOX: They did not do a formal investigation.

VICE CHAIRMAN MULVEY: They did not.

MR. FOX: The FRA, obviously, did an investigation and at the end of the day I do not recall if they concluded that coal dust was a contributing factor.

VICE CHAIRMAN MULVEY: Shippers presented evidence in their filings that they monitored some trains and that some trains went by full of coal, coal trains, and there was virtually no coal dust coming from them. And other trains went by and there was a lot of recorded foulants. And that the common factor was a locomotive as opposed to the fact that there were coal trains.

Do you want to address that charge, that it's not necessarily the coal dust, but it's actually perhaps emissions coming from the locomotives.

MR. WEICHER: Coal dust is clearly

episodic. I believe that is the term Mr. Sipe used earlier this morning, but our tests clearly differentiated and that's the difference between the first and second standard, the effects of coal dust and then the effects of locomotives. Frankly, the idea that all of this is coming out of the locomotives seems a little preposterous as well.

MR. FOX: There is a specific diesel signal and the IDV.2 value ignores that diesel signal for the locomotives at the front of the train as well as the distributed power at the rear of the train. That is not included in the IDV values.

VICE CHAIRMAN MULVEY: Is it possible that some of the coal dust that gets in the ballast doesn't come from the top of the train immediately on to the ballast, but rather goes off the side and then subsequent winds blow it back and the ballast? Therefore, it simply begins trapping all of this coal

dust and that it's part of a cycle when with the raised ballasts especially in a relatively flat area like Wyoming, Kansas, et cetera, you wind up having the winds blow it into the ballast and that's where it's being deposited as opposed to directly off the top of trains?

MR. FOX: It's definitely possible that coal dust gets in that way as well as from the top of the cars as well as from the bottom dump. We still believe that the majority is coming off the top of the cars.

VICE CHAIRMAN MULVEY: Would you agree with that, Mr. Von Salzen, that in fact, some of this coal dust could be in the ballast, even though it's not coming off directly and eventually gets blown back by the winds and given that the railroad right of way is the major mountain, if you like, going across some of these very, very flat territories it still gets in the ballast, but maybe it's not directly from the top of the train, but it gets blown back?

MR. VON SALZEN: I don't believe there's any evidence in the record that would support that speculation. It's possible, and anything is possible, but I don't believe there's any evidence that that is indeed the case.

I guess I would be skeptical about it, just because I think imagining just a breeze blowing through the buffalo grass, picking up dust and blowing it back towards the track, I have a hard time imagining you'd get very much movement that way. But it's possible.

MR. SIPE: Vice Chairman Mulvey, I have a recollection, perhaps faulty, but if you look at UP's opening evidence I think there's testimony that speaks if not to that very specific issue, at least to closely related issues about how dust that is dropped particularly on a multi-track segment of the joint line works it way into ballast, not necessarily directly.

MR. WEICHER: We, of course, welcome deep review by the Board and staff that we know will be taking place on the record contrary to the assertion.

VICE CHAIRMAN MULVEY: This again is one of these matters of fact and matters of scientific fact, of how things behave in the environment. And as I said, neither the Board Members or most of our staff or most of the people testifying here really possess that kind of expertise.

I asked the question of the last panel as to whether or not they thought that their members or the groups would be interested in co-sponsoring, co-paying for a study, perhaps even overseen by the Board which it did employ, however, people were noted experts, but they were not in the pay of either the shippers or the railroads to answer some of these scientific questions. I recognize that these are contracts and you have to eventually decide, but at least a lot

of the scientific questions might be answered in such a way that both parties could accept well, this is in fact, what is happening.

For the railroads, would the railroads be in favor or support such a possibility?

MR. WEICHER: We will work with anyone, talk with anyone. We have been doing that. We've been spending money on this for the last three or four years. We think we have to move forward. We believe we are responsible to address this problem through the promulgation and operating rule. We do not think that we should wait. We do not, however, expect to stop looking at the scientific issues, expect to stop looking at the best way to address it. We do not want to participate in something that tries to deny the problem. We want to look for solutions. We're doing that, we think, with our solutions that are there today. I think it's a question of working with others on continuous

improvement, not refusing to move forward.

VICE CHAIRMAN MULVEY: Right, it's not denying the problem. It's trying to define the problem, identify the problem and then what will be the best possible solutions that are both cost effective and environmentally effective. But I understand that there are some concerns about mediation. But this would not be mediation. This approach would simply try to reach a resolution, if you like, of the scientific disputes which I think can be done with some degree of objectivity. Albeit, there might still be some issues that will remain unresolved for whatever reason.

MR. SIPE: One potential benefit of the safe harbor approach that was discussed this morning is that we could begin solving the problem right now under a safe harbor approach and continue to work on the science and get it better so down the road there was a standard, a performance-based standard that

everybody could be comfortable with. But I can't think of any reason why that would preclude taking measures in the near term under a safe harbor type approach.

VICE CHAIRMAN MULVEY: A safe harbor approach, under that approach, then the shippers would not have to pay the tariff, if in fact they agree to use surfactants, if they agreed to profile the cars in such a way to minimize, then that would be considered to be acceptable and therefore they would not have to pay the extra tariff?

MR. WEICHER: We're not asking for -- we don't want to collect money. We're not asking for a tariff. We're asking for implementation to begin on surfactant or whatever method the shipper chooses, but the safe harbor concept was if they want to and people are doing this now, we need a rule to make sure this momentum continues.

Remember, we're only talking about frankly in terms of jurisdiction a fairly

small segment of the shipper population that the rule directly applies to, but that the rule should be there and we are quite open to the suggestion, you and the Chairman were airing out earlier today that there could be a safe harbor that if they are applying is taking this step that we know addresses the problem. Whether it's the only way or the perfect way, we are not precluding other ways under the performance base.

We recognize that as a safe harbor and science will continue to develop, and we think that will get the process going of these companies working together finding the most cost effective efficient way to reduce the dust. We think reducing the dust is where this has got to come from and the coal staying in the cars.

VICE CHAIRMAN MULVEY: One final question to the group. Is that the metrics-based safe harbor or not a metrics-based safe harbor, that we are discussing? It's

basically they spray the surfactant and they profile the cars as directed. But if they do that and you still get unacceptable readings, then you simply raise the requirements and require more surfactant be sprayed or require that the cars be profiled even lower?

MR. WEICHER: I don't think so and this is a bit of an inchoate idea that sounds like we're working it out, it's being discussed today. And we had thought about this kind of thing in the original rule. What I think we envision or what we thought we heard or what we are open to is we have published a performance-based rule that says meet this standard because we believe that standard reduces 85 percent of the dust.

We are open to amending that rule and working with our shippers that there would be a presumption if you applied the known surfactants, you pick which one, these tests are all around here, what would work that will presumptively in our mind meet compliance with

the performance-based standard, regardless of what the readings say. We do that for two or three years and let's see if everything is working together.

We know we must do something and we know it's being used around the world and in this country. This is not an untried thing. Let's get going on it and we will be willing to say that that is the safe harbor that meets our performance-based standard. I think at least that's what we heard and what we're open to.

VICE CHAIRMAN MULVEY: Thank you very much.

CHAIRMAN ELLIOTT: Thank you, Vice Chairman.

Commissioner?

COMMISSIONER NOTTINGHAM: Thank you, Mr. Chairman.

Mr. Fox, I heard you make the point that with the right load profile, spills can be prevented. Is that a fair statement?

MR. FOX: Yes, sir.

COMMISSIONER NOTTINGHAM: Have there been any studies on that or any data and under the general sort of heading of correct or right load profile, what about the scenario I've described today earlier about keeping the profile below the rim of the rail car?

MR. FOX: Over the last five years we have modified the profile. The initial profile was what I'd call a peaked profile with sharp edges and we've worked with NCTA early on. Four or five years ago, we created what we describe as a bread loaf profile. We've lowered the angle of repose of the coal on top of the car. We got rid of the sharp edges which reduces wind erosion and we spread the load all the way from the front of the car to the back of the car. That is the standard that's in place now in the joint line.

All chutes in the joint line, all loading chutes in the joint line now have been modified to create a bread loaf profile. We

have not looked at what I would describe as the bundt cake option where you would load coal below the side sills of the car.

COMMISSIONER NOTTINGHAM: Can I ask why you wouldn't look at that?

MR. FOX: Well, we haven't done it. We did have some concerns based on some very preliminary discussions with our consultant that the concern was an eddy current could be created where the wind would start an eddy current at the front of the car and basically continue causing wind erosion with that kind of loading profile. That was really preliminary discussions.

COMMISSIONER NOTTINGHAM: Mr. Weicher, would you be open to an alternative safe harbor which would be either try the surfactant or whatever turns out to be the best practice? You believe currently it's surfactant and you've held open the possibility in the future of a technology and science we could see other solutions, how

about an alternative safe harbor? If you're not comfortable, shipper, with the cost or the science behind surfactant, just keep your load profile below the rim of the rail car so we have a greatly reduced potential for spillage?

MR. WEICHER: We probably need to distinguish -- I believe our testing has shown that the profile in the profile improvements may have reduced 10 to 15 percent of the dust issue and subject to the type of technical problems and physical problems Greg Fox has related to. It does not appear at all that that can address the overall problem.

Having said that, if a shipper or a mine thinks a different technique can reduce and meet the standard, we're quite open to that. On the contrary, the testing we've seen and the several years of work on this would not support a safe harbor based just on profiling. It can't do it. Everything we've seen and what we've been doing it's not sufficient and that doesn't work, whereas now

several years of testing shows no, surfactant can do it. It can make a dramatic reduction and that's the technique being followed in other parts of the world.

COMMISSIONER NOTTINGHAM: So you're saying that the railroad industry or anyone else has thoroughly studied the scenario of having a load limit or safe harbor be below the height of the rail car?

MR. WEICHER: I cannot address, as a technical matter, whether that completely exhausts it. But of course that also, if we talk about profound impacts on our customers and the industry, now we're talking about more equipment, more trains, how do we meet the commitments we have and their desires to keep those stockpiles full. Now we start talking about a dramatic difference in how much coal is handled.

If that were in theory cost effective and shippers wanted to go that way, we're open to exploring that, but within the

existing way the railroad and our customers and these fleets and these hundreds of sets of equipment are running, we don't think that's a way that can address this, certainly not in any foreseeable time.

COMMISSIONER NOTTINGHAM: We've heard the argument raised today that railroads should not be allowed to unilaterally impose a solution on the customers. Can you think of any examples in the past where after efforts to dialogue and communicate the railroad industry has had to impose a solution in the area of car design over the objection of some shippers?

MR. WEICHER: Well, for better or worse, the way our world works and I don't mean I guess just the railroad work, the railroad owner, the person offering the service always ends up being the one hopefully as in this case after consultation with their customers, hopefully as not entirely in this case after agreement with their customers has

to set the terms of carriage.

We have massive, and some people would say too massive, we've been trying to get more of the plain speaking thing, but the rule book on coal, the rule book on grain, the rule book on commodities, as was mentioned earlier a variety of AAR and industry rules which generally apply. But then every railroad for every commodity, we've got blocking and bracing rules for all kinds of stuff.

COMMISSIONER NOTTINGHAM: Is it pretty common for some shippers to object to those rules as they come along?

MR. WEICHER: It does, unfortunately, occur, perhaps more often than we would like.

COMMISSIONER NOTTINGHAM: Are you -- is it your position that a railroad cannot be required to transport leaking cars?

MR. WEICHER: I think I would have to say yes.

COMMISSIONER NOTTINGHAM: It can choose to, right?

MR. WEICHER: It can choose to.

COMMISSIONER NOTTINGHAM: But it can't be required?

MR. WEICHER: It ultimately has responsibility to define the terms under which things were loaded and braced, and we do not believe it can be required. Leaking is a loaded word, but yes, if something is really leaking, we cannot -- in fact, I guess I would turn it around in the proper situation, chemicals are always easy, but a dangerous load of rebars or something, we may have an obligation not to transport.

COMMISSIONER NOTTINGHAM: It seems to me if there is routine spillage, release, leakage, pick your favorite word, that basically that's tantamount to routine overloading. And it seems to me a railroad has, in my humble opinion, the right to say we're not going to take cars that are

routinely overloaded and therefore routinely leak. And you put that out for a reasonable period of time and you give people the safe harbor alternative course of action.

I'm just speaking as one Board Member, but I think this Agency, I would think, would be hard pressed to say that a railroad is required to move leaking freight cars.

MR. WEICHER: Leaving aside a pure safety issue which is the absolute on the railroad, meeting both FRA and our own requirements, I will use my analogy. It's not the same, but in the stages of things we have all kinds of rules of how heavily cars can be loaded, including coal. We have corresponding tariff items, which you do not have before you now in this case, which says if something violates, that it is overloaded what we do. In that case, depending on exactly what it is, we say we will set it out and we will get a dumpster and unload something. And there are

charges for that. That's all set out, either in a contract or in a tariff.

Were someone to be subject to that and were that to occur, we recognize as the common carrier shipper that's within your jurisdiction. And that is certainly, we believe, within our ability as a railroad to do that step. That's not before the Board here. What is before the Board here is keep the coal in the cars, reduce the dust.

COMMISSIONER NOTTINGHAM: Do you recognize that one may not be the intended outgrowth of this controversy, but one possible outgrowth is that coal cars are required to move with less coal? It's out there in the range of possibilities, depending how this controversy plays out?

MR. WEICHER: It certainly is a possibility, but we think it's pretty remote particularly when for all the talk about cost, when you look at the overall delivery cost of coal, this is such a manageable, doable thing

as the most cost effective way to reliably move all this coal across the nation for all this energy within the existing fleet. However, that's why we started with a performance-based standard, not an activity-based standard. We're open to a safe harbor for an activity of spraying, but between the shippers and the mines, if there's a better way to achieve the result of no dust, it's more efficient, we're not precluding that.

COMMISSIONER NOTTINGHAM: I guess Mr. Sipe, you may be the best person to know, do you find it -- it seems to me that you're in the untenable legal situation of having -- of not having to, but being tempted to make the following type of argument. The better you can argue about how hazardous, dangerous, risky, negative, scary, throw in your -- risky, the movement of these heavily loaded, I'll say, I won't editorialize and say overloaded, but these heavily loaded cars of coal that seem to routinely spill out coal

that you have -- significant amount of coal, the better you argue the risks and the hazards and the negative externalities, the more actually you're inviting third party litigation by the organic farmers of the world that your client so skillfully demonstrated to us.

I mean do you feel any tension there or is that --

MR. SIPE: I'm not sure I would subscribe to the characterization untenable, but you've seen the record and you know we have not gone on and on about environmental risks and concerns. But everybody knows what the reality is. We live in a world where there's a lot of tension.

MR. WEICHER: And one could suggest that this tension is another reason why we as a responsible railroad need to put into effect a rule to mitigate coal dust.

COMMISSIONER NOTTINGHAM: That's why I ask the question because we don't have

a lot of third parties before us here. Many of us were, I think actually this may be a situation where almost, most of the parties that were testifying today, actually, and including the Board were basically aligned on the DM&E appeal and the battle.

We heard some legal arguments, very serious legal arguments raised by serious lawyers spending tens of hundreds of thousands of dollars, if not millions, to recite a litany of -- I'll just use the phrase again, "negative externalities", but basically horrible attributes of coal and coal-related energy production. We're all very -- this is not just some kind of contrived concern.

Mr. Sipe, are you familiar with court cases where parties have tried to raise claims about various hazards and dangers of coal and coal transportation?

MR. SIPE: I am certainly generally aware of what happened in DMNE. I know there's litigation currently in Alaska

which I believe involves stockpiles in a court in Alaska. I think these issues are potentially out there and you're probably correct in inferring that we haven't gone out of our way to stir people up.

COMMISSIONER NOTTINGHAM: Right. And I think this Board -- the reason I go into this is not to give you a hard time or to conjure up alarming scenarios, but this Board has a number of missions, I should say, some of which include promoting competition, working to review and approve, where appropriate, construction and new build out and new track.

So we have an interest, if there is a commodity that is spilling out on railroad right of way and basically inviting third party opposition to projects that would increase rail competition, it's more than an academic concern to us.

And so I guess I would say I wish you luck in trying to take steps to stop

commodities from leaking out of your cars. I think I understand why you're trying to do it. I may have some concerns with the methodology you took or the tactics you took in this case, I think you certainly, in my humble opinion, you seem to have the right to try to control spillage out of your rail cars.

MR. WEICHER: If I could comment briefly on that. There's almost some role reversals here. We have people saying this is too tight a rule to keep an emission down. If this were -- and there were some analogies earlier in the day to Government-induced rules, the usual question is you're not being strict enough, whoever is trying to control emission. Here we have people saying, don't worry about it. Don't worry about it. It's blow off. Let it happen. That is not our position.

It's time to do an incremental approach to reduce this problem.

COMMISSIONER NOTTINGHAM: I have

no more questions at this time.

CHAIRMAN ELLIOTT: Thank you, Commissioner.

I just had one line of questions for BNSF. I heard earlier in the testimony with regard to customers under contract, is there a significant percentage of the coal traffic in the PRB that's on the joint line that is under contract at this point in time?

MR. WEICHER: Yes, Chairman. I will speak generally.

CHAIRMAN ELLIOTT: I don't want to go to confidential information, obviously.

MR. WEICHER: I'm speaking only, of course, for BNSF Railway. Very roughly, I would estimate in the range of 80 to 85 percent of the tonnage we move in the PRB moves under contract, somewhere in the 15 to 20 percent moves under common carrier tariffs directly subject to your jurisdiction including the rate case stuff.

By the same token, I made an

allusion earlier today and I think this is important to understand who is subjected to what and who is being -- will this rule go into effect? Our general estimates are that by the end of 2011, something in the order of 65, 70 percent of our contract tonnage will be, by however it works through tariff contract, will be subject to such a rule as we are proposing here for the common carrier shippers and asking that be upheld.

CHAIRMAN ELLIOTT: If I understand what you're saying, at the present time you have the 80 to 85 percent under contract and they won't be subject to have the surfactants on it at the present time?

MR. WEICHER: Again, it's the rule for a performance based, some of which are, of course, choosing to go the surfactant route. Some are already there where the rule is in effect and we're working on implementation, but a large chunk of that contract base is not yet, will be by the end of 2011. As contracts

roll over, as they are negotiated, older contracts, before this problem arose, that to speak generally, might have incorporated an older version of rules, might not yet be subject to the rule's application today, but will be in due course.

CHAIRMAN ELLIOTT: So incrementally, have you been putting things like this in contracts?

MR. WEICHER: And without getting into the specifics --

CHAIRMAN ELLIOTT: Right.

MR. WEICHER: Of course. We are working on implementing this through our contracts as quickly as we can as things turn over, as things come up. This is a gradual, somewhat lumpy process, but it is moving along.

CHAIRMAN ELLIOTT: And say that tomorrow -- this is obviously very hypothetical because we can't issue a decision in one day -- but we say that it was

reasonable, what percent of the traffic would you say would be -- it be required at that point to run based on the tariff or something similar?

MR. WEICHER: If you permit, as we ask you to do, that this rule go into effect on October 1 --

CHAIRMAN ELLIOTT: Right.

MR. WEICHER: At that time, directly that 15 percent or so of tariff traffic would become subject to it. Again, remembering that the rule is not saying you must go spray. It is not asking for instant compliance. It's asking to be working this out.

Of that contract base, you raise some very interesting technical issues because quite frankly it doesn't necessarily depend on whether you uphold the rule or not. It depends on what's in the contract. And what the contract is incorporating, and what the contract says about a rule, but we will be

continuing to move towards broader and broader encumbrance through a combination of that tariff application, its incorporation in our contracts.

I don't mean to over-complicate it, but it's an iterative process.

CHAIRMAN ELLIOTT: My only concern there was similar to the concern I had earlier when I was asking you about Union Pacific and how they are going to go forward from here is that there will be trains running around the joint line and there will be coal flying off and while this 15 percent will be subject to the tariff and I guess coming to the conclusion that it may not be effective and that would be my only concern.

MR. WEICHER: I will, of course, not speak to UP's practices. I don't know what they are. I heard Counsel LouAnne Rinn speak to it earlier today. Our relationship with UP on this operating rule, and I'm speaking of the pure operating rule we put up

on the board comes about between us and UP under the joint line agreement which contains its own series of enforcement mechanism, arbitration remedies. It's an operating rule as soon as practicable, recognizing the realities of this rather convoluted or multi-tiered situation which we respect because it goes back to the ICC-approved joint line operation of the two carriers with us as the maintaining and operating rules issue carrier issuing the rules under that agreement. But as to our customers, we tried to describe generally this iterative process of bringing these into broader and broader effect.

I have to say if the rule doesn't go in on the common carrier, that will be a step background, a detrimental step to the gradual incorporation and working with our customers because not only will it delay things, but it will call into question whether this can be seriously applied to the universe of shippers.

It should eventually over time, be applicable too.

CHAIRMAN ELLIOTT: Thank you very much, Mr. Weicher. Thank you, counsel. Thank you everyone today for your patience. It was quite a lengthy hearing and a special thanks to the officers that came here today. Your knowledge is invaluable. We obviously take this matter very seriously. We can tell that it's a very emotional issue and we'll take it under advisement and the hearing is now adjourned. Thank you.

(Whereupon, at 3:32 p.m., the hearing was concluded.)

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November 17, 2010

VIA HAND DELIVERY

Ms. Cynthia Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, SW
Washington, DC 20423-0001

Re: *Petition of Arkansas Electric Cooperative Corporation for a Declaratory Order*, STB Finance Docket 35305

Dear Ms. Brown:

As requested by Board staff, enclosed are two hard copies of the PowerPoint slides that BNSF Railway Company presented during oral argument in the above-referenced case on July 29, 2010, and two copies of the videos clips that were shown in the PowerPoint presentation.

Please address any questions concerning these materials to the undersigned.

Sincerely,

Samuel M. Sipe (KG)
Samuel M. Sipe, Jr.
Counsel for BNSF Railway Company

cc: Parties of Record (with enclosures)

BNSF Railway

STB Docket No. 35305

Petition of Arkansas Electric Cooperative Corporation

July 29, 2010

BNSF RAILWAY

The Board Should Conclude:

1) It is necessary to keep coal dust from blowing off of loaded trains in transit.

2) BNSF has the authority to issue reasonable operating rules that will curtail coal dust emissions.

3) The specific standards at issue here are reasonable.

COAL DUST EMISSIONS MUST BE SUBSTANTIALLY ELIMINATED

Coal dust fouling is extensive

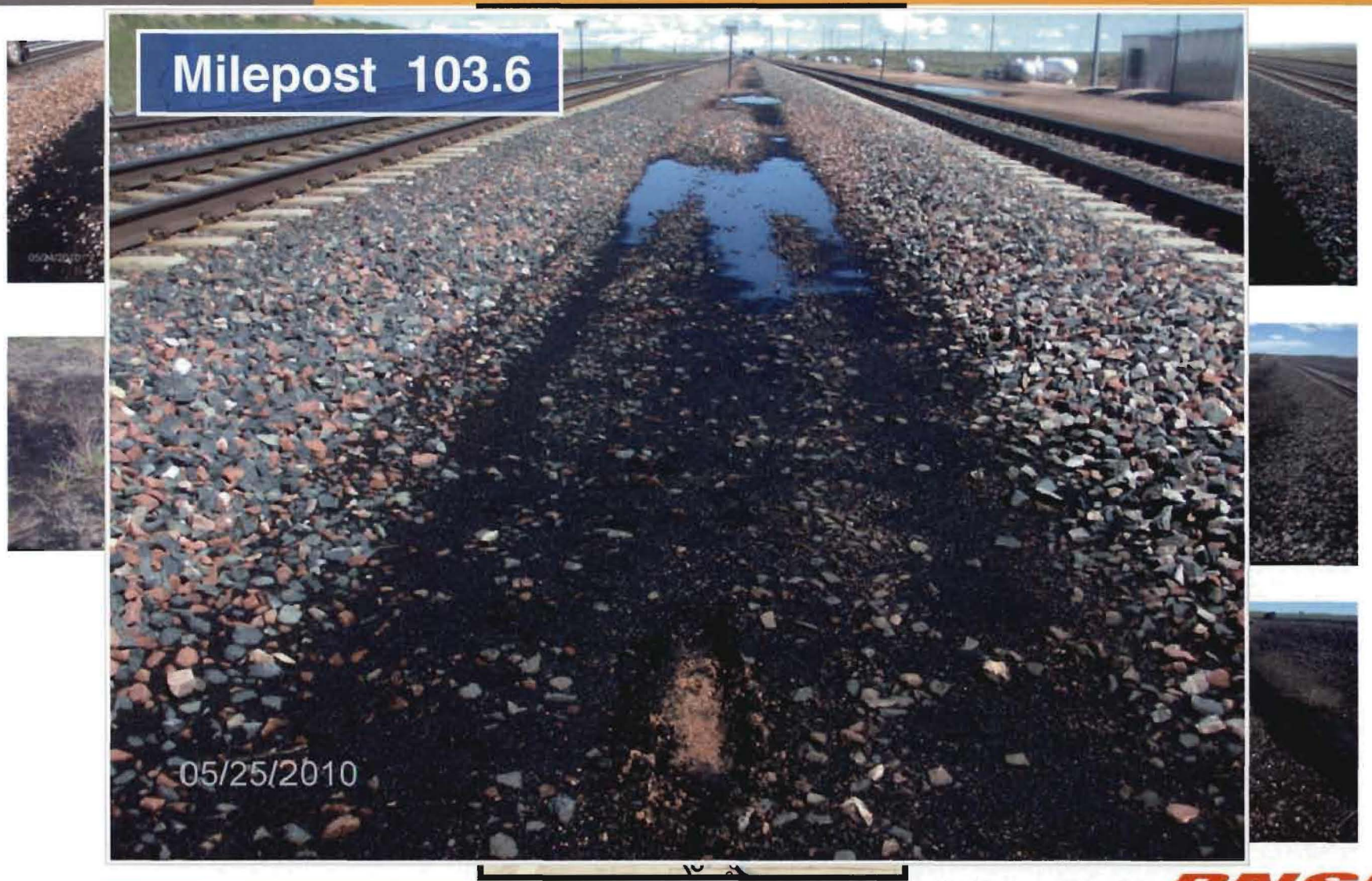
Coal dust fouling is extensive

Coal dust fouling is extensive

Coal dust fouling is extensive

Coal dust fouling is extensive

Coal dust fouling is extensive



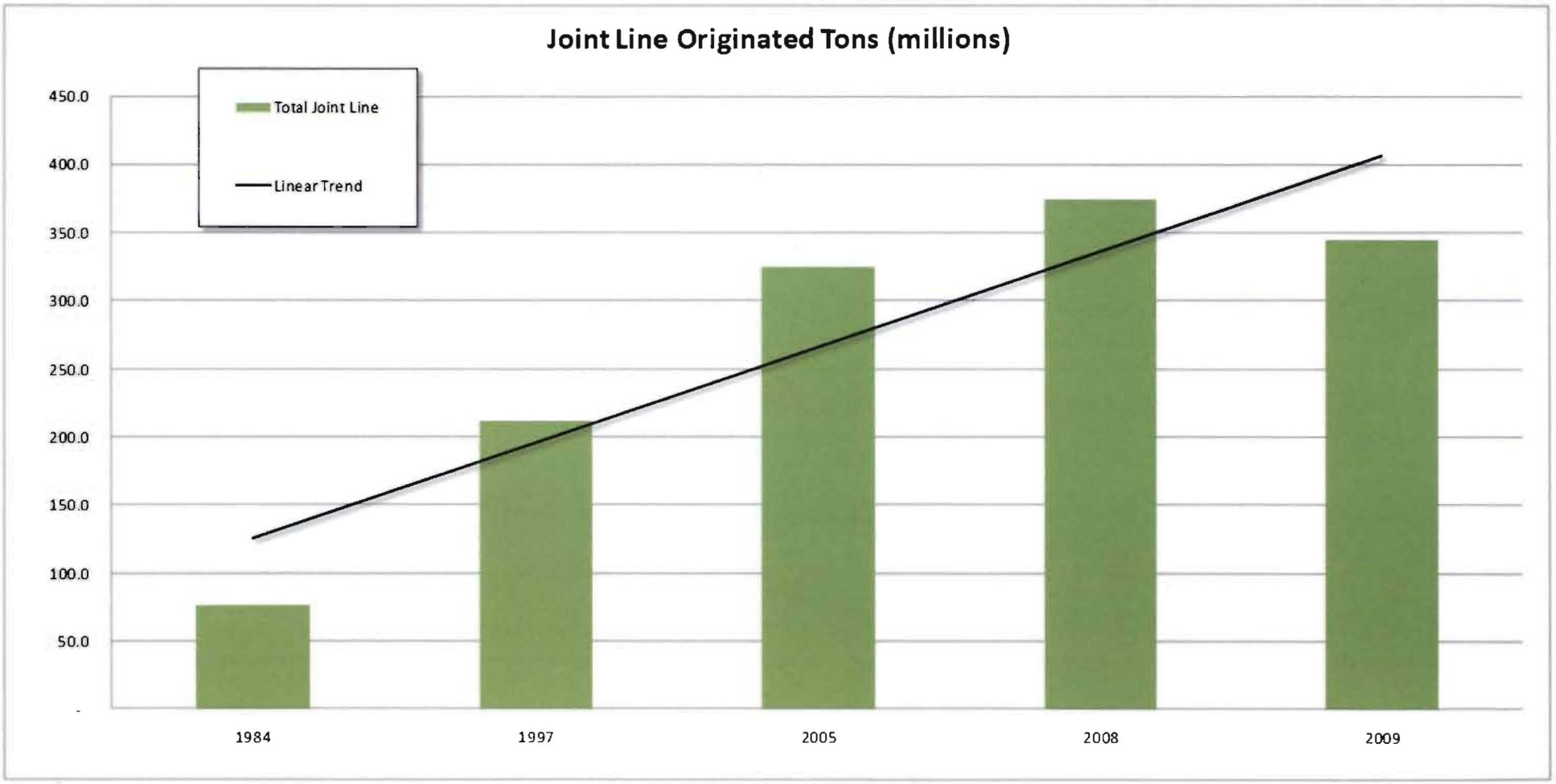
Coal dust fouling is extensive

Coal dust is found on all PRB rail lines

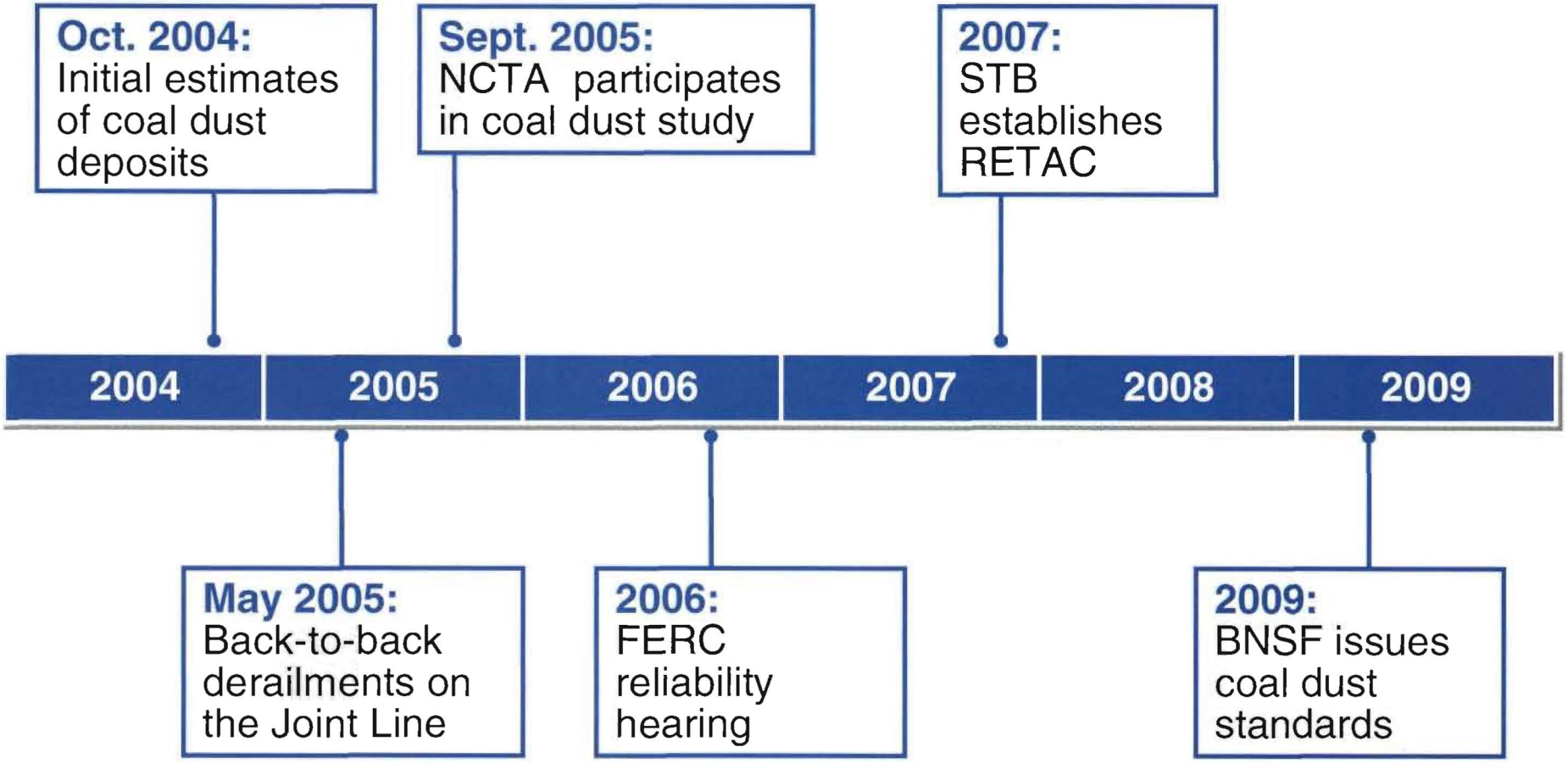
Coal dust is blown off the top of loaded cars in transit

Large amounts of coal are lost from the tops of cars

Increase in Joint Line traffic 1984-2009

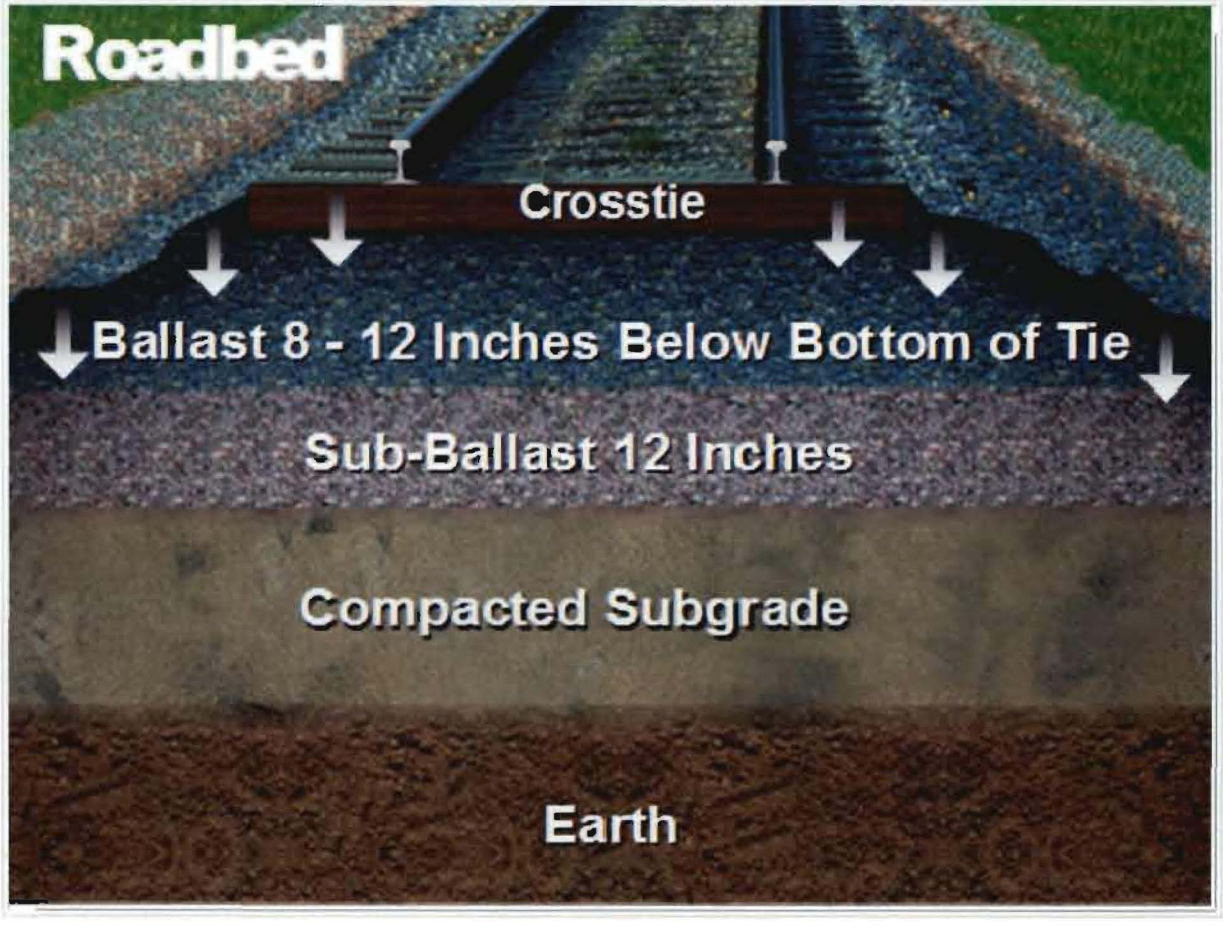


BNSF has been studying the coal dust problem for years



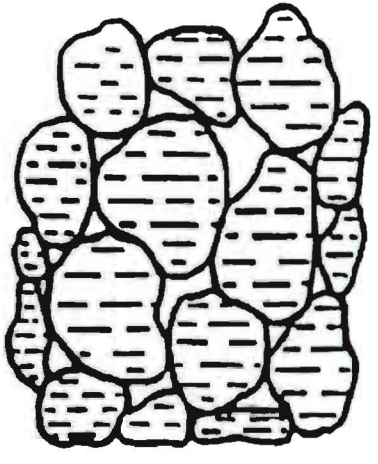
AFTER-THE-FACT MAINTENANCE IS NOT A RESPONSIBLE WAY OF DEALING WITH COAL DUST

Ballast is a crucial aspect of track integrity

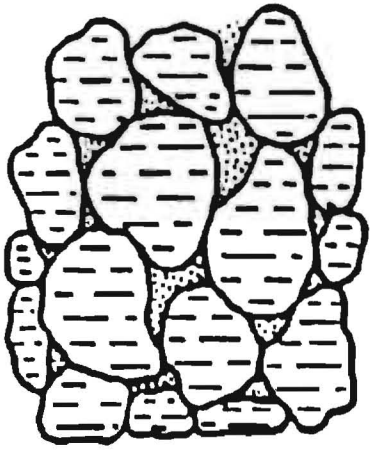


Coal is a pernicious ballast foulant

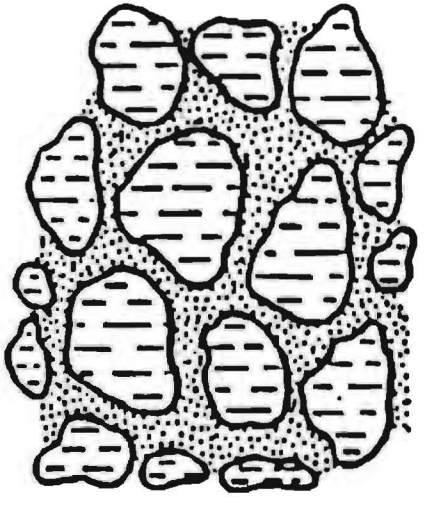
- Critical Phases of Fouling



Clean

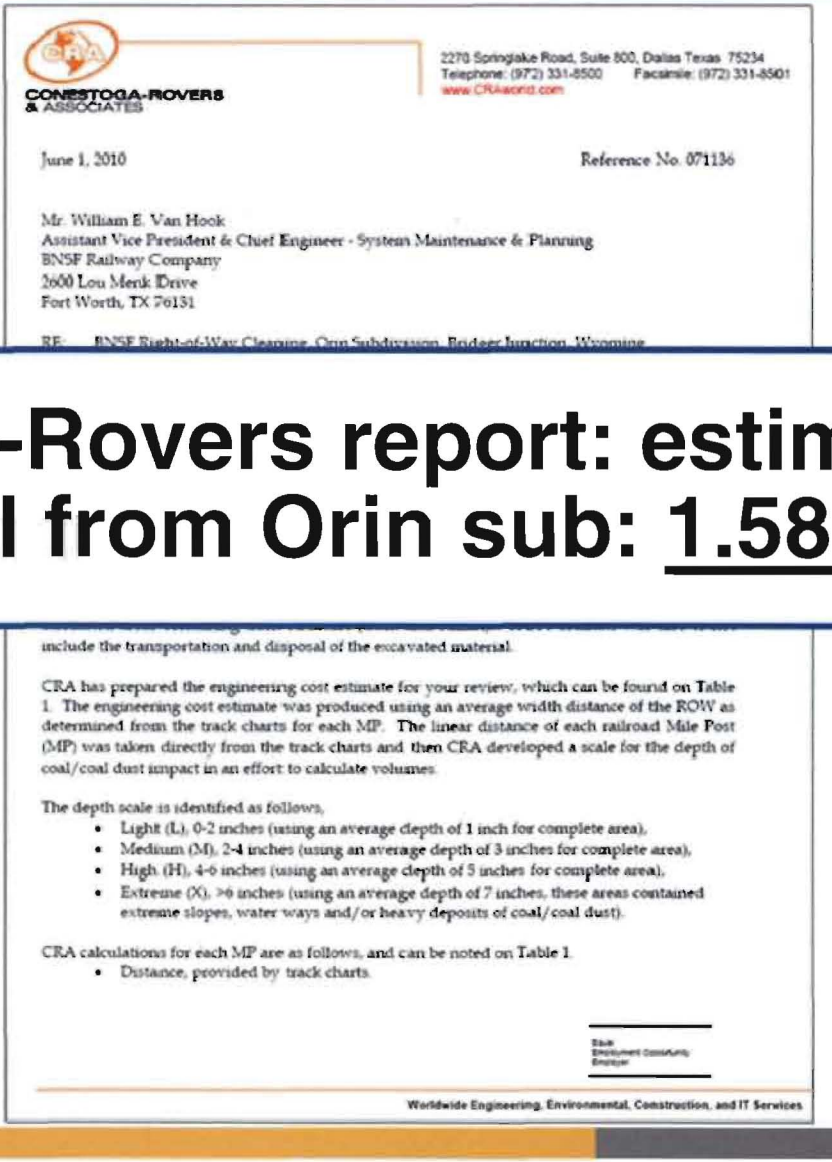


Partially to Fully Fouled



Heavily Fouled

Large volume of coal dust makes it impossible to deal with through maintenance



CONESTOGA-ROVERS & ASSOCIATES

2270 Springlake Road, Suite 600, Dallas Texas 75234
Telephone: (972) 331-8500 Facsimile: (972) 331-8501
www.CRAworld.com

June 1, 2010 Reference No. 071136

Mr. William E. Van Hook
Assistant Vice President & Chief Engineer - System Maintenance & Planning
BNSF Railway Company
2600 Lou Menk Drive
Fort Worth, TX 76131

RE: BNSF Right-of-Way Cleaning, Orin Subdivision, Bridger Junction, Wyoming

include the transportation and disposal of the excavated material.

CRA has prepared the engineering cost estimate for your review, which can be found on Table 1. The engineering cost estimate was produced using an average width distance of the ROW as determined from the track charts for each MP. The linear distance of each railroad Mile Post (MP) was taken directly from the track charts and then CRA developed a scale for the depth of coal/coal dust impact in an effort to calculate volumes.

The depth scale is identified as follows,

- Light (L), 0-2 inches (using an average depth of 1 inch for complete area),
- Medium (M), 2-4 inches (using an average depth of 3 inches for complete area),
- High (H), 4-6 inches (using an average depth of 5 inches for complete area),
- Extreme (X), >6 inches (using an average depth of 7 inches, these areas contained extreme slopes, water ways and/or heavy deposits of coal/coal dust).

CRA calculations for each MP are as follows, and can be noted on Table 1.

- Distance, provided by track charts.

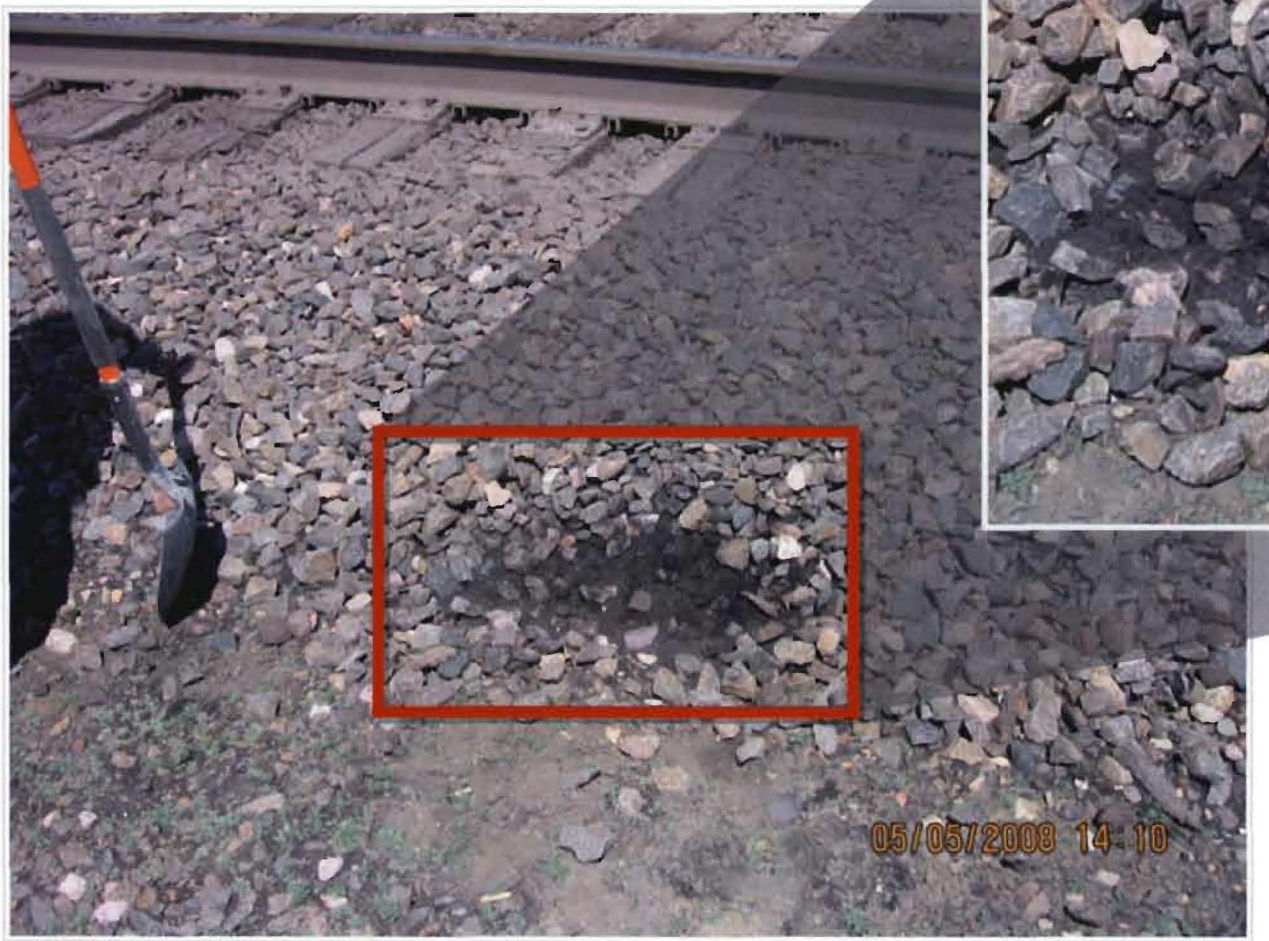
Worldwide Engineering, Environmental, Construction, and IT Services

Conestoga-Rovers report: estimated tons for removal from Orin sub: <u>1.58 Million</u>

Coal dust deposits accumulate rapidly

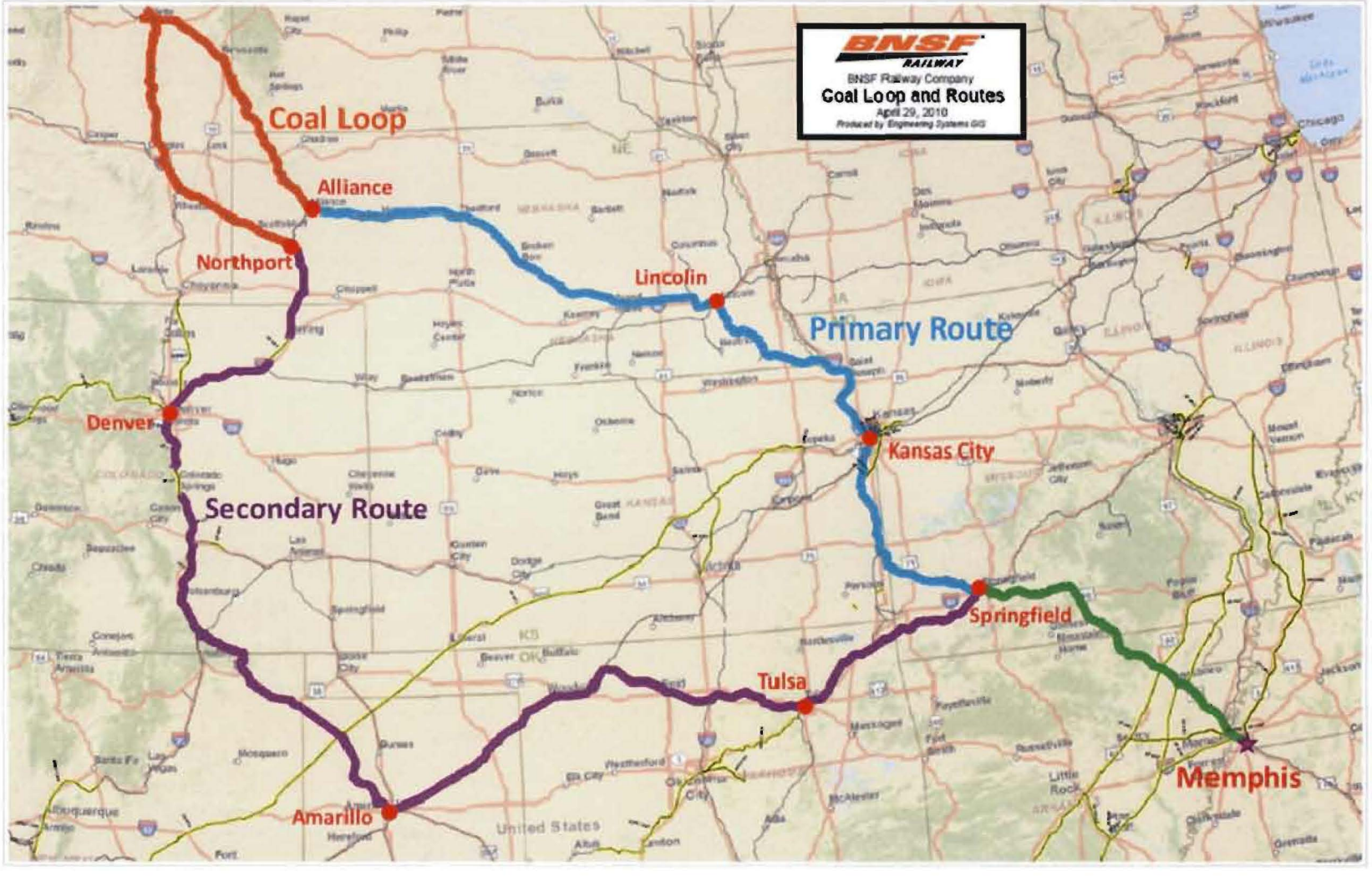
Coal dust accumulates in the ballast

Coal dust in the ballast is often difficult to detect



Apparently clean granite ballast with coal dust deposits beneath the surface

Lengthy reroutes are needed because of coal dust maintenance



After-the-fact maintenance does not address coal dust that falls off the right-of-way

The Chadron Record

May 4, 2010

"Coal Dust Runoff Inundates Family's Organic Garden"

Coal dust was a contributing factor to two derailments in 2005

THE PRECAUTIONARY PRINCIPLE ARGUES FOR PREVENTATIVE MEASURES

BNSF's emissions standards can be implemented without large costs

Assumptions:

- Delivered cost of coal = $30/ton
- Surfactant cost = 20 cents/ton

Cost of surfactant spraying

<1%

Prevention and maintenance are not equally effective

Preventing coal dust emissions

Performing after-the-fact maintenance

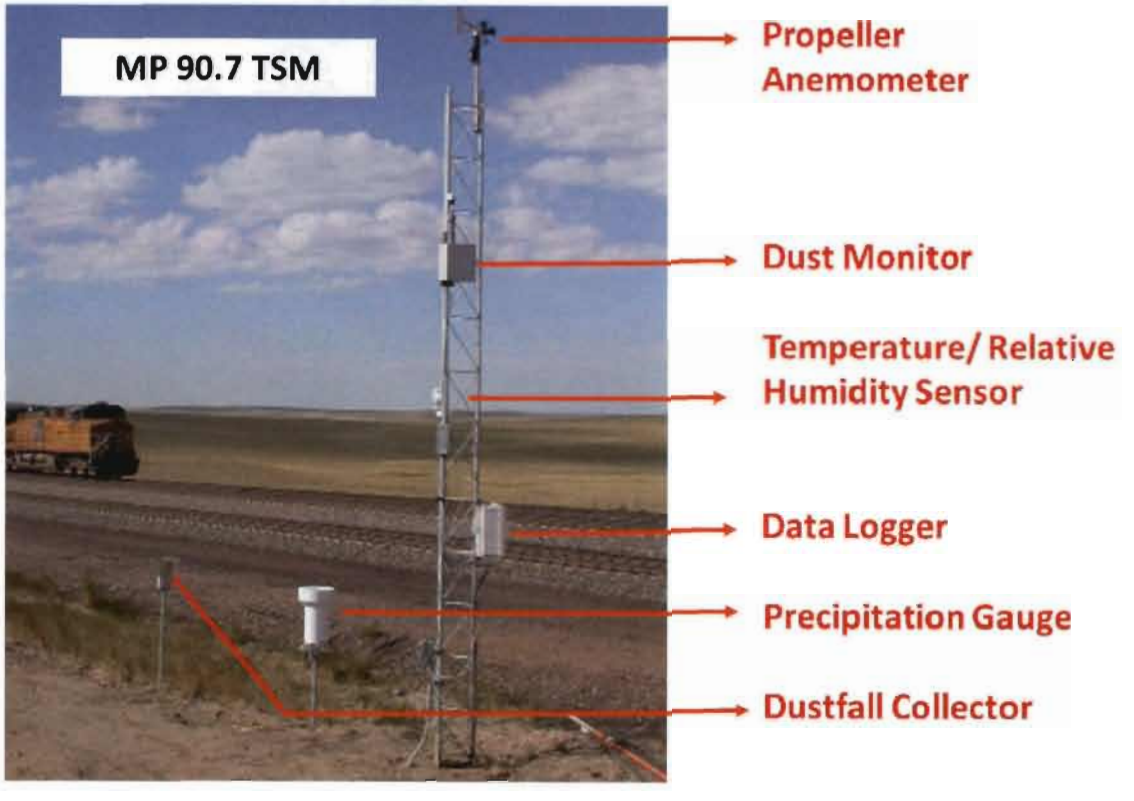
Core Legal Principles and Conclusions

- Railroads have authority to issue operating rules to promote safe and efficient transportation.
- Shippers are responsible for securing their freight.
- BNSF's coal dust operating rule is a reasonable way to ensure that shippers will take steps to limit coal dust emissions.

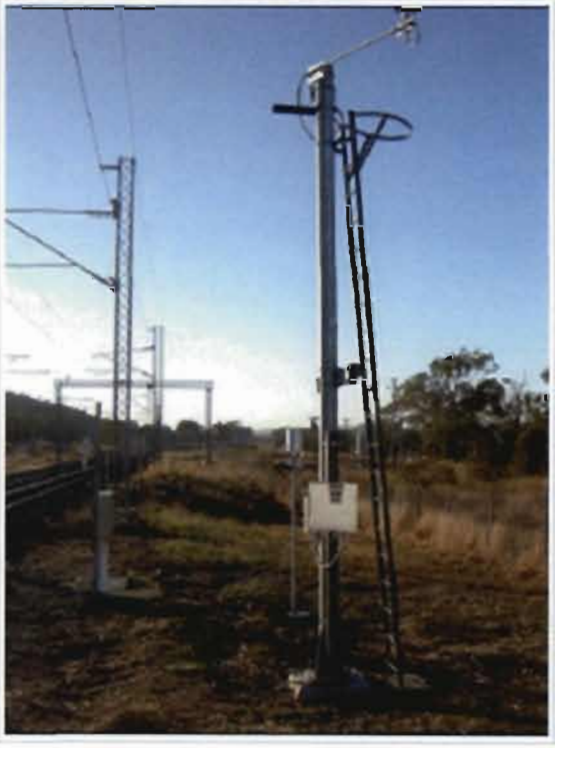
BNSF'S PERFORMANCE STANDARD REQUIRES MONITORING

Trackside monitors

Track-side monitor at milepost 90.7



Trackside monitor in Queensland, Australia



Monitors detect dust clouds emitted from passing trains

403

BNSF's use of the dust monitors has been approved by the manufacturer

Met One Instruments, Inc.
1600 NW Washington Blvd.
Grants Pass, OR 97526
(541) 471-7111
www.metone.com

Dear Dr. Emmitt,

It is our understanding that some questions about the Met One Instruments, Inc E-Samplers have been raised in the context of a proceeding before the Surface Transportation Board. These concerns apparently center on the suitability of the E-Samplers to measure relative amounts of coal dust in the air from coal trains in transit. Based on our understanding of how the E-Samplers are being used, we have no reservations about their use in the Powder River Basin (PRB) to monitor dust emitted from moving coal trains. We believe that the E-Samplers are well suited to this task. We are aware of claims made about supposed shortcomings in the method, and we would like to take this opportunity to make some specific observations about four important points:

First, it is perfectly appropriate to use the E-Samplers to measure the relative amount of dust in an air sample using a relative dust unit instead of a unit of mass concentration such as milligrams per cubic meter (mg/m^3). While the E-Sampler output can be scaled to report particulate mass concentrations through the use of a K-factor (multiplier), it is not necessary to do so for the PRB application.

Second, when measuring the relative amount of dust in a sample using relative dust units, the E-Samplers will reliably establish a linear relationship between measurements. Thus, a reading of 2X dust units can reasonably be interpreted as representing two times the amount of dust as a reading of X dust units, assuming that the type of dust is reasonably consistent. This claim is adequately met with sample times of several minutes, as is the case with trains passing the monitoring site described by BNSF.

"Based on our understanding of how the E-Samplers are being used, we have no reservations about their use in the Powder River Basin (PRB) to monitor dust emitted from moving coal trains. We believe that the E-Samplers are well suited to this task."

– Dennis Hart, Product Engineer, MetOne Instruments

Load Profiling

BEFORE

Note peaked loads, sharp lines, steep angle of repose and other irregular surfaces which are susceptible to erosion

AFTER

Note rounded contour, no sharp angles, flatter angle of repose and few irregular surfaces which are susceptible to erosion

Surfactant Application

Surfactant spraying in the PRB

Surfactant spraying in China

BNSF'S ADOPTION OF A PERFORMANCE-BASED STANDARD

FERC convened a hearing regarding impact of coal delivery on reliability

408

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Discussions with Utility and Railroad Representatives On Market and Reliability Matters — Docket No. AD06-8-000

NOTICE ON FILING COMMENTS

(June 30, 2006)

On June 15, 2006, the Federal Energy Regulatory Commission (FERC) met with utility and railroad representatives to discuss railroad coal-delivery matters and their impact on markets and electric reliability.

Additional comments in this docket will be accepted until **July 17, 2006.**

Magalie R. Salas
Secretary

The Board places a strong emphasis on maintaining a reliable PRB coal supply

38193 SERVICE DATE JULY 17, 2007
EB

SURFACE TRANSPORTATION BOARD

DECISION

STB Ex Parte No. 670

ESTABLISHMENT OF A RAIL ENERGY TRANSPORTATION ADVISORY COMMITTEE

AGENCY: Surface Transportation Board.

ACTION: Notice of Establishment of Federal Advisory Committee.

SUMMARY: As required by section 9(a)(2) of the Federal Advisory Committee Act (FACA), 5 U.S.C. App., the Surface Transportation Board (Board), hereby gives notice that, following consultation with the General Services Administration, the Board is creating a Rail Energy Transportation Advisory Committee (RETAC). RETAC will provide advice and guidance to the Board, and serve as a forum for discussion of

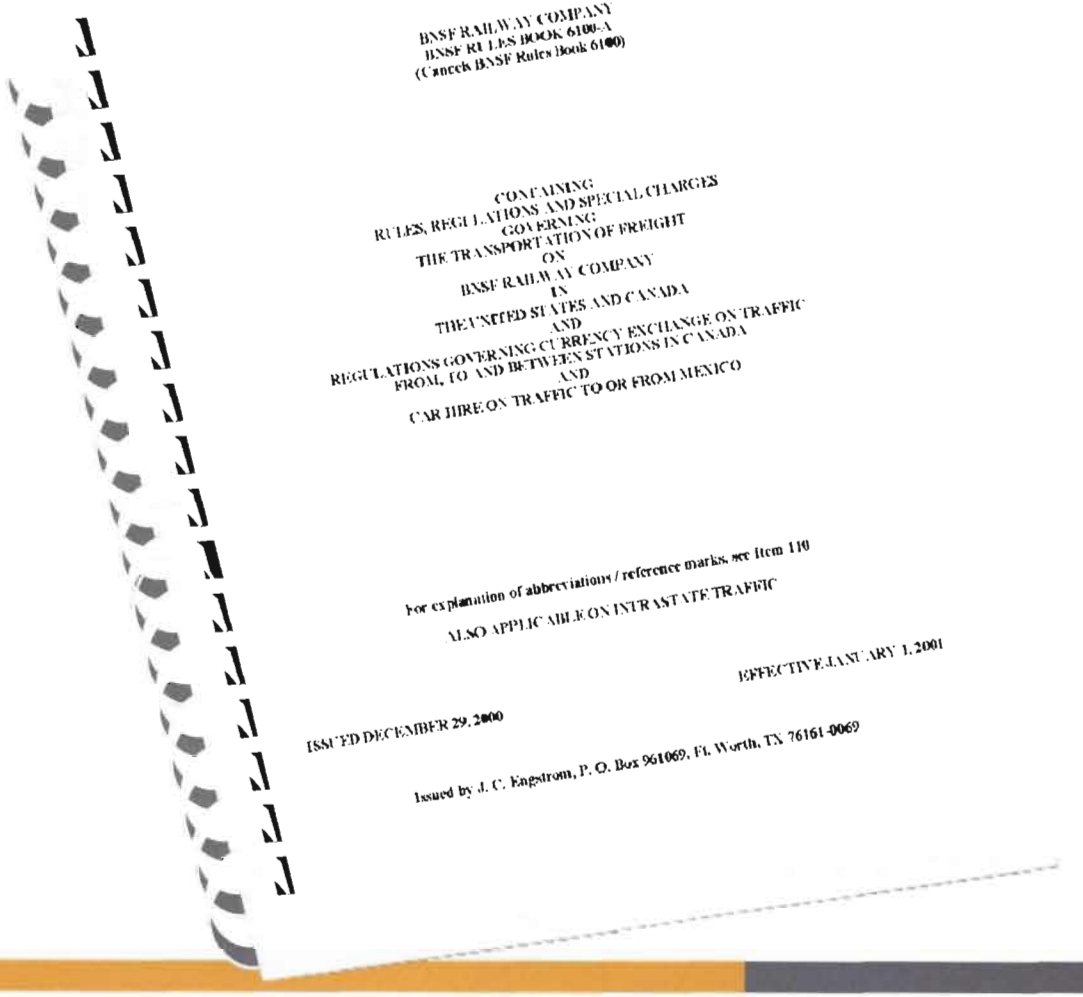
The Board views the reliability of the nation's energy supply as crucial to this nation's economic and national security, and the transportation by rail of coal and other energy resources as a vital link in the energy supply chain.

STB Ex Parte No. 670 (Served July 17, 2007)

Service (FIRS) at 1-800-877-8339.]

SUPPLEMENTARY INFORMATION: The Board, created by Congress in 1996 to take over many of the functions previously performed by the Interstate Commerce Commission, exercises broad authority over transportation by rail carriers, including regulation of railroad rates and service (49 U.S.C. 10701-10747, 11101-11124), as well as the construction, acquisition, operation, and abandonment of rail lines (49 U.S.C. 10901-10907) and railroad line sales, consolidations, mergers, and common control arrangements (49 U.S.C. 10902, 11323-11327).

There must be a rule that is generally applicable



BNSF RAILWAY COMPANY
BNSF RULES BOOK 6100-A
(Cancels BNSF Rules Book 6100)

CONTAINING
RULES, REGULATIONS AND SPECIAL CHARGES
GOVERNING
THE TRANSPORTATION OF FREIGHT
ON
BNSF RAILWAY COMPANY
IN
THE UNITED STATES AND CANADA
AND
REGULATIONS GOVERNING CURRENCY EXCHANGE ON TRAFFIC
FROM, TO AND BETWEEN STATIONS IN CANADA
AND
CAR HIRE ON TRAFFIC TO OR FROM MEXICO

For explanation of abbreviations / reference marks, see Item 110

ALSO APPLICABLE ON INTRASTATE TRAFFIC

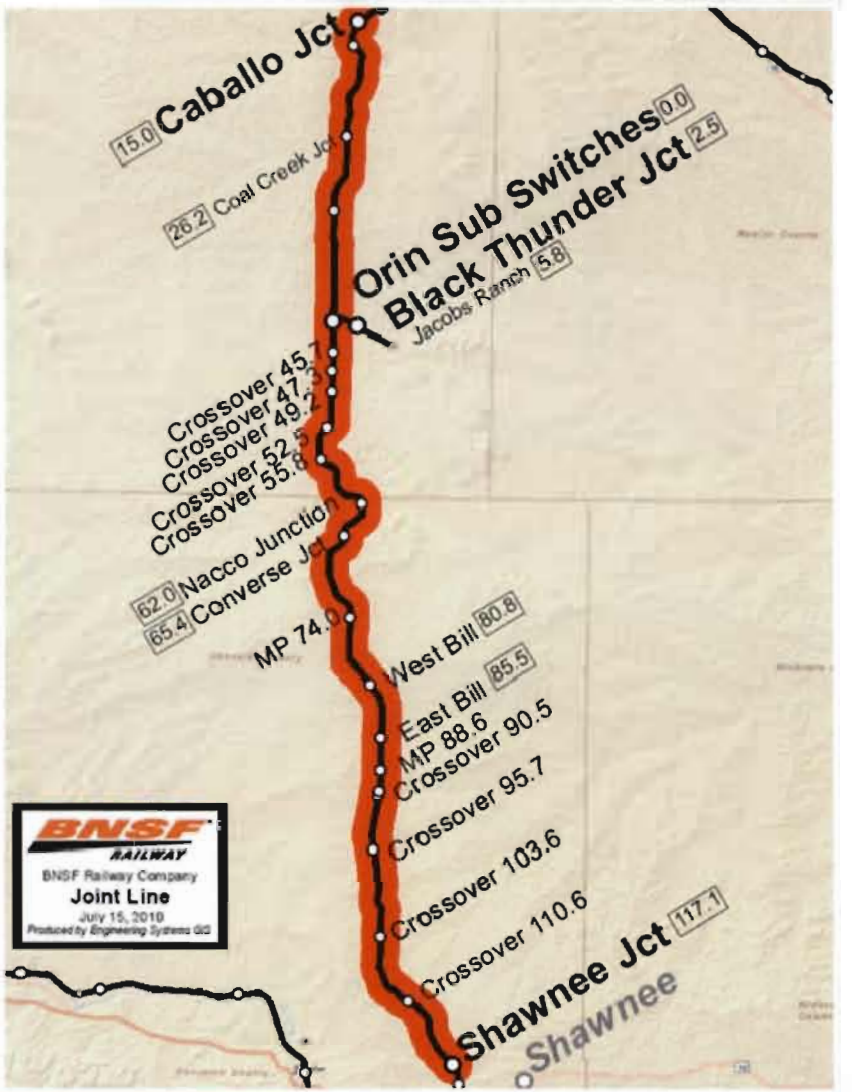
EFFECTIVE JANUARY 1, 2001

ISSUED DECEMBER 29, 2000

Issued by J. C. Engstrom, P. O. Box 961069, Ft. Worth, TX 76161-0069

SHIPPERS MUST BEGIN TO ADOPT CURTAILMENT MEASURES

The Joint Line



Joint Line Operating Rule

"As soon as practicable, trains handling cars loaded with coal moving from individual mine origins on the Joint Line shall not emit more than an Integrated Dust Value (IDV.2) of 300 units in order to enhance retention of coal in rail cars."

NEXT STEPS


BNSF

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(202) 347-7170

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WRITER'S E-MAIL:
abk@sloverandloftus.com

November 18, 2010

BY HAND DELIVERY

Ms. Cynthia Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423-0001

Re: Finance Docket No. 35305, *Arkansas Electric Cooperative Corp. – Petition for Declaratory Order*

Dear Ms. Brown:

In response to the request of the STB's staff earlier this week, we are providing two copies of the hearing materials utilized by the Western Coal Traffic League ("WCTL") and the Concerned Captive Coal Shippers ("CCCS") during the July 29, 2010 hearing in the above-referenced proceeding. WCTL's materials included a PowerPoint presentation. CCCS's materials included a PowerPoint presentation identifying the members of the group, a set of photos showing Joint Line track conditions as of May 2010, and a video showing the movement of a train on the Joint Line. We have enclosed both hard-copy and electronic versions of the hearing materials.

Respectfully submitted,

Andrew B. Kolesar III

Enclosures

STB Finance Docket No. 35305

Handout for Oral Hearing

Excerpts from WCTL-CCCS Rebuttal Exhibit 2

Joint Line Photos – May 25 & 26, 2010

C. Michael Loftus
Slover & Loftus LLP
Counsel for Concerned Captive
Coal Shippers
July 29, 2010


MP 28.44 - May 25, 2010


MP 29.99 - May 26, 2010


MP 39 - May 26, 2010


MP 45 - May 26, 2010


MP 59.3 - May 26, 2010


MP 65.4 - May 26, 2010

MP 88.6 - May 26, 2010

Finance Docket No. 35305
Western Coal Traffic League

July 29, 2010

BNSF IDV Standards

- Item 100 – "Effective October 1, 2010, Shipper shall take all steps necessary to ensure that Trains handling Cars loaded with Coal from **any mine origin that move over the Joint Line shall not emit more than an Integrated Dust Value (IDV.2) of 300 units** in order to enhance retention of Coal in Cars."

- Item 101 – "Effective October 1, 2010, Shipper shall take all steps necessary to ensure that Trains handling Cars loaded with Coal from **any mine origin that move over the Black Hills Subdivision shall not emit more than an Integrated Dust Value (IDV.2) of 245 units** in order to enhance retention of Coal in Cars."

BNSF 6041-B, Issued June 9, 2010

F.D. 35305

Concerned Captive Coal Shippers

July 29, 2010

Concerned Captive Coal Shippers

- American Electric Power Service Corporation
- Consumers Energy Company
- Dairyland Power Cooperative
- Dynegy, Inc.
- Entergy Arkansas, Inc., Entergy Gulf States Louisiana, L.L.C., and Entergy Services, Inc.
- Intermountain Power Project
- Progress Energy, Inc.
- Seminole Electric Cooperative, Inc.
- South Carolina Public Service Authority (Santee Cooper)
- South Mississippi Electric Power Association

U.S. Department of Transportation
Office of the Secretary of Transportation

General Counsel

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

November 18, 2010

Ms. Cynthia Brown
Chief of the Section of Administration
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: Arkansas Electric Cooperative Corporation –
Petition for Declaratory Order
Docket No. FD 35305

Dear Ms. Brown:

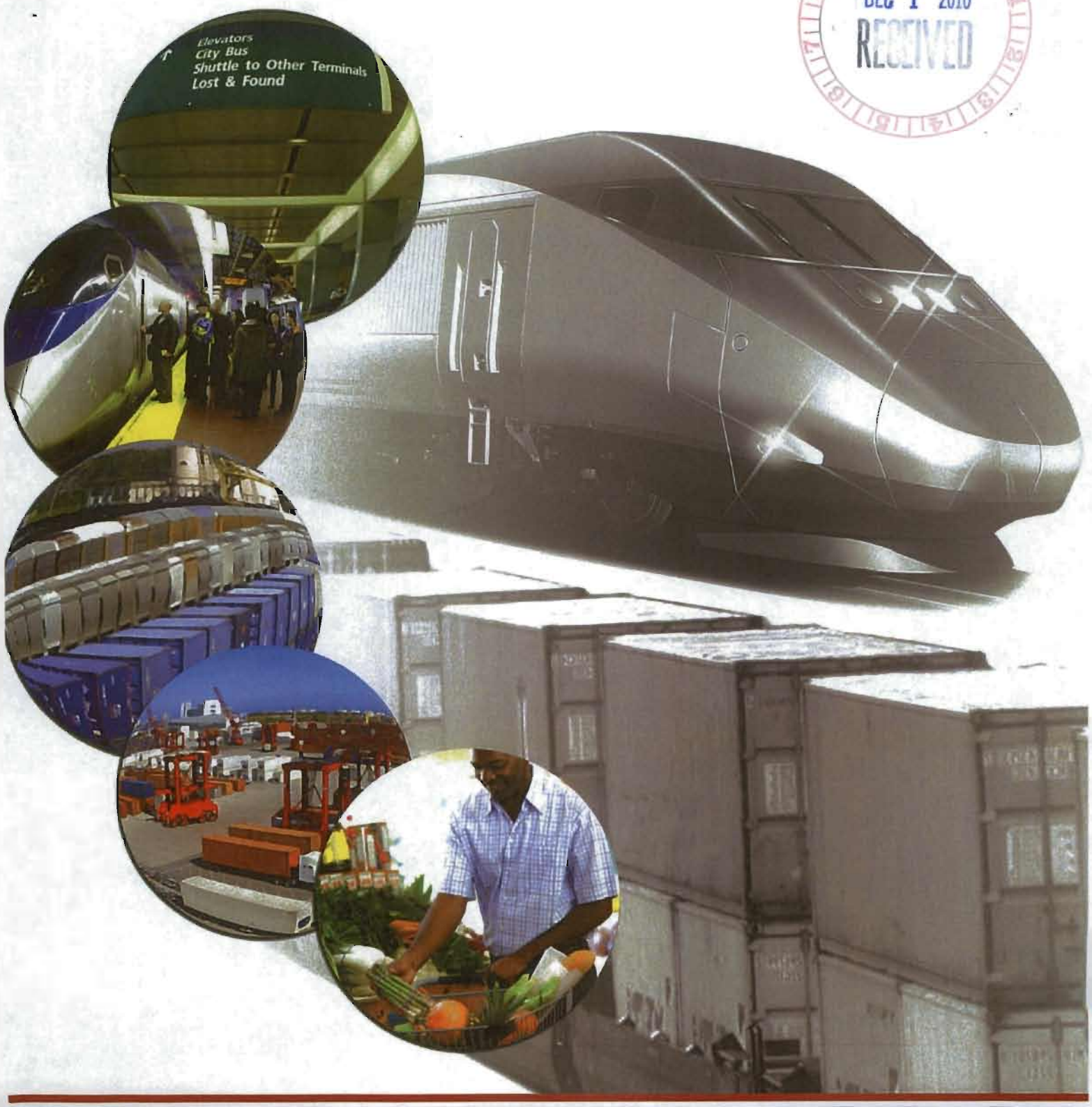
Pursuant to the request of the Surface Transportation Board, enclosed are two hard copies of the *Preliminary National Rail Plan* issued by the Federal Railroad Administration in October 2009. I supplied copies of this document to the members of the Board at the hearing in the above-referenced proceeding on July 29, 2010, referencing in particular Figure 1 on page 4. Please contact me if you have any questions.

Respectfully submitted,

PAUL SAMUEL SMITH
Senior Trial Attorney
(202) 366-9280

Enclosures

PRELIMINARY
NATIONAL RAIL PLAN



FEDERAL RAILROAD ADMINISTRATION

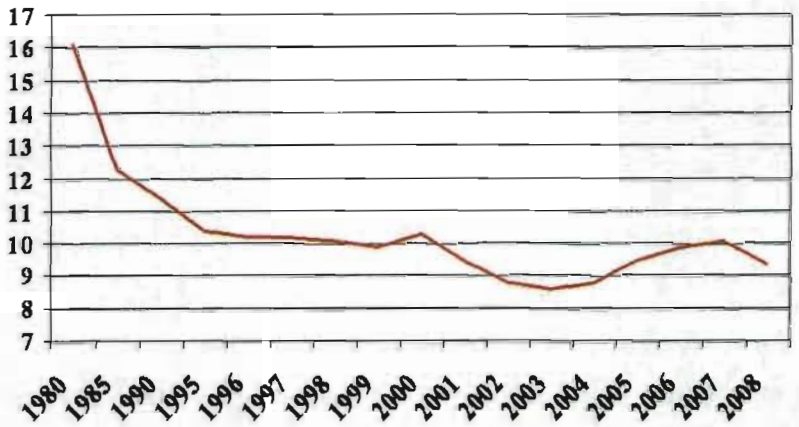
OCTOBER 2009

Preliminary
National Rail Plan

The Groundwork for Developing Policies to Improve the United States Transportation System

October 15, 2009

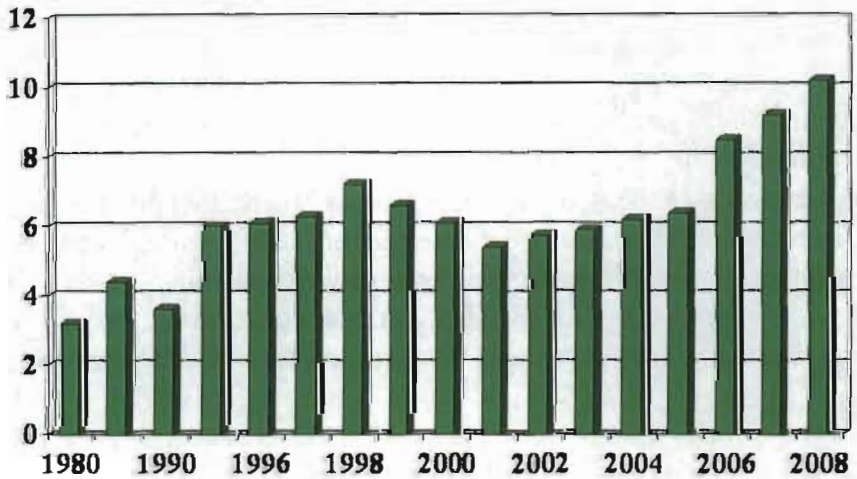
Figure 8. - Total Logistics Costs as a Percent of GDP



Source: Annual State of Logistics Report; Council of Supply Chain Management Professionals

Congestion causes delays, diminishes productivity, and adds extra costs to virtually all goods and services produced in the economy. Investments in transportation infrastructure that expand capacity and relieve congestion points will facilitate the movement of goods over the network and reduce logistics costs. The freight railroad industry invested over $148 billion from 1980 through 2008. In recent years investment to expand capacity rose from $6.4 billion in 2005 to $10.2 billion in 2008. (See Figure 9.)

Figure 9. - Class I Railroad Capital Expenditures



Source: Association of American Railroads; "Railroad Facts," various editions for historic results

Preliminary National Rail Plan

Figure List

Executive Summary

The Passenger Rail Investment and Improvement Act of 2008 (PRIIA) directed the Administrator of the Federal Railroad Administration (FRA) to develop a Preliminary National Rail Plan (PNRP or Preliminary Plan) to address the rail needs of the Nation. The PRIIA also directed FRA to provide assistance to States in developing their State rail plans in order to ensure that the Federal long-range National Rail Plan is consistent with approved State rail plans. Subsequent to PRIIA, the American Reinvestment and Recovery Act of 2009 (Recovery Act) sets the framework for the development of true high-speed rail in the United States. This Preliminary Plan is, therefore, an important first step in an ongoing process.

This Preliminary Plan lays the groundwork for developing policies to improve the U.S. transportation system. Its goals are consistent with the top goals of the U.S. Department of Transportation's (DOT): to improve safety, to foster livable communities, to increase the economic competitiveness of the United States, and to promote sustainable transportation. The important attributes of rail—safety, fuel efficiency, and environmental benefits—can meaningfully assist in achieving these goals.

CURRENT RAILROAD BENEFITS TO THE TRANSPORTATION NETWORK	FREIGHT	PASSENGER
SAFETY	Rail and intermodal rail can enhance safety in competitive corridors	Average fatalities per year from 2002-2008 = less than 9
ENERGY	1.9 to 5.5 times more fuel-efficient than truck	Consumes 21% less energy per passenger mile than automobiles
LIVABLE COMMUNITIES	Mitigates urban congestion	Encourages efficient land use
ECONOMIC GROWTH	Reduces logistics costs	Improves regional interconnectivity
ENVIRONMENT	Reduces greenhouse gases and pollutants	Reduces greenhouse gases and pollutants

Today, rail is part of a complex national system for the movement of people and goods. Passenger and freight transportation are closely interlinked in that people and goods use the same infrastructure for transportation by highway and rail. Therefore, a National Rail Plan must be developed with an awareness of the transportation needs and demands of both passengers and freight, both of which increasingly move "intermodally," that is they use the most suitable mode of transportation for each segment of a particular journey. The long-range National Rail Plan will assist in developing strategies that exploit the strengths that are inherent in each mode of transportation, and leverage those strengths to improve U.S. transportation as a whole.

The traditional role of the FRA has long been to promote and oversee railroad safety, and safety remains a focus of FRA. Legislative directives in the last year, most notably PRIIA and the Rail Safety Improvement Act of 2008 (RSIA), have given FRA additional broad responsibilities to administer and manage funds that will improve rail transportation. The new scope and direction provided by PRIIA and RSIA, in combination with the Recovery Act, has made FRA's participatory role in rail transportation projects comparable to that of other modal administrations in the Department.

This Preliminary Plan sets forth the FRA's proposed approach to developing the long-range National Rail Plan, including our goals and objectives for the greater inclusion of rail in the national transportation system. Although this Preliminary Plan does not generally offer specific recommendations, it identifies a number of issues that this agency believes should be considered in formulating the National Rail Plan. In short, it is designed to create a springboard for further discussion. The FRA especially looks forward to input from the States, and freight railroads, who are expected to provide valuable information and perspectives. The end focus is on the shippers and riders who use the rail system. We welcome the participation of all transportation stakeholders on these issues as well as others that may be presented, as we develop the long-range National plan. Outreach efforts such as the Rail Safety Advisory Committee and the high-speed rail development efforts have been very successful. These and other activities have given FRA a reputation for strong and extensive outreach; the development of a National Rail Plan will be in line with this model.

Background and Context of the Plan

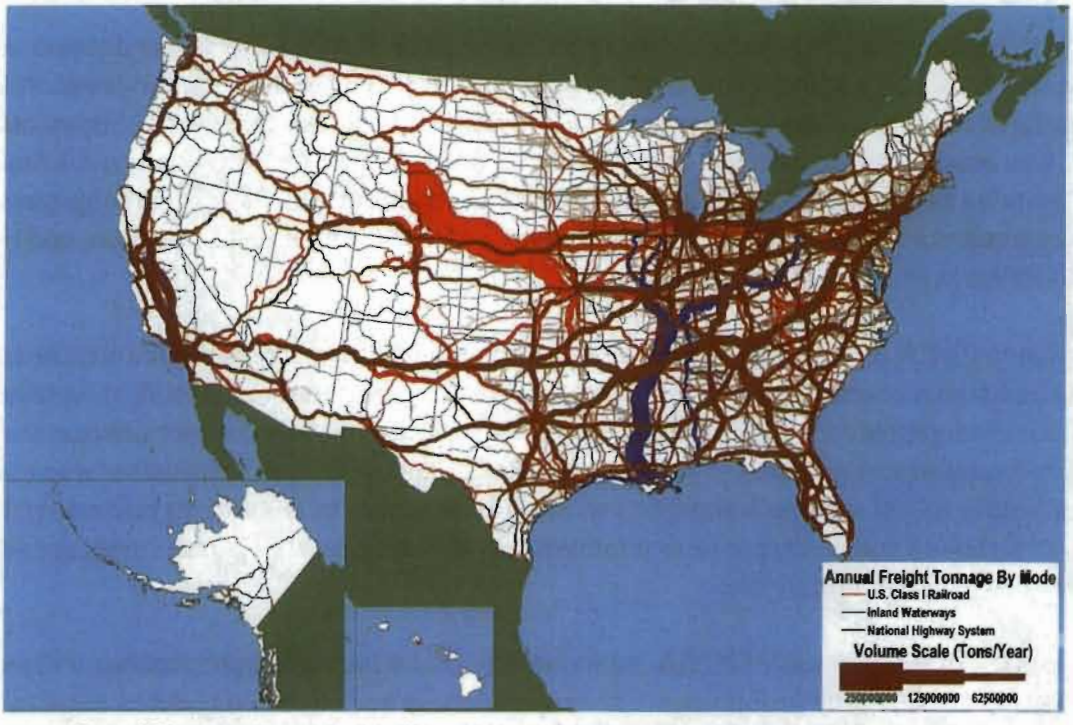
The RSIA reauthorized FRA and the current safety program through 2013, and it proposes initiatives to enhance rail safety by adding inspectors and new programs. The RSIA also advances high-speed rail by opening avenues for Federal investments in infrastructure improvements. Companion legislation, PRIIA, was enacted on October 16, 2008. Section 307(b)(j) of the Act directs the Administrator of FRA to: (1) provide assistance to States in developing State rail plans, (2) develop a long-range National Rail Plan consistent with both approved State rail plans and the rail needs of the Nation, and (3) develop a PNRP within a year of the date of enactment.

Additionally, PRIIA directed the Administrator to develop partnerships with the freight and passenger railroad industry concerning public rail development, support intermodal rail development and high-speed rail development, ensure that programs and initiatives developed under this section benefit the public, and support regional and national transportation goals. The Administrator was also directed to assist providers of rail service and owners of rail infrastructure in integrating passenger-freight service on shared rights-of-way in response to joint requests to help assess operations and capacity, capital requirements, and operating costs.

The directives of this section of PRIIA are numerous, and while certain provisions will require additional time due to new requirements, they nonetheless need to be considered in this Preliminary Plan. This PNRP sets forth the issues, methodology, and framework that must be taken into account in the future development of the first long-range National Rail Plan, which, as noted above, must be consistent with the approved State rail plans. This PNRP also presents background material on various aspects of our current system of rail transportation, and addresses the key issues that must be resolved in order to develop a modern and efficient passenger and freight rail system that works in harmony with other modes of transportation. Such a system will enable DOT to meet future national needs as well as achieve current departmental goals.

The railroad industry today is a major component of a mature transportation network that also includes highway, waterway, transit, pipeline, and air (see Figure 1 for rail, highway and waterway tonnage). Together these systems provide, singularly or intermodally, the transportation that is required for freight and passengers. Over the past decades, the network has improved in response to shippers and travelers who have demanded more efficiencies from both the transportation modes and the intermodal connections. As a result, freight shippers and their customers have been able to extract logistic costs from the supply chain, and commuter and intercity rail passengers can sensibly choose the type of transportation that best meets their expectations in terms of time and cost. As this trend continues, higher quality rail service will attract an increasing share of business from shippers and from traveling passengers.

Figure 1. - Tonnage on Highways, Railroads and Inland Waterways: 2002



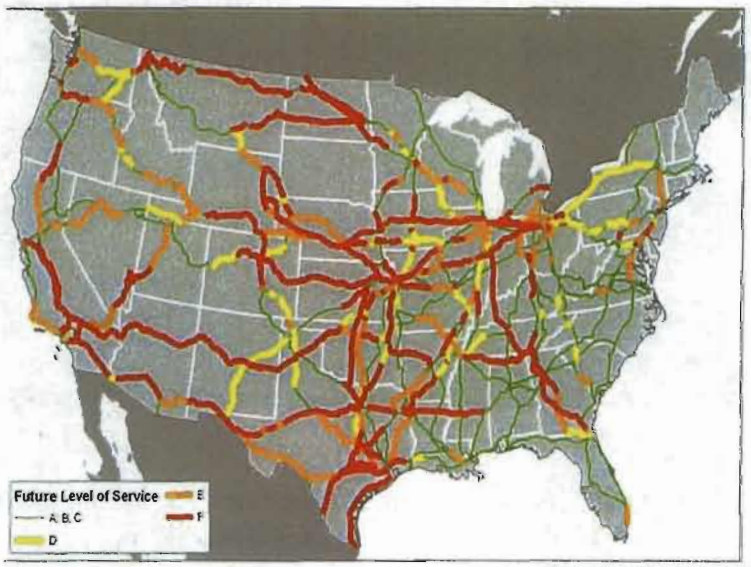
Sources: Highways: U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework, Version 2.2, 2007. Rail: Based on Surface Transportation Board, Annual Carload Waybill Sample and rail freight flow assignments done by Oak Ridge National Laboratory. Inland Waterways: U.S. Army Corps of Engineers (USACE), Annual Vessel Operating Activity and Lock Performance Monitoring System data, as processed for USACE by the Tennessee Valley Authority; and USACE, Institute for Water Resources, Waterborne Foreign Trade Data, Water flow asssignments done by Oak Ridge National Laboratory.

In the United States today, two distinctly different rail systems exist: freight railroads and passenger railroads. Freight railroads are privately owned and operated; they are in business to make a profit for their stockholders. Passenger railroads are publicly subsidized by taxpayers; they provide a public service by offering a safe and environmentally friendly travel option. These two different types of rail transportation usually occur in the same corridor and on the same infrastructure.

By many measures, the U.S. freight rail system is the safest, most efficient and cost effective in the world. Generally speaking, and in relative comparison to other modes, freight railroads perform their functions and maintain the freight rail infrastructure without the need for government funds. Freight rail infrastructure maintenance and capacity enhancements, however, can only occur with Federal legislation and policies that allow rail carriers to earn revenues that are sufficient to encourage their continued investment in the system. Their investment meets National needs by enhancing safety, reliability, and capacity. Before 1980, when railroads were partially deregulated, they focused on survival. In recent years, they have been thriving and privately funded freight railroads have focused on enhancing the reliability of their service and their intermodal capacity. The recent economic downturn has slowed but not eliminated targeted projects that will enhance freight railroads capacity and competitiveness, thereby positioning them to better handle traffic as the economy recovers.

These investments are important to meet future growth. The Department estimates that tonnage on the railroad system will increase by 88 percent through 2035. Taking this growth into consideration, Figure 2 shows future rail volumes based upon current corridor capacity. Levels of service "A, B, and C" are corridors operating below capacity. Levels of service "D and E" are operating near capacity and level of service "F" is operating above capacity with congestion affecting the network.

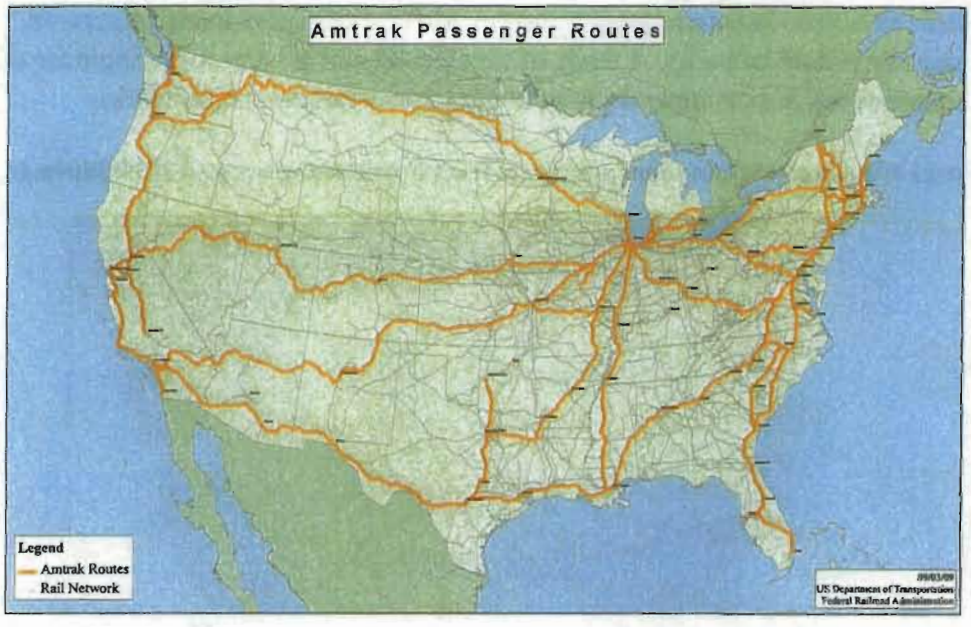
Figure 2. - Future Corridor Volumes Compared to Current Corridor Capacity - 2035 Without Improvements



Source: National Rail Capacity Study, 2007

Our Nation's intercity passenger rail service is provided by the National Railroad Passenger Corporation (Amtrak), which was created in 1971 to relieve the freight railroads from their common carriage obligation to provide passenger service. The current passenger services, (see Figure 3), which serve as an important component of a national transportation system, must be improved and intermodal connections enhanced. The PRIIA reauthorized Amtrak for 5 years and provided funding to improve the U.S. rail passenger network. To better develop high-speed rail service, whether operated by Amtrak or another entity, the Recovery Act, signed into law by President Obama on February 17, 2009, contains funding and sets forth requirements for the development of high-speed intercity rail. This investment will serve as an important economic stimulus, while improving intercity passenger rail service in urban areas and paving the way for high-speed rail.

Figure 3. - Amtrak Passenger Routes



Currently, there are more than 20 commuter rail systems that serve 25 major metropolitan areas. During the 10 years between 1997 and 2007, annual commuter rail ridership increased by 28 percent–by almost 100 million riders–and in 2007, these commuter rail systems operated 7,000 route-miles and carried approximately 1.7 million daily riders. These systems are supported by State, local, and Federal funding, and they operate over rights-of-way that may be publicly owned, or owned and maintained by freight railroads. As commuter services grow, and as high-speed intercity rail brings more passengers directly into city centers, the importance of easy access to local transit services will increase. The number of rail corridors that reach through metropolitan areas and into the heart of cities, however, is limited.

Long-term trends demonstrate that the growth in intercity and commuter passenger rail services will continue. Most passenger service, however, occurs on rail infrastructure that is owned and operated by freight railroads; only a small amount of rail infrastructure is owned by passenger carriers. Although some rail infrastructure is passenger-only, the vast majority of rail route-miles are traversed by freight.

Passenger and freight rail needs are vastly different. Yet because they are inescapably linked and amenable to economies of scale and joint benefits, the development of a National Rail Plan cannot consider one method in isolation from the other. Both passenger and freight rail operations can interfere with one another, and the delay of either passengers or freight seriously diminishes productivity and customer satisfaction.

Moreover, the rail plan must be developed in consideration of all other modes of transportation within the entire network. With proper policies and positioning, rail can better serve its role as a complementary component of that network. Shippers and passengers benefit from options that include intermodal freight and passenger transportation. Therefore, any plan must consider how to improve efficiencies not only within that particular mode, but also on how the system can collectively work together to provide service enhancements for all users of transportation services.

The National Rail Plan must be vigilant of the dynamic transportation needs of the Nation and remain flexible to accommodate changes in trade patterns and market conditions. For example, the completion of the Panama Canal expansion project in 2014 could significantly alter U.S. and international trade patterns and shift current freight flows to or from different port facilities with subsequent increases in traffic on corridors which are not accustomed to such intensive use.

By recognizing that the individual modes of transportation form an integrated transportation system, the Nation can utilize the strengths that are inherent in each mode, thereby optimizing the entire system.

Objectives for Rail as part of a National Transportation System

Increasing Passenger and Freight Rail Performance Will Improve National Transportation System Performance

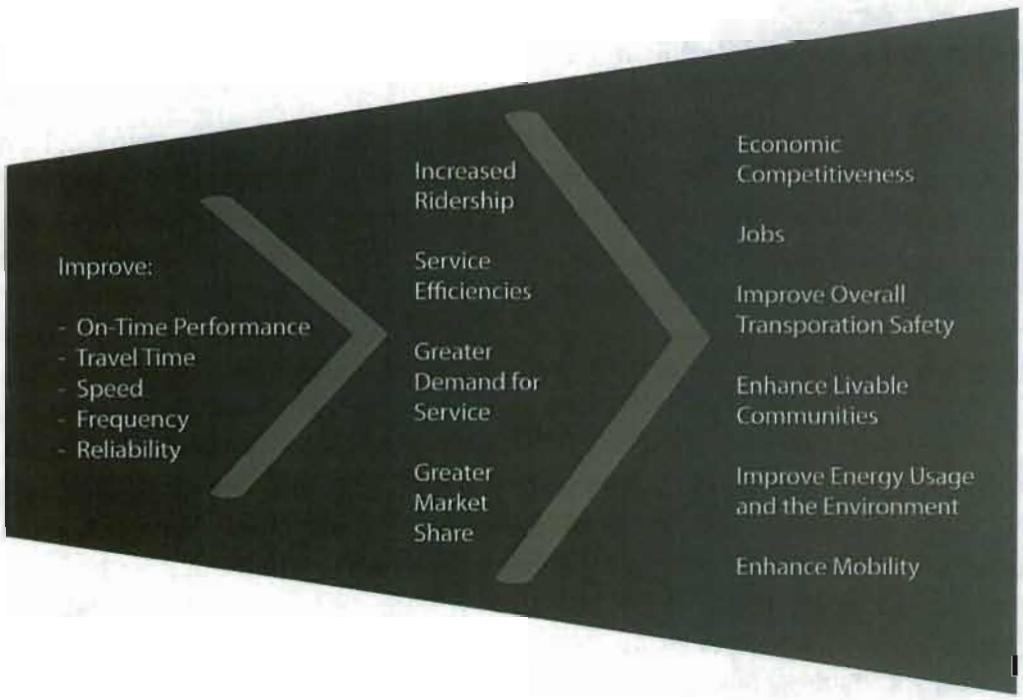
The demand for rail passenger transportation depends on the performance of the system. Late passenger trains and inadequate amenities drive away customers, while on-time, frequent and comfortable trains draw increased patronage. Passengers switch to rail when the combination of the positive attributes (safety, speed, reliability, comfort, and convenience) outweighs the cost of transportation alternatives, that is, when the "total package" is viewed as preferable. For this reason, improving rail's performance will enhance the performance of the national transportation system as a whole. Experience around the world has shown that high-speed and intercity passenger rail systems will require a sustained investment.

Freight shippers, for example, consider not just the cost of rail, but its reliability and convenience. Shippers of freight, and particularly high-value freight, cannot afford slow or undependable transportation services, and when these difficulties result in lost market share, arguments about the superior safety and fuel efficiency of rail fall on deaf ears. If freight rail is to play a larger role in the national transportation system, its performance must improve. This will require expanding capacity, improving connections, reducing chokepoints, and providing new and expanded services. And where rail does not provide direct service to the originator or end-user, seamless service for the "last mile" is also key. At the same time, regulatory and institutional factors that increase costs and impose unequal burdens on performance may have to be revised to better serve the transportation industry and the Department's goals. Finally, industry and government, working together, must develop and harness new technologies to further improve rail safety, productivity, and performance.

Integration of All Transportation Modes: A More Complementary Transportation System

The inclusion of new transportation options will allow people and companies to make smarter choices regarding costs and services. Greater integration of rail into the transportation network, where it makes sense to do so, will help the Nation to achieve its ambitious goals. When relative costs and services lead to the increased use of rail, society will experience improved safety, reduced congestion, and a reduction in the need for petroleum with subsequent reductions in pollution and greenhouse gas emissions. In many cases, measures to improve rail performance beyond current levels will further increase rail's capacity to expeditiously move additional freight and passengers.

Using information provided by the States and other stakeholders, including freight railroads and passenger rail operators, the National Rail Plan will set forth a methodology that can more accurately determine what capacity is needed and where intermodal connections need to be improved. This final Plan will recommend strategies to fund capacity enhancements, as well as identify public benefits and consequences. The plan will strive to identify and encourage choices in transportation that help achieve the Nation's and the Department's goals.



Identify Projects of National Significance

One purpose of this plan is to consider how to achieve those critical improvements in the rail system that cannot be realized solely through current public or private arrangements. Rail projects such as the Kansas City Flyover and the Alameda Corridor are examples of successful public-private partnerships

that are funded by various means, including substantial funding from private sources. As in the case of the Alameda Corridor, user fees can be used to repay a portion of the initial outlays by government. Such projects mirror the manner in which early highway projects were financed by a variety of funding and recouped much of the cost of the project through user fees in the form of tolls.

The privately owned freight rail system, however, must generally finance improvements through current cash flow based on expectations of future demand. Corporate railroads have a responsibility to generate income for their shareholders and look for ways to maximize their return on investment. However, activities that may provide a broad public benefit may not adequately contribute to (and may even harm) efforts to increase revenue or reduce expenses. By comparison, the national highway system, designed to be maintained by user fees in the form of fuel taxes, is not, and has never been, expected to "turn a profit" for its owners. Nonetheless, the national highway system provided speed and flexibility, and revolutionized travel and freight transportation during the 40 years of its development.

There are critical rail projects that might be pursued if additional resources were available. This is particularly true for joint freight-passenger improvements, where the benefit for either mode (when viewed independently) may not be enough to justify a project, although the total benefit would warrant it. New high-speed intercity rail projects provide another example where coordination will be needed among a number of different local jurisdictions. The long range National Rail Plan will consider methods of identifying these "projects of national significance" and propose financing mechanisms. In addition, the Plan will evaluate alternative strategies for financing freight and passenger rail needs.

Just as the formation of the interstate highway system took shape in concert with the development of corridors, rail service enhancements and additions to infrastructure must be coordinated within the context of traffic flows, corridors, and route structures that are in harmony with State and regional transportation plans. As an integral part of the national transportation system, improvements to rail service should be harmonized with existing and future highways, transit systems, airports, and ports.

Provide Increased Public Awareness

The achievement of these goals will require public support and awareness of all modes of transportation. It is therefore vital to stimulate public awareness of the issues and potential benefits from improvements in various modes of transportation, including rail. With this in mind, the long range National Rail Plan will include an extensive public outreach effort. Moreover, the Department will undertake efforts to develop and disseminate material to the public on the potential of rail transportation in partnership with other modes. This is consistent with the Department's resolve to form a cohesive and efficient multimodal transportation network. Consequently, the long range National Rail Plan will include provisions for ongoing education and feedback on the numerous transportation issues involved.

Need for a National Rail Plan

As the Nation seeks to rebalance its transportation system, much attention has been focused on rail. In the last year, Congress has enacted several important pieces of legislation: RSIA, PRIIA, and the Recovery Act. Efforts are currently underway for legislation for surface transportation reauthorization. A National Rail Plan, developed in harmony with the states, can provide direction by developing a common understanding and aligning goals.

The Recovery Act contains more than $48 billion in vital transportation funding to help bring about economic recovery and make lasting investments in our Nation's infrastructure. This Act provides an investment in our Nation's transportation infrastructure and in jobs for Americans. The resources made available for transportation infrastructure in the Recovery Act will primarily be used for the modes of transportation that have been traditionally funded publicly. However, the Recovery Act specifies that certain investments, funded through the Federal Highway Administration or the Office of the Secretary of Transportation, can be used for meaningful transportation enhancements regardless of mode; these funds, therefore, are available for rail infrastructure improvements. In addition, for the first time, the Recovery Act designated $8 billion specifically for the development of high-speed intercity rail in the United States.

Rail can deliver on the Department's goals. For both passenger and freight, rail transportation is a safe, fuel efficient, and environmentally friendly mode of transportation. How rail transportation contributes to the Department's goals is further explained below.

Development of Passenger High-Speed Intercity Rail: A New Transportation Vision

To help address the Nation's transportation challenges, the Federal Government is determining how and where to invest in an efficient, high-speed intercity passenger rail network, which would consist of 100–600 mile intercity corridors that connect communities across America. (See Figure 4.) This vision builds on the successful highway and aviation development models by adding a 21st century solution that focuses on a clean, energy-efficient option (even today's modest intercity passenger rail system consumes 21 percent less energy per passenger-mile than automobiles, for example). But developing a comprehensive high-speed and intercity passenger rail network would require a long-term commitment at both the Federal and State levels. In addition to the $8 billion in the Recovery Act, consideration is currently being given at all levels of government to increase funding for high-speed rail.

Over the past two decades, the Federal Government has taken small steps to lay the groundwork for an expansion of high-speed intercity rail and intercity passenger rail. The funding provided in the Recovery Act represents a significantly greater Federal commitment to high-speed intercity rail development in the United States.

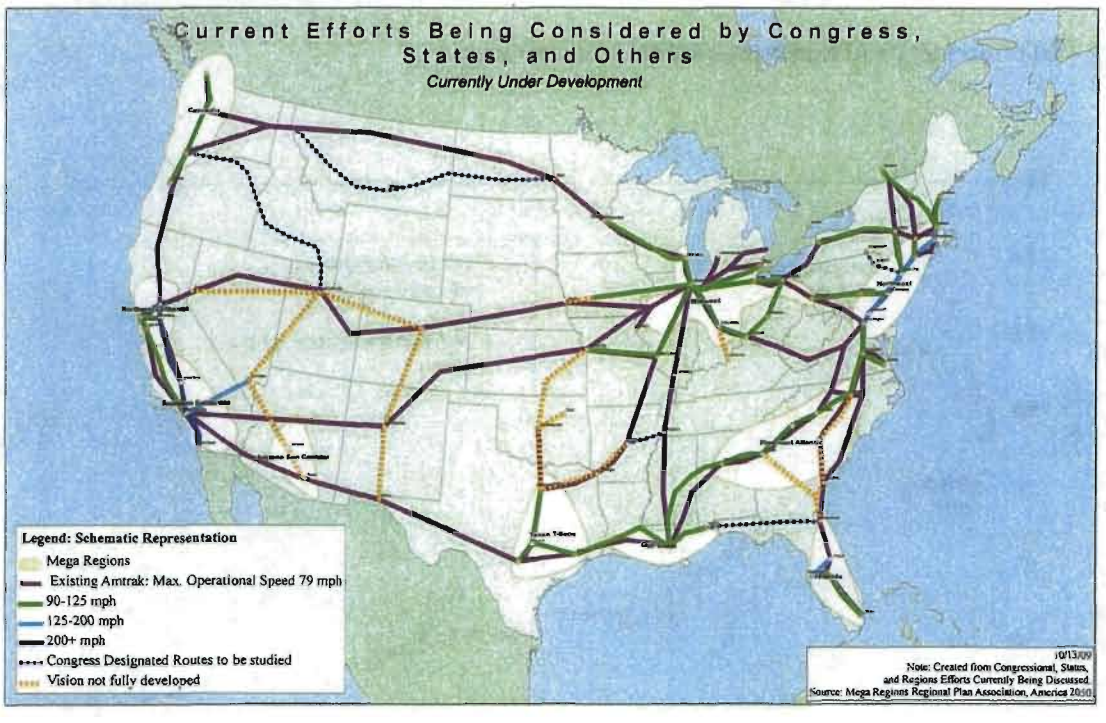
The first steps to advance passenger rail will emphasize strategic investments that will yield tangible benefits to intercity rail infrastructure, equipment, performance, and intermodal connections over the

next several years, while also creating a "pipeline" of projects to promote future corridor development. Federal and State governments face a difficult fiscal environment in which to balance critical investment priorities, and many will have to ramp up their program management capabilities.

The United States has a dwindling pool of expertise in the field of passenger rail and a lack of manufacturing capability. But future investment in passenger rail could lead to a resurgence of this industry and require new technologically advanced designs. Equipment could be constructed in manufacturing plants, requiring advanced subsystems along with primary materials such as high-quality steel.

This presents a challenge, but also an opportunity. Along with the renewed Federal commitment proposed here, the country's success in creating a balanced and sustainable transportation future will require that we work to overcome these challenges through strong new partnerships among State and local governments, railroads, manufacturers, and other stakeholders.

Figure 4. - High-Speed/Intercity Rail Corridors under Consideration by Multiple Entities



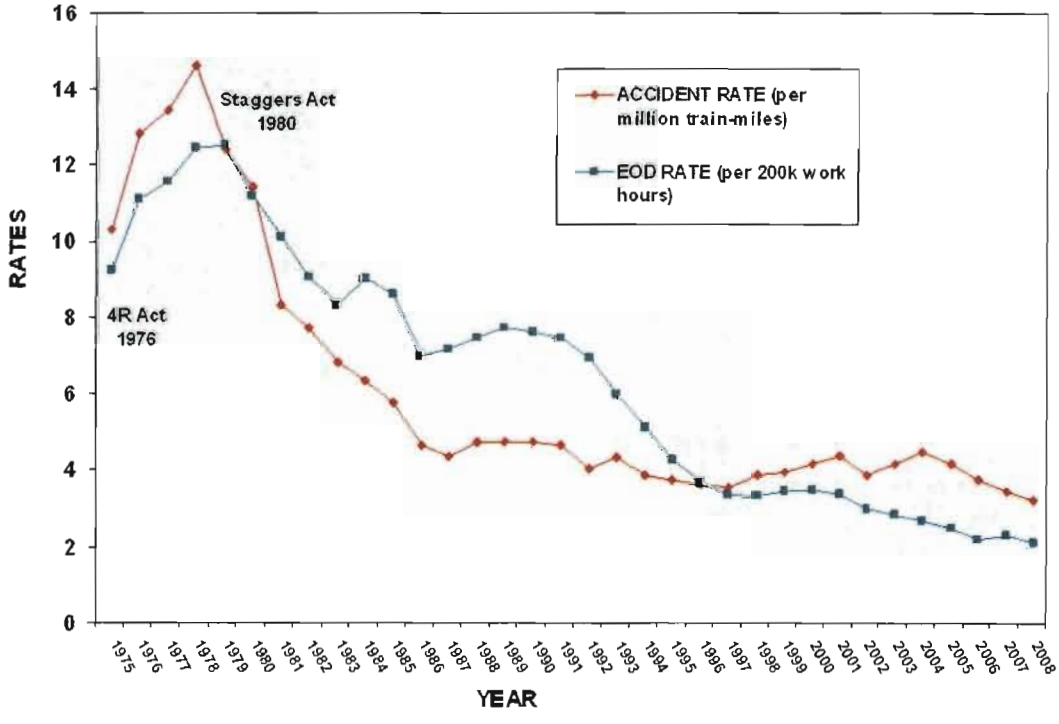
To Improve Safety

In numerous ways and on many levels, FRA has played a key role in the ongoing development and progression of safety in rail transportation. Although a strong safety culture already exists in the freight and passenger railroad environments, there is always room for improvement. Owing to the fact that rail transportation occurs on private rights-of-way and away from the public domain for most of its journey,

it largely avoids interacting with the public. In fact, the preponderance of casualties, both injuries and fatalities, involve traffic at grade crossings and/or people trespassing on railroad property. Due to this separation between railroads and other traffic, shippers and passengers who use rail in lieu of public infrastructure accrue measurable safety benefits. Railroad passengers are significantly safer because of safety regulations, standards, and technology that are designed and built into passenger equipment and operations. On a per-mile basis, rail passengers are exponentially safer than automobile occupants. Whether hauling freight, taking commuters to work, or moving intercity passengers, rail is one of the safest modes available. The railroad environment, however, is not without its dangers; indeed, it can be unforgiving in certain situations. Because of this, FRA's most critical mission is safety.

The railroad industry has experienced considerable improvement in safety over the past several decades, with significant annual declines in casualties and rail-related accidents and incidents, including train accidents, highway-rail grade-crossing incidents and employee accidents. These promising trends are all the more impressive because they occurred during an era of ever-increasing train-miles. Since 1980, train-miles, a measure of exposure, have increased by 27 percent while accidents per million train-miles have declined by 71 percent. (See Figure 5.)

Figure 5. - Train Accident and Employee on Duty Casualty Rates



Over the past decade, both the accident rate and the employee-on-duty casualty rate have flattened. To build upon these successes, FRA began the Risk Reduction Program (RRP), an initiative to reduce accidents and injuries beyond the current downward trend. The program capitalizes upon strong safety cultures already in place by helping the rail industry establish voluntary programs that identify and address risk, and which include measurable goals and corrective actions. Congress later mandated the use of the RRP in the Railroad Safety Improvement Act of 2008.

New technologies have the potential to increase safety even further; two notable examples are positive train control (PTC) and electronically controlled pneumatic (ECP) brakes. PTC systems integrate command, control, communications, and information systems in order to control train movements with safety, precision, and efficiency. These PTC systems will improve railroad safety by significantly reducing the probability of collisions between trains, "overspeed" accidents, and casualties to roadway workers. With FRA guidance and involvement, railroads have tested and demonstrated different types of PTC in signaled and non-signaled territory. The Rail Safety Improvement Act requires the installation of PTC by 2015 on all Class I[1] mainline track where certain hazardous materials are transported, and on mainline track over which intercity or commuter rail passenger transportation is regularly provided. The FRA has begun the rulemaking process for PTC implementation.

Another proven technology, ECP brakes, can significantly enhance rail safety and efficiency. Under some conditions, trains operating with ECP brake systems can stop in approximately half the time and distance as compared to trains equipped with conventional brakes. With ECP brakes, locomotive engineers have better control of their trains because they can gradually apply or release the brakes. In addition, the use of ECP brakes may offer major benefits in fuel savings, train handling, car maintenance, and network capacity. Over the long term—and, in part, because of shorter stopping distances—ECP brakes will allow longer trains to safely operate closer together, permitting greater traffic flow and thereby increasing capacity on existing infrastructure.

To Improve Fuel Efficiency

Railroads offer low rolling resistance, even at high speeds. This inherent feature of rail transportation saves fuel when transporting freight and passengers. Petroleum consumption is, of course, a growing national concern, not only as an economic drain, but also because increasing global competition for petroleum supplies raises national security concerns. Moreover, when petroleum is consumed in transportation, greenhouse gases (GHG) are released into the atmosphere; more efficient methods of transportation will reduce GHG and other harmful emissions.

[1] As defined by the Surface Transportation Board, Class I railroads are rail carriers with operating revenues greater than $359.6 million per year.

According to a U.S. Department of Energy study, depending on a number of factors including passenger load-factor, distance traveled and weight, passengers traveling by rail use 21 percent less BTUs[2] per mile on average than those traveling by automobile, and 17 percent less BTUs per mile than those traveling by air for short-haul flights on average. Importantly, passengers riding on intercity trains that are powered by electricity in the Northeast consume zero petroleum. Electricity for this region of the Nation is generated from a variety of energy sources. Examining information provided by the Energy Information Administration for the States in which electrically-powered intercity passenger trains operate (MA, CT, NY, PA, RI, DE, and MD) for the month of June 2009, indicates that in total, over 36 percent of the electrical power was generated by nuclear energy. Natural gas and hydroelectric power accounted for about 24 percent and 7 percent, respectively. About 30 percent of the energy was generated from coal. The balance is from other sources, such as wind. Technologies such as regenerative breaking, which captures the electrical energy that is generated by decelerating a train, can further increase energy efficiency.

The railroad industry is one of the most fuel-efficient freight transportation modes in the Nation. A 2009 study comparing rail and truck fuel efficiency[3] demonstrated that, depending on the route and the commodity carried, railroads are 1.9 to 5.5 times more fuel-efficient than trucks. According to Oak Ridge National Laboratory, on a BTU per ton-mile basis, rail is 1.7 times more efficient[4] than domestic waterborne commerce.

Railroads have worked to improve their fuel efficiency and have shown gains of over 23 percent from 1990 through 2007, measured as average gallons of fuel consumed per revenue ton-mile. Most of these improvements were realized before the significant rise in fuel prices in 2008. These gains are the result of a mix of technical improvements in railroad infrastructure and improvements in equipment and operations. As new locomotive technologies are perfected, including hybrid systems and techniques to reduce aerodynamic drag, further gains are being realized.

Freight rail is much more fuel efficient than transportation by truck, although the level of rail fuel efficiency varies considerably by freight corridor and commodity when making a direct comparison. The 2009 fuel efficiency study found that the benefits of shipping by rail increase with route distance. As route distance increases, the advantage of rail's fuel efficiency is compounded. Similarly, as commodity volume and weight increase, it takes more trucks to replace a single rail carload of freight. Figure 6 shows the average gallons of fuel consumed when shipping by rail compared to equivalent shipments moving by truck.

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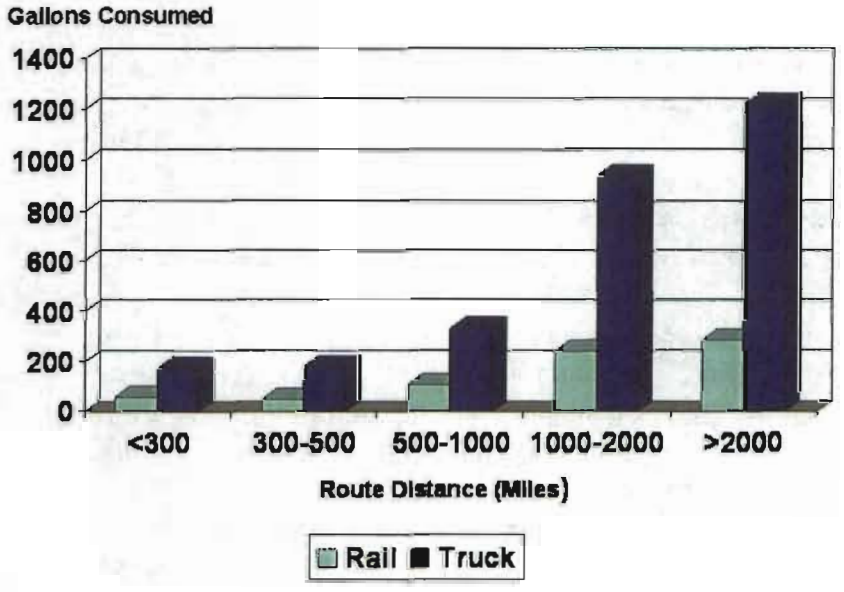
[2] BTU is an abbreviation of "British thermal unit."

[3] *Comparative Evaluation of Rail and Truck Fuel Efficiency on Competitive Corridors*, ICF International, published by the Federal Railroad Administration (2009) pp. 1-9.

[4] Table 2.16 Transportation Energy Data Book, 28th Edition (2009).

Figure 6. - Rail vs. Truck Fuel Savings by Distance Traveled



On average, for comparative moves within the mileage blocks and commodities studied, the fuel consumed for shipments traveling less than 300 miles is 58 gallons on rail, while truck consumes 173 gallons. For shipments studied travelling 300–500 miles, rail consumption is 49 gallons and trucks use 180 gallons. Figure 6 illustrates that the results are similar for the 500–1,000 mile range with rail consuming 107 gallons to truck's 333 gallons. When moving to the 1,000-2,000 mile range, the fuel consumption between the modes widens with rail using 241 gallons to truck's 943 gallons. The largest fuel savings are realized for moves over 2,000 miles. Here, rail consumes 284 gallons but the equivalent move using trucks would consume 1,227 gallons.

Fuel savings for an entire long-distance freight train are particularly impressive. Depending on the type of the freight and the distance hauled, a single cross-country intermodal double-stack train[5] can replace 280 trucks and save up to 80,000 gallons of fuel.

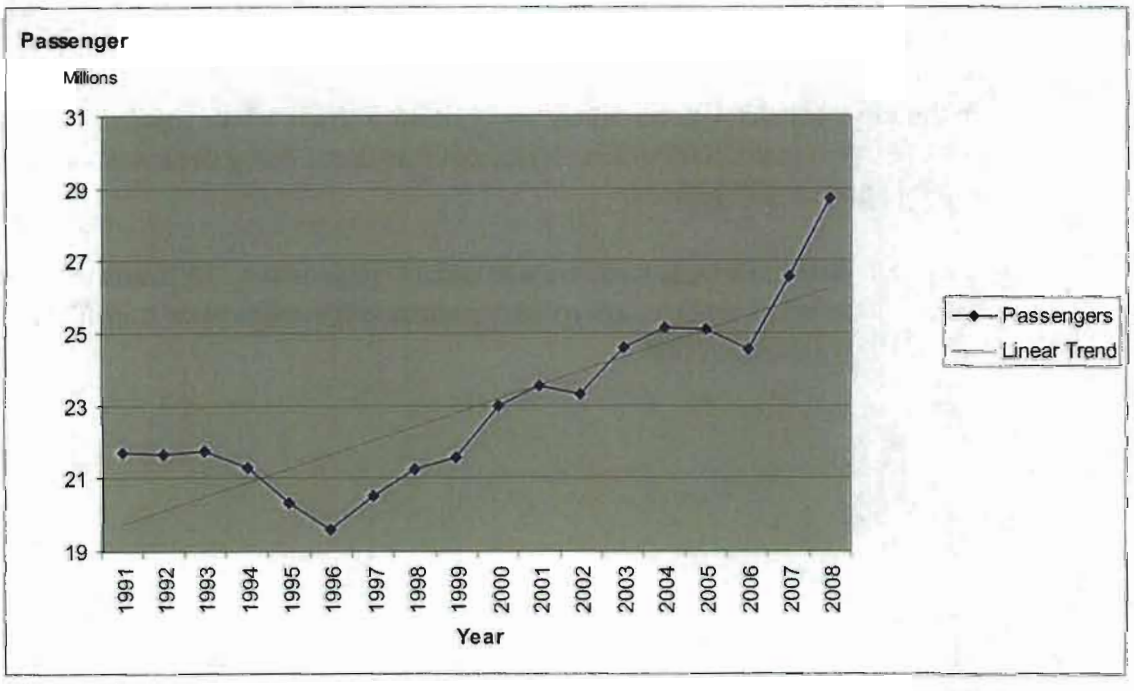
[5] Intermodal freight is hauled in containers moved by truck, rail, barge, or container ship. On intermodal double-stack trains, the containers are stacked two containers high, doubling the amount of trucks this type of train can replace.

To Foster Livable Communities

By providing enhanced intercity and commuter passenger rail transportation options, rail can increase a community's vitality and livability. Rail corridors offer the use of private rights-of-way into city centers, putting intercity passengers within easy walking distance of their destinations or convenient transit connections to reach those destinations. From large cities to small towns, restaurants and shops often locate near center-city train stations that can serve as hubs of retail and business activity.

Although Amtrak ridership has declined recently due to the economy, it has generally increased at a steady pace during the last 10 years. (See Figure 7.) As high-speed intercity rail services are expanded beyond the Northeast, the livability of cities will be enhanced. City centers are often the focus of transit systems and generally have the highest concentration of destinations, whether business or personal. By connecting city centers with convenient rail links, center city accessibility is leveraged exponentially, permitting residents of one city to easily enjoy the opportunities of neighboring cities without the need for automobile or air travel, which may be inconvenient for moderate distance trips between city centers. Moreover, the rail mode is often more environmentally friendly. Intercity rail can also work synergistically with transit by encouraging more people to use transit to get to rail stations. The result will be better use of transit services, which will stimulate growth of development more attuned with livable communities not relying on auto access.

Figure 7. - Amtrak Ridership



New stations, platforms and rail passenger cars are being constructed with ease of accessibility built into the design. Using rail passenger services, people with disabilities can travel between cities and connect to accessible transit services.

Freight rail also plays a role in livable communities. By using the long-haul efficiencies of rail, roadway congestion can be reduced, allowing commuters and shoppers to use their automobiles more efficiently. By tailoring their services to community and shipper needs, small freight railroads can preserve, and often improve, local rail service to communities that are not directly served by Class I railroads. And when freight rail service can provide businesses and factories in small communities with cost-effective transportation options, they, too, become more competitive.

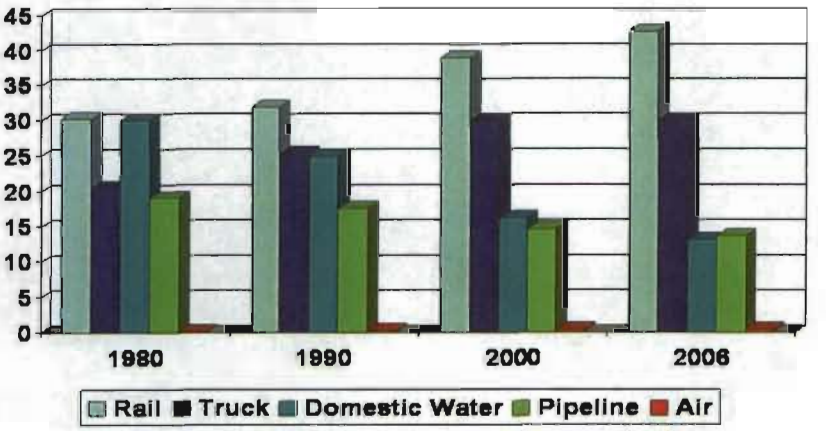
To Increase the Economic Competitiveness of the United States

Safe and efficient passenger and freight transportation systems are essential to support our economy, and when properly maintained and strategically expanded, rail can be a catalyst not only for personal mobility but also for robust economic growth. Moving freight quickly and economically enables our Nation's industries and markets to meet the demands of domestic consumers and helps U.S. products to compete in the global marketplace. Given that even the most successful commercial enterprise can be stifled by inefficient transportation, easy access to U.S. ports is an important factor in facilitating more cost-effective international trade. Economic forecasts continue to indicate a burgeoning demand for freight transportation in the future; industry and the Nation must aggressively plan ahead now if we hope to maintain the competitiveness of the United States in light of the future demands of a challenging global environment.

To that end, transportation providers and shippers have worked to lower total logistics costs. Over the years, more efficient use of the transportation network and targeted investments have lowered those costs, but recently they have begun to rise. This has led shippers to demand more improvements in transportation and better intermodal connections to reduce additional costs. Figure 8 shows logistics costs as a percent of gross domestic product (GDP). These costs fell after transportation industries were deregulated in the early 1980s; however, in 2003 they began to rise, a development that lasted until the recent economic downturn. While much of this increased cost can be attributed to a booming economy that placed capacity constraints on the transportation network, rising fuel prices also played a role. The result has been that logistics costs have formed a larger part of GDP, putting a drag on economic activity, making goods more costly, and diminishing the U.S. competitive position. In 2008, logistics costs ended their 4-year rise, falling to 9.4 percent of GDP. This was likely due to significant reductions in inventory cost from the slumping economy. Transportation costs as a percent of GDP, however, have continued to increase.

The financially healthy and viable rail system that was created after the partial deregulation in 1980 allowed the railroads to regain market share, and helped ease the increasing burden that the economic boom imposed on the highway system. From 1980 through 2006, the railroad's mode share measured in revenue ton-miles grew from 30 percent to 43 percent. (See Figure 10.)

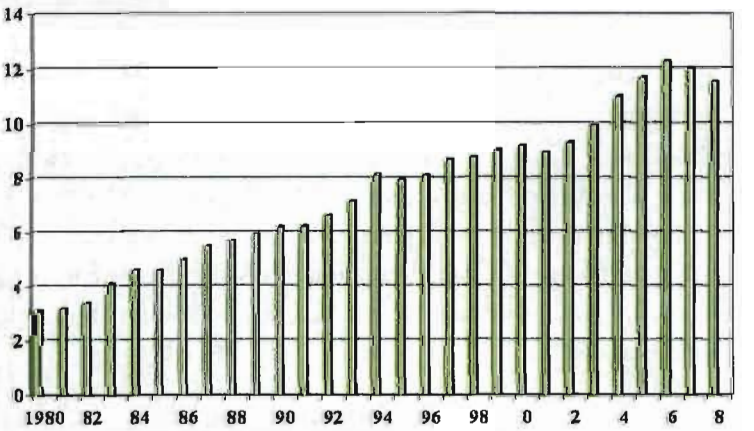
Figure 10. - Trends in Freight Mode Share



Source: Bureau of Transportation Statistics--2008

At the same time, rail intermodal shipments (shipping containers and truck trailers on rail flatcars) grew from 3 million trailers and containers to over 11.5 million. (See Figure 11.) Even though down from the 12.3 million trailers and containers in 2006, intermodal transportation is, nonetheless, the fastest growing segment of traffic on the rail system. (See Figure 12.)

Figure 11. - Intermodal Growth



Association of American Railroads "Railroad Facts"
(2008 preliminary from AAR "Weekly Railroad Traffic, 2008 Annual Summary"

Duplicative routes and branch lines that were sold by the Class I's are now being operated by smaller railroads. Class I railroads also spun off some routes that became viable Class II or "regional railroads" that offer mainline service and connections to multiple Class I's and shortlines. The Class I's also shed lightly used branch lines, allowing shortline operators to maintain rail service that might otherwise have been abandoned without the sale. This has created an important niche for the smaller railroads, which focus on local customer service.

Historically, only two modes of freight transportation, rail and pipeline, are self-sustaining, meaning that they have the ability to finance, build, and maintain their infrastructure. Other modes of freight transportation rely on publicly financed infrastructure, though these modes have dedicated revenue sources that are paid, at least in part, by system users. When an investor buys stock in a non-rail transportation company, the investment is made in the vehicles, towboats, office buildings, and other capital costs. The investment does not cover the cost of the infrastructure, which is not owned and not maintained by the freight company. The economics of the U.S. rail industry are unique because private railroads own their locomotives and equipment as well as the track, yards, tunnels, and bridges of the total enterprise. Railroads, confident of the untapped capability of rail freight transportation, have been investing billions of dollars in double-tracking, signal improvements, and intermodal facilities. Railroads are in business to earn a profit and are willing to self-finance additions to their infrastructure to ensure long-term returns. A notable phenomenon is the construction of new main tracks in the same locations where main tracks were removed decades before.

It is the inherent efficiency of rail transportation that enables freight railroads to do something that is expected of no other form of transportation: maintain their infrastructure, add capacity, host passenger operations, and pay local property taxes on their real estate[6]. A review of the previous 29 years since the railroads were partially deregulated by the Staggers Act of 1980 reveals improvements in the railroad's physical plant (infrastructure) as well as their performance metrics. Safety and fuel efficiency have remarkably improved. Rail rates are lower today than in 1980, when compared in constant dollars.[7] (See Figure 13.) Nonetheless, captive shippers -- those without a viable alternative to a single rail carrier -- often complain that they are being charged more than shippers that have competitive options.

[6] Railroads paid over $650 million in property taxes in 2007.

[7] The period of declining rates ended in 2000. Through late 2007, due to increased demand and little excess capacity, freight rates began to move higher. Much of the increase in 2008 was due to the run-up in fuel prices.

Figure 13. - Rail Rates Adjusted for Inflation—1970 to 2008

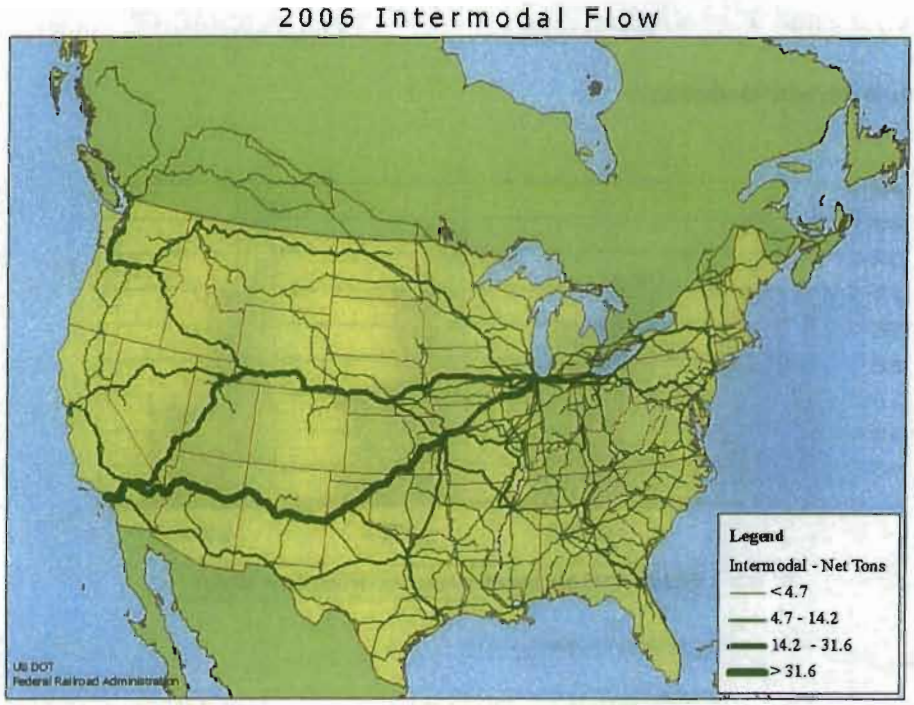
Sources: U.S. Dept. of Labor, Bureau of Labor Statistics, Producer Price Index of Line-Haul Operating Railroads; U.S. Dept. of Commerce, Bureau of Economic Analysis, Implicit Price Deflator for Gross Domestic Product

The combination of steel on steel, gentle grades and curves, and advances in motive power and rolling stock has enabled railroads to offer highly efficient and productive transportation services. Greater use of rail in the national transportation system can only increase the sustainability of this system.

To Help Bolster the Domestic Passenger Rail Industry and Create Jobs

Potential new developments in high-speed rail and intercity passenger rail could bring about a resurgence in railroad engineering and manufacturing that could help to bolster the U.S. industrial base. Rail passenger equipment industries have languished domestically in recent decades. Since the creation of Amtrak in 1971, uncertain budgets and ambiguities about the future of passenger rail service have contributed to the relative low volume of equipment purchases. States have taken up some of the slack, making important purchases of passenger rolling stock that have helped to meet the needs of the national passenger system. New equipment will need to be designed and built, however, if passenger rail services are to be strengthened and expanded. Given that locomotive production, like that of passenger cars, is a segment of heavy industry that relies on many suppliers to produce the required materials and components, this new production will exert a multiplier effect. For passenger equipment, more efficiencies and economies of larger-scale production could be realized. The development of passenger car standards that ensure interoperability of equipment and permit the same equipment to be used on various routes over the course of its designed lifetime could also result in lower unit costs and increased utilization.

Figure 12. - 2006 Intermodal Flows



Modern rail systems require skilled employees. The rail industry has focused on workforce development, not only recruiting and retaining the needed skilled employees to add to and replace the large number of employees that will be required for an ever-increasing demand, but also ensuring that adequate educational institutions are in place to develop a constant pool of talent. This will provide for a highly technical work force at all levels that will be needed to build and operate those systems.

To Better Understand and Integrate the Unique Economics of the Rail Industry

The passage of the Staggers Act in 1980 partially deregulated railroads. Partial deregulation of the industry allowed the railroads to consolidate and gave them the flexibility to control costs and enter into contract pricing. As a consequence, the long-term decline of the U.S. freight rail industry prior to Staggers was reversed. Since the early 1980s, the total number of Class I railroads went from 26 to 7. The number of miles of road owned by these railroads has declined from nearly 165,000 miles in 1980 to nearly 94,000 miles in 2008. All told, railroad productivity has increased substantially, as more freight moves over a denser network.

Importance of State Rail Plans in Developing the Long-Range National Rail Plan

PRIIA contains a legislative mandate to develop a long-range National Rail Plan, and the Act directed FRA to develop the plan consistent with approved State plans. The PRIIA also tasks States with establishing or designating a State rail transportation authority that will develop statewide rail plans to set policies for freight and passenger rail transportation within their boundaries, establish priorities and implementation strategies to enhance rail service in the public interest, and serve as the basis for Federal and State rail investments within the State. The FRA is aware of the variety of rail needs and resources within State DOTs and that those individual State authorities can range from a division of the State DOT to the assignment of such activities to a particular office. The Department expects that these State rail plans will provide detailed insight into the concerns facing State transportation systems and set forth their vision of how rail transportation can address those issues. The Department's challenge in preparing the National Rail Plan will be to examine passenger and freight corridors running through and between States, and to coordinate the States' plans into a blueprint for an efficient national system, thereby meeting both regional and national goals. Because the majority of the infrastructure is owned and maintained by the freight railroads, the Department will continue to work with States to develop plans that contain proposals or initiatives for partnering with freight carriers in the development of plans and objectives.

In addition to the requirements of PRIIA, this preliminary plan will provide the States with a framework of elements that the Department views as necessary for creating a viable national rail plan. States are welcome to raise additional issues and provide other relevant information, and are encouraged to work with all stakeholders. State rail plans should also consider all other modes of transportation, especially ways in which they can be leveraged to serve transportation customers more effectively and efficiently. It is anticipated that the National Rail Plan may encourage rail development and growth much like the model of the interstate highways system, recognizing that the traffic flow of passengers and freight rely on the connectivity of regional corridors that pass through several States.

This Preliminary Plan recognizes the comments received from stakeholders over the last several months. On September 9, 2009, FRA held a meeting to exchange information with representatives from State DOTs, other U.S. DOT modal administrations, passenger rail advocates, transit groups, and the freight rail industry. This meeting served as an important step to reach out to all stakeholders and solicit their participation in the development of the National Rail Plan; these activities will be numerous as we go forward in the development of the Plan.

Framework for a National Rail Plan

The development of a National Rail Plan will necessarily involve a discussion and resolution of certain issues common to almost every state. The following areas of discussion are not exhaustive, but are intended to raise key issues for States and transportation stakeholders to consider as they structure their State rail plans and provide input to the long-range National Rail Plan. The FRA believes an exploration

of these issues by States and stakeholders will provide valuable information to the Department. This input will help shape policies and define the future programs that will be necessary to complete a strategic, long-range national plan. In addition, by bringing together the appropriate parties, and particularly by partnering with freight railroads—the owners of the rail infrastructure—the States will be able to better assess and resolve crucial transportation issues.

On a more operational level, States can provide information on local rail bottlenecks and resultant traffic congestion, which can affect the movement of people and goods not only in that location but throughout the rest of the corridor as well, thereby negatively affecting the larger transportation network. Resolution of such issues can improve transportation flows and positively affect the movement of goods and people far beyond State borders. States can also provide information on projects that they are planning to develop, which may have repercussions beyond state borders, and hence should be considered in the National Plan.

The following are several issues that States and stakeholders should consider as they provide input to FRA in the development of the long-range National Rail Plan:

Appropriateness of Strategies of Funding Freight Transportation Investments

Our Nation's transportation infrastructure is one of its greatest assets. Properly maintained, it can move freight quickly and efficiently, which is essential to U.S. economic growth, industrial productivity, and global competitiveness. Inadequate investments in freight corridors that fail to keep pace with increased shipper demand and expected public benefits cause congestion, delays, unreliable service, and damage the environment. These freight corridors, once built, should be self-supporting. Cost-effective, fuel efficient, and environmentally friendly, improved rail transportation is essential to achieving national freight transportation goals. Failure to keep and grow rail market share will impose a further burden on highways.

To address this issue, stakeholders need to evaluate the appropriateness of various strategies for investing in freight rail by the private sector, the public sector, or potentially both in conjunction. States can leverage Federal programs and funds by partnering with all freight transportation stakeholders, including the private sector. As States develop State transportation plans, it is expected that they will identify planning and organizational opportunities that will lead to the development of new and more creative ways to better allocate resources, which will result in a more integrated and efficient freight and passenger transportation network.

Developing ways to assign Costs and Allocate Resources Equitably across All Modes of Freight Transportation

As explained above, freight transportation services are provided almost exclusively by the private sector, and all types of freight transportation place some cost on society. These external costs can include the costs of infrastructure damage, environmental damage, accidents, congestion, and other costs.

While motor carriers operate on publicly provided highways and water carriers on publicly maintained waterways, the transportation services that the rail industry provides occur over its own rights-of-way, and through privately funded support services. Since railroads are privately owned, its customers must pay the full costs, both variable and fixed, for the transportation provided. These include the full costs of equipment operation and maintenance, as in the other modes; but unlike the other modes, rail must also maintain its own infrastructure.

The Federal Highway Administration's May 2000 *Addendum to the 1997 Federal Highway Cost Allocation Study*, indicates that heavy intercity trucks only pay 80 percent of the costs imposed on Federal highways. Many local roads are funded by real estate and sales taxes, rather than the highway users. A more recent study[8] indicates that user fees from transportation taxes and tolls cover only about 60 percent of highway costs, when all roads, Federal, State, and local, are taken into consideration.

The pricing of one mode of transportation can directly affect demand for and costs of other modes. When private freight companies provide transportation services without being held accountable for using the infrastructure, the resultant inefficiencies can impose higher costs on society. From a societal standpoint, inefficient pricing will manifest itself in the continued misallocation of resources for transportation services.

Some States and universities have been studying the costs imposed on society by the different modes of freight transportation. In their rail plans, States can examine the opportunities that would exist if the various modes were priced properly, and calculate the expected benefits and cost savings that might result. The National Rail Plan will further examine this issue.

Opportunities and Greater Efficiencies in Multimodal Transportation

One of the greatest accomplishments in improving efficiencies in the U.S. transportation network over the past 15 years has been the gains that have resulted from using multiple modes of transportation for completing an origination/destination trip. Significant investment by the public and private sectors has gone toward improving, for example, passenger connections at airports for ground transportation, which has included rail. Travelers and commuters look to minimize trip costs, and rely on the most efficient mode to meet their needs. The ubiquitous "park-n-ride" facilities that surround major cities are a testament to intermodal passenger travel. Intercity and commuter rail provides a great benefit to intermodal passenger traffic and can be designed for total accessibility.

The private freight railroads have also undertaken and continue to make investments in facilities to develop rail intermodal services. Under a multimodal approach, the transportation mode that is the most efficient and cost effective for each leg of the trip is used for that particular segment. On the freight

[8] *Paying Our Way: A New Framework For Transportation Finance*, Report to the National Surface Transportation Infrastructure Financing Commission, February 2009.

side, customer demands for lower logistics costs have led to a reliance on truck trailers or containers on freight trains for the long haul. At the origin, the trailer or container is driven to the rail intermodal facility or loaded onto rail at dockside. The long haul is provided by rail, keeping the shipment off congested highways, while creating a huge savings in fuel. For the final delivery of the freight—the "last mile" of the trip—a motor carrier provides the flexibility and reliability that is sought by the shipper.

While transportation customers continue to demand improvements in multimodal travel, these efficiencies are also reducing the external and social costs of transportation. To continue these gains, States should look at opportunities to exploit the inherent efficiencies of each of the modes, and identify projects that will improve multimodal connections and travel. These strategic investments can repay the taxpayers many times over.

Identifying Areas to Continue to Improve Transportation Safety

Over the years, FRA has worked closely with State rail safety inspectors and railroads to reduce both the frequency and the severity of railroad accidents. As a result, Federal and State railroad safety efforts are now in harmony. In the wake of several major train accidents, DOT and FRA jointly launched, in 2005, the National Rail Safety Action Plan, whose broad goals are to target the most frequent, highest risk causes of train accidents, to focus FRA oversight and inspection resources more precisely, and to accelerate research efforts that may mitigate the largest risks. New technologies will also enhance railroad safety, and FRA has sponsored research to bring technologies such as PTC and ECP to the point that they now are ready to be deployed. Congress has observed the value of several of FRA's initiatives and has mandated their implementation in Rail Safety Improvement Act of 2008. Going forward, PTC, in combination with other technologies and strategies, can offer levels of passenger protection that can be incorporated into new equipment design standards.

The National Rail Plan will present DOT's strategies for further improving rail safety based on data complied and the analysis developed by FRA's Office of Railroad Safety. The FRA will continue to ensure that its inspection, enforcement, and regulatory programs uphold the safety of the rail industry. And FRA will continue to develop new programs to advance railroad safety for employees, passengers, and the general public.

States should also consider areas in which the greater use of rail, for both passenger and freight, can be used to improve safety. This should be an important consideration for transportation planning.

Effectively Meet Defense and Emergency Transportation Requirements

Rail transportation is important to the national defense strategy because the military's heavy and oversized vehicles need to move by rail to seaports for deployment. The Department of Defense (DOD) has emphasized the need for rapid deployment of large numbers of people and huge amounts of materials on short notice. Similarly, following a natural disaster, rail transportation is critical to ensuring the safe evacuation of affected populations and to assisting local, State, and Federal officials in

rebuilding devastated communities. Deployment of personnel, equipment, and supplies for defense and emergency relief operations requires a well planned and flexible rail network with the capacity to absorb additional traffic should the demand arise.

The DOD's Railroads for National Defense Program, in conjunction with FRA, has established the Strategic Rail Corridor Network (STRACNET), which allows for the mobilization and deployment of personnel, equipment, and supplies in the event of a national emergency or natural disaster. The STRACNET is owned and operated by individual rail operators, principally the Class I railroads, and it comprises 38,000 miles of rail track serving 170 defense installations. The DOT and FRA will continue to work with the DOD, other Federal agencies, individual rail operators, and the transportation community to identify short- and long-term national defense and emergency transportation requirements and to ensure that the Nation's railroad network can meet those requirements. To continue this high level of readiness, States should assess their plans and rail transportation options in the event a disaster strikes. States should also identify the need for improved access and egress in case of evacuations and the need for movement of humanitarian supplies.

Balancing the Benefits of Rail Corridor Development with Local Communities and Commuter Services

Greater use of passenger rail and freight rail holds the promise of improving our national transportation systems, reducing congestion, and diminishing petroleum use while improving the environment. These benefits enhance the livability of communities. Thus the benefits of expanded freight and passenger service to communities should be an important consideration when developing rail projects. In assessing total costs, States should consider both the community benefits and the potential community costs in developing their plans. Carefully planned economic development can also help to alleviate the recurring problem of benefits being enjoyed by one community while the costs are passed on to another, as well as "not-in-my-backyard" issues. Strategies and best-practice approaches must be developed to resolve these issues and to ensure that local concerns are addressed as regional and National needs are obtained.

Identify Opportunities to Improve Energy Use and the Environment

While rail has proven that it is more energy efficient than comparable truck moves, the most significant gains occur over longer hauls. As advances in technology result in greater rail fuel and operating efficiencies, the relative length of haul required to obtain maximum efficiencies may be reduced. State and Federal efforts can work in harmony to leverage private freight rail investments and identify high-volume freight corridors that have the potential to increase their capacity through enhanced rail service. This can reduce the burden on highways while combining the benefits of lower highway capital and maintenance costs with improved safety and environmental quality. In order to assess the benefits of these projects, states can collect data to comply with the Clean Air Act administered by the U.S. Environmental Protection Agency (EPA), as well as make use of voluntary programs developed to estimate greenhouse gas emissions, such as the EPA's Resources for Inventory Development and State Climate Change Action Plans at www.epa.gov/climatechange/emissions/state_ghginventories.html.

Stakeholders and the Development of the National Rail Plan

We are all stakeholders in the Nation's transportation system, and we all have a vested interest in the continuation and enhancement of performance and services that we have come to rely on. Each of us depends on the delivery of goods and the ability to travel unimpeded throughout the country. The providers of transportation services are constantly under pressure to provide greater value to their customers.

A long-range National Rail Plan cannot be constructed without the input of those that support and provide transportation services. These stakeholders include States, Class I railroads, Amtrak, regional and shortline railroads, rail labor, rail industry suppliers, trucking companies, logistics providers, domestic and international freight shippers, and the associations that represent these groups. Other stakeholders include the modal administrations of the DOT, the U.S. Environmental Protection Agency, and other State and Federal government entities.

Large carriers have the employees and maintenance capabilities to reliably operate a high-quality infrastructure that can simultaneously support passenger and freight operations through national corridors. But some rail projects designed to improve both rail and highway traffic flows lack sufficient return to the railroad to justify the investment. Nor could public bodies pursuing the project solely fund it. Railroads have pursued public participation in the development, financing, and construction of such projects. Such public-private partnerships offer the potential to achieve multiple goals that benefit both parties.

Smaller railroads also play a critical role in providing transportation services. These generally lower-cost railroads preserve transportation options for local shippers, and thus play an important part in the harmonization of the national transportation system by providing the link to connect shippers with the larger carriers. In many instances, these small railroads have demonstrated the flexibility and resourcefulness to improve customer service at the local level, while connecting with the Class I carriers for the efficiencies of long-haul rail service. This combination has often improved service to shippers and communities that would otherwise have been without rail service.

With the increase in rail intermodal traffic over the past few years, the trucking industry has become a significant partner with the railroads. These companies include large, national long-haul trucking firms, as well as local companies which provide drayage to and from port and rail intermodal facilities. The railroads have tailored their services to meet the demands of these customers and have continued to shorten transit times and strengthen reliability. This adds value and lowers total logistics costs. There are many aspects to these services, and because of the highway interfaces, obstacles to improving services could be local—that final mile on the highway—or regional. Stakeholders include trucking companies and trucking associations as well as ports and localities around intermodal terminals. Finally, shippers and receivers who depend on rail, and other modes, have a significant interest in the performance of the entire transportation system as many shipments are multimodal. The convergence of

each of these stakeholder concerns should be addressed in a National Rail Plan where stakeholders can identify the prospects for improved services and potential opportunities to achieve lower logistics costs.

Passenger rail service on the current freight rail network provides opportunities as well as significant challenges. Improvements in passenger rail service hold the promise of further mobilizing the Nation in an environmentally friendly way while reducing highway and airport congestion. The National Rail Plan will need to address many of these issues, a number of which are currently addressed/required in FRA's High-Speed Intercity Passenger Rail Program. Stakeholders, who include passengers and industry trade groups, will act as important resources in highlighting passenger rail issues.

Rail passenger intermodal facilities have also become important, as customers have benefited from improved connections between all forms of transportation. Significant investment on the part of the States, local governments, and the Federal Government has brought about these improvements. All stakeholders should identify additional opportunities for such connections and potential funding sources.

The role of public-private partnerships for these endeavors should also be explored. In this regard, FRA stands ready to work with all stakeholders who want to contribute to a comprehensive national rail plan that incorporates the needs of the States, the traveling public, the freight railroads and their customers, and promotes the National goal of a safe, efficient, and sustainable transportation system. Together, we can improve safety, foster livable communities, and improve the economic competitiveness of the United States.

Outreach Strategy to Develop the National Rail Plan

The FRA's National Rail Plan will involve a vigorous outreach strategy that will encompass all stakeholders and the achievement of the Administration's goals will require nationwide involvement. Therefore, it is vital to promote nationwide awareness of the lasting benefits that high-speed intercity passenger rail, commuter rail and freight rail can provide, as well as the trade-offs including, but not limited to, costs to taxpayers and users of the Nation's transportation system, impacts on local communities and businesses, and the effects on the environment. To encourage this, FRA will undertake efforts to develop and disseminate material to the interested public on the value of rail transportation in partnership with other modes.

It is essential that the National Rail Plan be developed with an extensive outreach effort to stakeholders and the public, not only by FRA, but also by States and local organizations to their communities. As FRA developed this Preliminary National Rail Plan, stakeholders participated through FRA outreach efforts and provided valuable insight that played an important role in validating some issues and bringing others to the forefront. A list of stakeholders is shown in Appendix A. Appendix B illustrates the issues raised during outreach sessions for high-speed intercity rail. The FRA is committed to a proactive outreach effort to involve stakeholders in our development process that will result in a validated and consensus-built long-range National Rail Plan.

Objectives of the National Rail Plan Outreach

The FRA recognizes the importance of discussing rail issues in an open forum and constructively listening to different points of view from stakeholders and customers. As it is a National plan, FRA will reach across the Nation throughout the rail community and transportation industry for productive feedback.

During the course of our outreach, FRA will give careful consideration to efforts that:

- Further define the Plan's goals;
- Determine role of passenger and freight rail in the Nation's transportation system, and identify appropriate role of various stakeholders including the Federal government, State governments, local governments, freight railroads, commuter railroads, Amtrak, and other parties;
- Develop strategies to achieve goals;
- Define system performance outcomes and metrics;
- Define key issues that affect success;
- Define roles and responsibilities for Federal, State, local, and private stakeholders;
- Develop an implementation plan to achieve goals, including recommendations for legislative, regulatory, or administrative changes.

Outreach Activities

The FRA will host a series of live webconferences to assist in the development of the National Rail Plan. This format will provide the opportunity for FRA to refine more detailed questions and make any necessary adjustments as we move forward. In addition, this will allow those that will not be able to travel for face-to-face meetings to have a chance to provide their comments within a forum. The projected timeframe for webconferences is from December 2009 through February 2010

To ensure that we capture nationwide input, FRA will place a notice in the Federal Register for the opening of a docket for anyone who may wish to submit written input._The FRA will seek opportunities to discuss rail issues at targeted national rail and other transportation meetings to widen the reach and further inform the development of the national rail plan. In addition, FRA will host several regional meetings across the nation with key stakeholders. The projected timeframe for these regional meetings is March through May 2010.

Next Step

The FRA will provide stakeholders with the times of webconferences and meeting dates, locations, and other essential information to enable them to plan for participation. We will also provide support materials as we begin to more clearly focus on objectives and outcomes as well as pertinent input that we capture along the way.

APPENDIX A

Key to rail's future success is partnerships.

FRA will be engaging in meetings and events with Federal, State, local and national organizations representing rail and transportation interests at large as well as special interest organizations and groups such as—but not limited to:

- American Association of State and Highway Transportation Officials (AASHTO)
- American Association of Port Authorities
- American Automobile Association (AAA)
- American Association of Retried Persons (AARP)
- American General Contractors (AGC)
- American Planning Association
- American Public Transportation Association (APTA)
- American Shortline and Regional Rail Association (ASLRRA)
- American Society of Safety Engineers (ASSE)
- Amtrak
- Association of American Railroads (AAR)
- Brotherhood of Locomotive Engineers and
- City Mayors
- Coalition of Northeast Governors (CONEG)
- Congressional Leaders and Staff
- Council of University Transportation Centers (CUTC)
- Executives from State Departments of Transportations
- -Environmental Groups-
- Governors and Staff
- Institute of Transportation Engineers
- Intermodal Association of North America
- National Governors Association
- National Mayors Conference
- Metropolitan Planning Organizations Leaders
- National Association of Railroad Passengers (NARP)
- States for Passenger Rail Coalition (SPRC)
- National Association of Counties (NACo)
- National Association of County Engineers
- National Association of Rail Shippers
- National Industrial Transportation League
- National Private Truck Council (NPTC)
- National Railroad Construction and Maintenance Association (NRC)
- National Safety Council
- North American Rail Shippers Association (NARS)
- Railway Supply Institute (RSI)
- OneRail Coalition
- Regional Economic Development Agencies
- Rail Division IBT
- Transportation for America - Coalition Partners
- Transportation Trades Department, AFL-CIO
- U.S. Chambers of Commerce Leaders
- U.S. Department of Environmental Protection Agency (EPA)
- U.S. Department of Housing and Urban Development (HUD)
- U.S. Department of Justice / ADA
- U.S. Department of Transportation (DOT) Modes and other Federal organizations
- Urban Land Institute

APPENDIX B: Issues Raised During High-speed Intercity Rail Outreach

	Charlotte	Orlando	Seattle	Sacramento	Houston	Chicago	Philadelphia
Collaboration and Stakeholder Agreements	●	●	●	●	●	●	●
Implementation Timeline and Evaluation Criteria	○	●	●	●	●	●	●
Need for Public Education / Outreach	○	●	○	○	●	●	○
Liability Issues	○	●		○	○	○	●
Interconnectivity		●	○	●	○	○	●
Sustainable Federal Funding	●	●	●	●	●	●	○
Sustainable State Funding	●	○	○		○	●	●
National Equipment Standards	○	○	●	●	●	●	○
Environmental Process	○			○	○		●
Positive Train Control	○	○	○	●		○	

● Most prominent issue discussed ● Issue raised multiple times/discussed in greater detail ○ Issue briefly discussed

APPENDIX C

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November 17, 2010

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The Honorable Cynthia T. Brown
Chief, Section of Administration, Office of Proceedings
Surface Transportation Board
395 E Street, N.W.
Washington, D.C. 20423

Re: STB Finance Docket No. 35305
Arkansas Electric Cooperative Corporation - Petition for Declaratory Order

Dear Ms. Brown:

In response to the Surface Transportation Board's request, enclosed are two paper copies of the PowerPoint slides Union Pacific Railroad Company recalls using at the July 29, 2010 hearing. Additionally, Union Pacific Railroad Company provided a CD containing its PowerPoint slides/hearing exhibits to the Board's staff before the hearing. If you have any questions, please feel free to contact me.

I certify that I have served a copy of this letter on all parties of record by U.S. mail.

Sincerely,

Sang Min Lee

Enclosures

4243822 v1

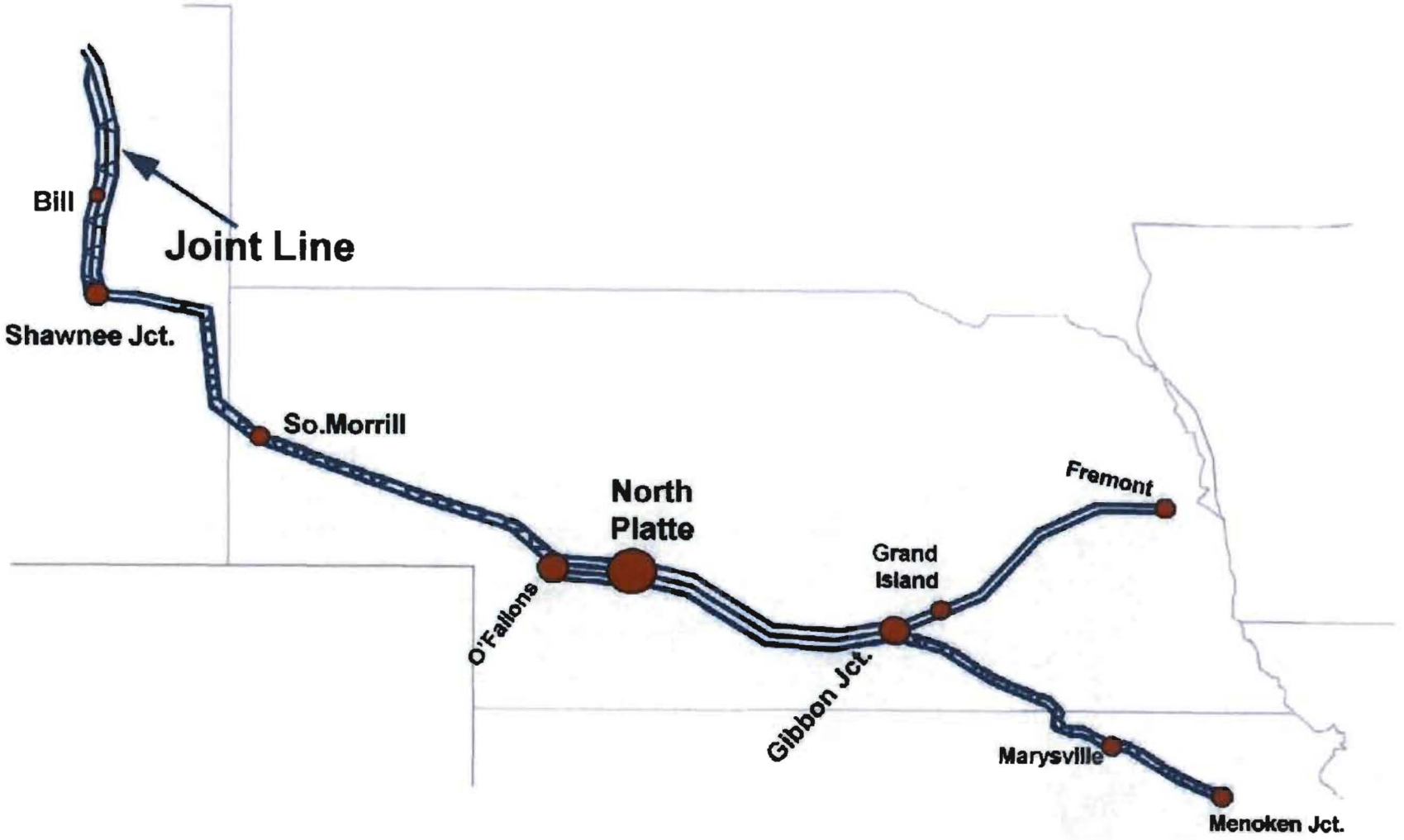
STB Finance Docket No. 35305

ARKANSAS ELECTRIC COOPERATIVE CORPORATION—PETITION FOR DECLARATORY ORDER

July 29, 2010 Hearing

Argument of
Union Pacific Railroad Company

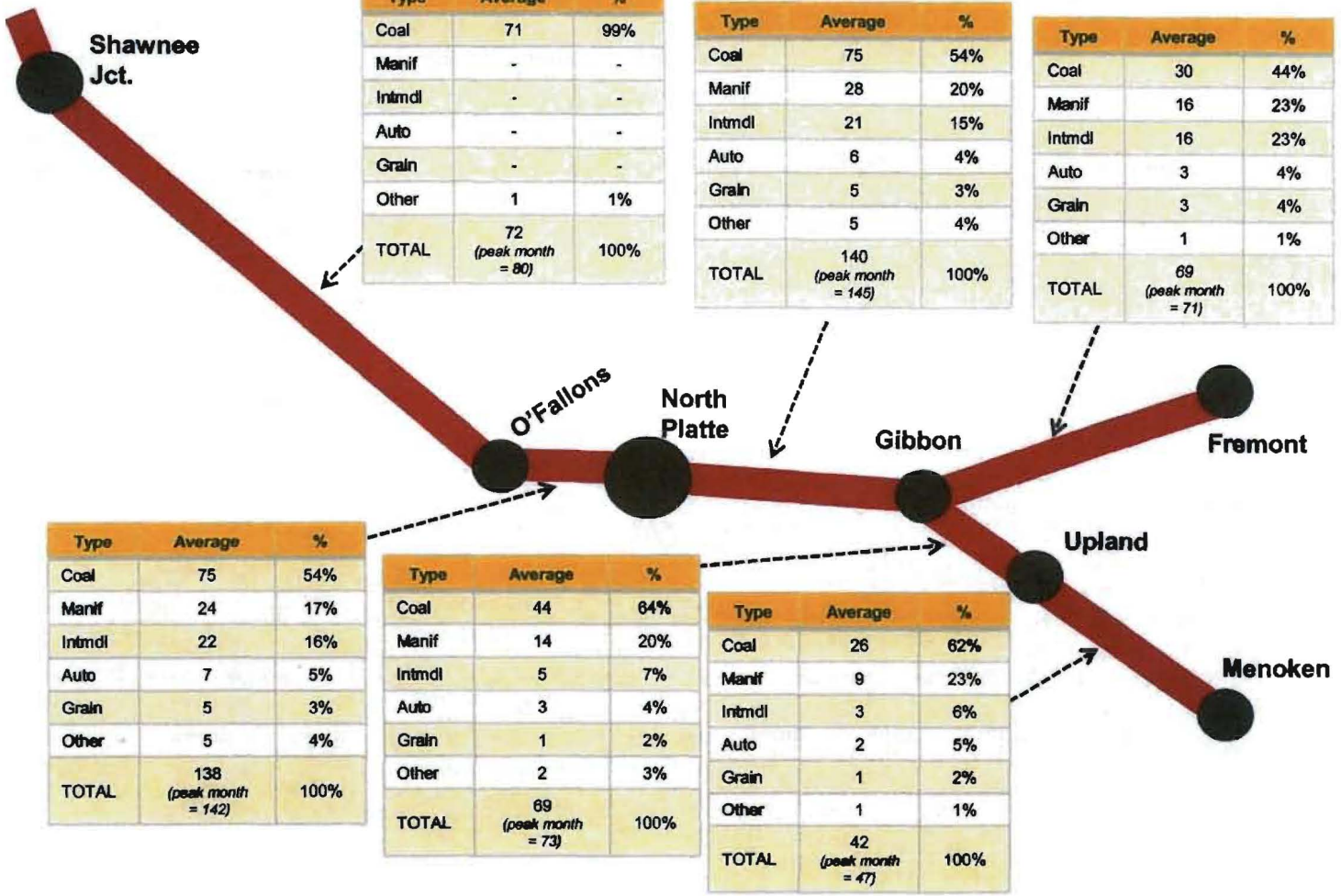
The Core of Union Pacific's Coal Network



Record Reference: UP Op. Glass VS, at 3.

2007 Trains per Day

Shannon and Wilson Study Area



Type	Average	%
Coal	71	99%
Manif	-	-
Intmdl	-	-
Auto	-	-
Grain	-	-
Other	1	1%
TOTAL	72 *(peak month = 80)*	100%

Type	Average	%
Coal	75	54%
Manif	28	20%
Intmdl	21	15%
Auto	6	4%
Grain	5	3%
Other	5	4%
TOTAL	140 *(peak month = 145)*	100%

Type	Average	%
Coal	30	44%
Manif	16	23%
Intmdl	16	23%
Auto	3	4%
Grain	3	4%
Other	1	1%
TOTAL	69 *(peak month = 71)*	100%

Type	Average	%
Coal	75	54%
Manif	24	17%
Intmdl	22	16%
Auto	7	5%
Grain	5	3%
Other	5	4%
TOTAL	138 *(peak month = 142)*	100%

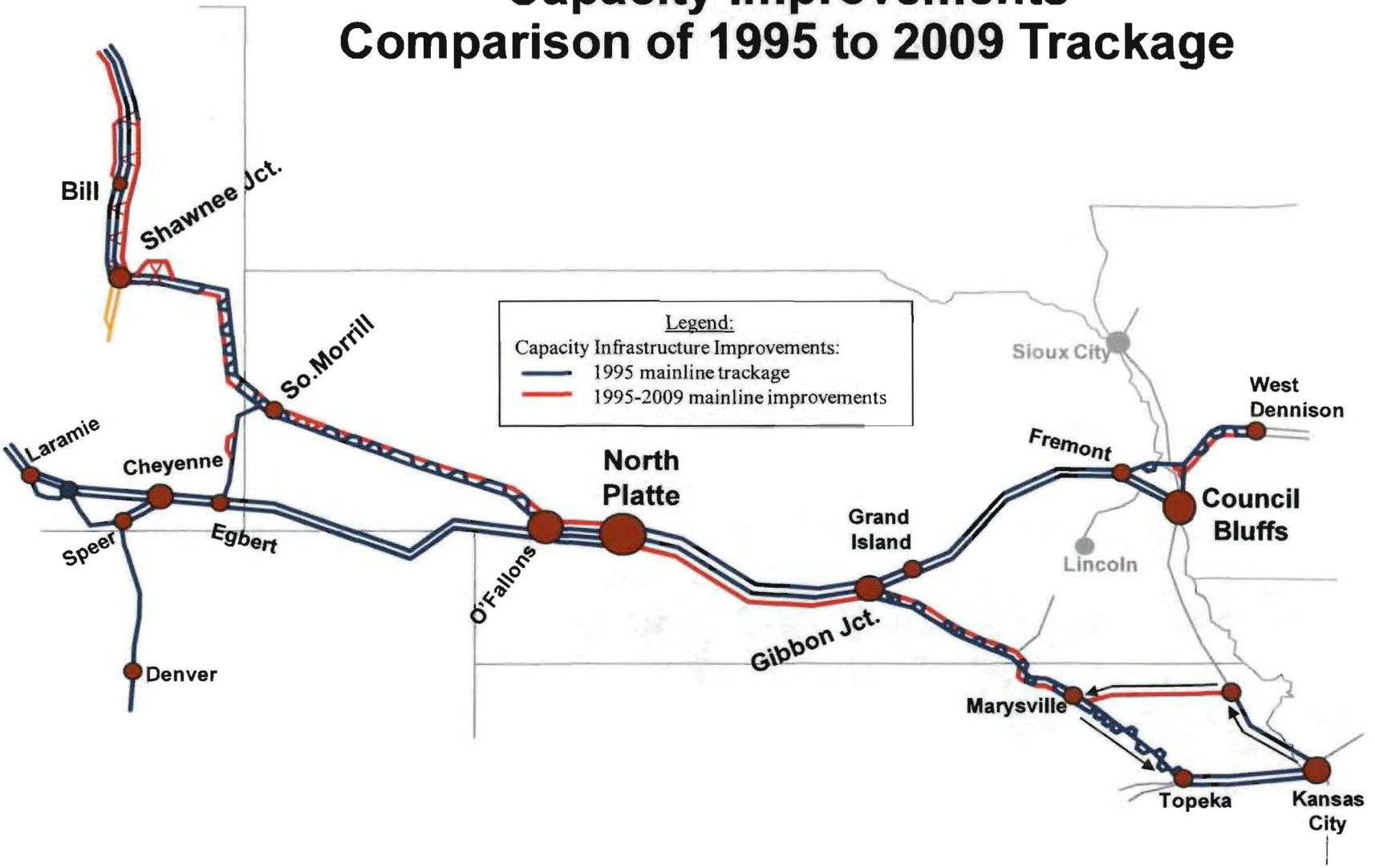
Type	Average	%
Coal	44	64%
Manif	14	20%
Intmdl	5	7%
Auto	3	4%
Grain	1	2%
Other	2	3%
TOTAL	69 *(peak month = 73)*	100%

Type	Average	%
Coal	26	62%
Manif	9	23%
Intmdl	3	6%
Auto	2	5%
Grain	1	2%
Other	1	1%
TOTAL	42 *(peak month = 47)*	100%

Record Reference: UP Reply Glass VS, Ex. DRG-2.

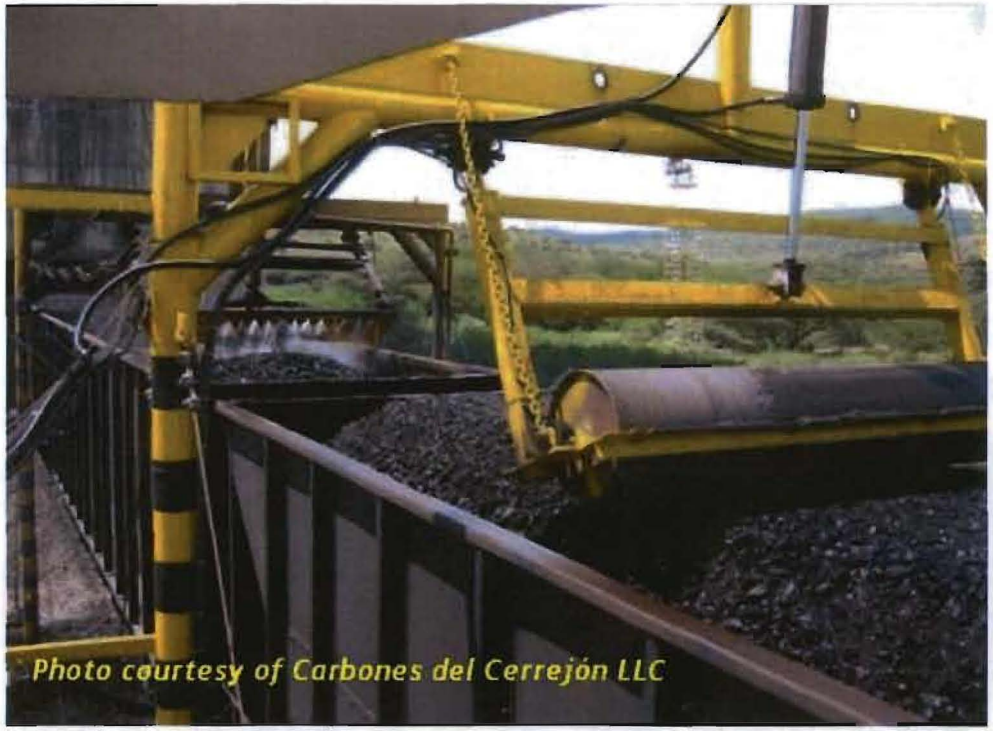
UPRR's SPRB Coal Route

Capacity Improvements
Comparison of 1995 to 2009 Trackage



Record Reference: UP Rebuttal Duffy VS, at 3.

Coal Surface Compacted by a Frame-Mounted Roller



Record Reference: UP Op. Muleski VS, at 8-9 & n.5