Exhibit C 7: 2007 and 2017 Northern Counties Commodities Forecast Changes

Northern Counties Inbound Top 20 Commodities	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Secondary Freight	48.21%	2,099,804	16.10%	2,437,801	55.35%
Lumber or Wood Products	21.75%	947,405	(40.00%)	568,442	12.91%
Nonmetallic Minerals	9.08%	395,413	11.64%	441,455	10.02%
Clay, Concrete, Glass or Stone	7.39%	321,711	(5.92%)	302,675	6.87%
Food or Kindred Products	2.71%	118,222	5.71%	124,972	2.84%
Primary Metal Products	1.47%	64,021	11.39%	71,316	1.62%
Farm Products	1.33%	57,765	(5.75%)	54,443	1.24%
Chemicals or Allied Products	1.22%	52,984	4.08%	55,147	1.25%
Petroleum or Coal Products	1.04%	45,151	10.60%	49,936	1.13%
Furniture or Fixtures	0.99%	42,978	48.26%	63,717	1.45%
Pulp, Paper or Allied Products	0.98%	42,641	1.53%	43,295	0.98%
Rail Intermodal Drayage from Ramp	0.63%	27,403	(6.15%)	25,718	0.58%
Electrical Equipment	0.59%	25,847	1.24%	26,168	0.59%
Fabricated Metal Products	0.49%	21,314	10.66%	23,586	0.54%
Transportation Equipment	0.47%	20,557	19.80%	24,627	0.56%
Waste or Scrap Materials	0.44%	19,017	17.51%	22,348	0.51%
Coal	0.39%	17,201	18.27%	20,344	0.46%
Rubber or Misc Plastics	0.24%	10,290	13.47%	11,676	0.27%
Machinery	0.20%	8,850	48.13%	13,109	0.30%
Misc Manufacturing Products	0.17%	7,288	72.83%	12,596	0.29%

Northern Counties Outbound Top 20 Commodities	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Lumber or Wood Products	51.49%	6,128,070	(17.82%)	5,035,838	47.97%
Nonmetallic Minerals	38.89%	4,628,855	(9.14%)	4,205,699	40.06%
Farm Products	2.59%	308,288	5.73%	325,953	3.11%
Pulp, Paper or Allied Products	1.60%	189,859	9.38%	207,666	1.98%
Clay, Concrete, Glass or Stone	1.22%	145,315	(5.43%)	137,430	1.31%
Fabricated Metal Products	0.95%	113,431	6.46%	120,756	1.15%
Waste or Scrap Materials	0.77%	91,154	0.18%	91,322	0.87%
Furniture or Fixtures	0.75%	89,048	52.72%	135,990	1.30%
Chemicals or Allied Products	0.60%	71,049	4.24%	74,063	0.71%
Electrical Equipment	0.26%	30,788	3.58%	31,891	0.30%
Food or Kindred Products	0.19%	22,932	10.58%	25,358	0.24%
Secondary Freight	0.15%	17,861	92.01%	34,296	0.33%
Primary Metal Products	0.15%	17,561	(48.22%)	9,093	0.09%
Transportation Equipment	0.12%	14,682	44.90%	21,274	0.20%
Rail Intermodal Drayage to Ramp	0.09%	11,184	20.61%	13,488	0.13%
Rubber or Misc Plastics	0.07%	7,946	8.98%	8,660	0.08%
Apparel or Related Products	0.03%	3,165	101.14%	6,366	0.06%
Fresh Fish or Marine Products	0.03%	2,986	13.96%	3,402	0.03%
Metallic Ores	0.02%	2,902	(37.17%)	1,823	0.02%
Printed Matter	0.02%	2,188	67.05%	3,656	0.03%

Exhibit C 8: 2007 and 2017 Central Counties Inbound Tonnage

Central Counties Inbound Tonnage		2007	2017	Growth	% Growth
Local Freight					
Truck Only	Tonnage & Growth Rate	8,868,718	7,658,928	(1,209,790)	(13.6%)
Rail Only	Tonnage & Growth Rate	22,044	17,722	(4,322)	(19.6%)
Truck + Rail	Tonnage & Growth Rate	8,890,762	7,676,650	(1,214,112)	(13.7%)
Directional Freight (to West, East, North or South)					
Truck Only	Tonnage & Growth Rate	12,897,378	12,918,293	20,915	0.2%
Rail Only	Tonnage & Growth Rate	4,811,408	5,131,603	320,195	6.7%
Truck + Rail	Tonnage & Growth Rate	17,708,786	18,049,896	341,110	1.9%
Combined Local and Directional Freight					
Truck Only	Tonnage & Growth Rate	21,766,096	20,577,221	(1,188,875)	(5.5%)
Rail Only	Tonnage & Growth Rate	4,833,452	5,149,326	315,874	6.5%
Truck + Rail	Tonnage & Growth Rate	26,599,548	25,726,547	(873,001)	(3.3%)

Exhibit C 9: 2007 and 2017 Central Counties Inbound Distribution

Central Counties Inbound Tonnage			Local Freight: Circulates within IPH Counties		Inbound from Western Origins: Routes = I-90, US2, US12, US20		Inbound from Eastern Origins: Routes = I-90, US2, US12, ID200		Inbound from Northern Origins: Routes = US95, US195, US395		Inbound from Southern Origins: Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Spokane County, WA	2007	Tonnage	6,703,832	18,084	8,403,410	401,916	962,855	3,498,236	148,804	498,264	525,569	60,240	21,221,210	79.8%
	2017	Tonnage	5,388,819	15,109	7,816,605	356,760	994,701	3,844,780	180,411	514,447	573,908	60,737	19,746,277	76.8%
		% vs 2007	(19.6%)	(16.4%)	(7.0%)	(11.2%)	3.3%	9.9%	21.2%	3.2%	9.2%	0.8%	(7.0%)	
Kootenai County, ID	2007	Tonnage	1,234,365	3,960	525,056	3,280	379,073	58,308	44,826	36,600	604,640	18,840	2,908,948	10.9%
	2017	Tonnage	1,101,535	2,613	504,888	1,376	421,235	63,542	56,722	43,378	698,508	16,237	2,910,033	11.3%
		% vs 2007	(10.8%)	(34.0%)	(3.8%)	(58.1%)	11.1%	9.0%	26.5%	18.5%	15.5%	(13.8%)	0.0%	
Lincoln County, WA	2007	Tonnage	469,949		392,457		68,301	3,920	33,350	3,160	78,913		1,050,050	3.9%
	2017	Tonnage	645,341		619,480		116,927	5,755	38,963	3,947	97,489		1,527,901	5.9%
		% vs 2007	37.3%		57.8%		71.2%	46.8%	16.8%	24.9%	23.5%		45.5%	
Adams County, WA	2007	Tonnage	244,572		503,432	4,000	16,908	145,604	34,905	73,400	22,646	5,640	1,051,107	4.0%
	2017	Tonnage	213,882		501,778	4,203	23,541	119,764	40,662	93,505	23,783	3,173	1,024,291	4.0%
		% vs 2007	(12.5%)		(0.3%)	5.1%	39.2%	(17.7%)	16.5%	27.4%	5.0%	(43.7%)	(2.6%)	
Shoshone County, ID	2007	Tonnage	216,000		33,097		62,467		4,843		51,826		368,233	1.4%
	2017	Tonnage	309,350		38,678		96,813		5,147		68,057		518,044	2.0%
		% vs 2007	43.2%		16.9%		55.0%		6.3%		31.3%		40.7%	
County Summary	2007	Tonnage	8,868,718	22,044	9,857,453	409,196	1,489,604	3,706,068	266,728	611,424	1,283,593	84,720	26,599,548	100.0%
	2017	Tonnage	7,658,928	17,722	9,481,427	362,340	1,653,217	4,033,841	321,905	655,276	1,461,744	80,147	25,726,547	100.0%
		% vs 2007	(13.6%)	(19.6%)	(3.8%)	(11.5%)	11.0%	8.8%	20.7%	7.2%	13.9%	(5.4%)	(3.3%)	

2007 Truck Freight	2007	Tons %	33.3%		48.5%				
2007 Rail Freight	2007	Tons %		0.1%	18.1%				100.0%
2017 Truck Freight	2017	Tons %	29.8%		50.2%				
2017 Rail Freight	2017	Tons %		0.1%	19.9%				100.0%
2007 Truck + Rail	2007	Tons %	33.4%		38.6%	19.5%	3.3%	5.1%	100.0%
2017Truck Freight	2017	Tons %	29.8%		38.3%	22.1%	3.8%	6.0%	100.0%

Exhibit C 10: 2007 and 2017 Central Counties Outbound Tonnage

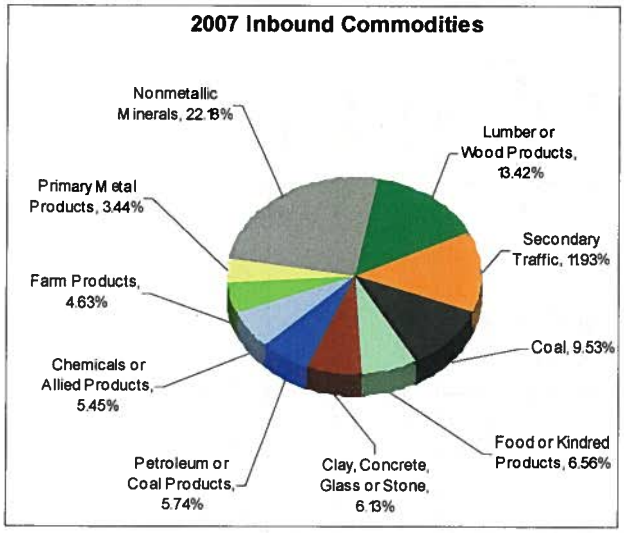
Central Counties Outbound Tonnage		2007	2017	Growth	% Growth
Local Freight					
Truck Only	Tonnage & Growth Rate	4,372,966	3,716,961	(656,005)	(15.0%)
Rail Only	Tonnage & Growth Rate	6,256	5,914	(342)	(5.5%)
Truck + Rail	Tonnage & Growth Rate	4,379,222	3,722,875	(656,347)	(15.0%)
Directional Freight (to West, East, North or South)					
Truck Only	Tonnage & Growth Rate	17,931,927	16,743,840	(1,188,087)	(6.6%)
Rail Only	Tonnage & Growth Rate	6,418,537	5,395,133	(1,023,404)	(15.9%)
Truck + Rail	Tonnage & Growth Rate	24,350,464	22,138,973	(2,211,491)	(9.1%)
Combined Local and Directional Freight					
Truck Only	Tonnage & Growth Rate	22,304,893	20,460,802	(1,844,091)	(8.3%)
Rail Only	Tonnage & Growth Rate	6,424,793	5,401,047	(1,023,746)	(15.9%)
Truck + Rail	Tonnage & Growth Rate	28,729,686	25,861,849	(2,867,838)	(10.0%)

Exhibit C 11: 2007 and 2017 Central Counties Outbound Distribution

Central Counties Outbound Tonnage			Local Freight Circulates within IPH Counties		Outbound to Western Destinations. Routes = I-90, US2, US12, US20		Outbound to Eastern Destinations. Routes = I-90, US2, US12, ID200		Outbound to Northern Destinations. Routes = US95, US195, US395		Outbound to Southern Destinations. Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Spokane County, WA	2007	Tonnage	1,672,550	4,496	8,843,907	3,300,477	1,004,653	374,932	287,471	5,600	943,720	80,056	16,517,862	57.5%
	2017	Tonnage	1,554,568	4,012	7,871,726	3,356,030	979,628	344,192	361,324	7,249	911,354	73,363	15,463,444	59.8%
		% vs 2007	(7.1%)	(10.8%)	(11.0%)	1.7%	(2.5%)	(8.2%)	25.7%	29.4%	(3.4%)	(8.4%)	(6.4%)	
Kootenai County, ID	2007	Tonnage	2,291,415		664,034	6,600	863,336	242,400	59,181		1,967,748	82,800	6,177,513	21.5%
	2017	Tonnage	1,867,154		712,260	7,513	961,797	220,433	76,447		2,074,657	65,860	5,986,122	23.1%
		% vs 2007	(18.5%)		7.3%	13.8%	11.4%	(9.1%)	29.2%		5.4%	(20.5%)	(3.1%)	
Adams County, WA	2007	Tonnage	175,293	880	297,272	1,011,116	57,175	147,760	87,522		1,044,816	3,960	2,825,795	9.8%
	2017	Tonnage	118,550	951	252,330	531,506	46,698	124,580	99,100		881,228	4,161	2,059,104	8.0%
		% vs 2007	(32.4%)	8.1%	(15.1%)	(47.4%)	(18.3%)	(15.7%)	13.2%		(15.7%)	5.1%	(27.1%)	
Lincoln County, WA	2007	Tonnage	175,293	880	297,272	1,011,116	57,175	147,760	87,522		1,044,816	3,960	2,825,795	9.8%
	2017	Tonnage	118,550	951	252,330	531,506	46,698	124,580	99,100		881,228	4,161	2,059,104	8.0%
		% vs 2007	(32.4%)	8.1%	(15.1%)	(47.4%)	(18.3%)	(15.7%)	13.2%		(15.7%)	5.1%	(27.1%)	
Shoshone County, ID	2007	Tonnage	58,416		17,176		189,996		8,303		108,830		382,721	1.3%
	2017	Tonnage	58,139		16,105		147,543		10,233		62,055		294,075	1.1%
		% vs 2007	(0.5%)		(6.2%)		(22.3%)		23.2%		(43.0%)		(23.2%)	
County Summary	2007	Tonnage	4,372,966	6,256	10,119,662	5,329,309	2,172,336	912,852	529,999	5,600	5,109,930	170,776	28,729,686	100.0%
	2017	Tonnage	3,716,961	5,914	9,104,750	4,426,554	2,182,364	813,784	646,203	7,249	4,810,522	147,546	25,861,849	100.0%
		% vs 2007	(15.0%)	(5.5%)	(10.0%)	(16.9%)	0.5%	(10.9%)	21.9%	29.4%	(5.9%)	(13.6%)	(10.0%)	

2007 Truck Freight	2007	Tons %	15.2%		62.4%					
2007 Rail Freight	2007	Tons %		0.0%	22.3%					100.0%
2017 Truck Freight	2017	Tons %	14.4%		64.7%					
2017 Rail Freight	2017	Tons %		0.0%	20.9%					100.0%
2007 Truck + Rail	2007	Tons %	15.2%		53.8%	10.7%	1.9%	18.4%		100.0%
2017Truck Freight	2017	Tons %	14.4%		52.3%	11.6%	2.5%	19.2%		100.0%

Exhibit C 12: 2007 and 2017 Central Counties Top Ten Inbound Commodities



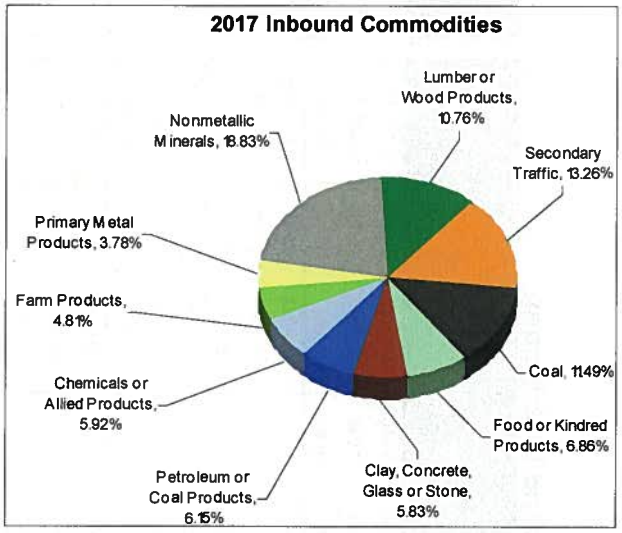
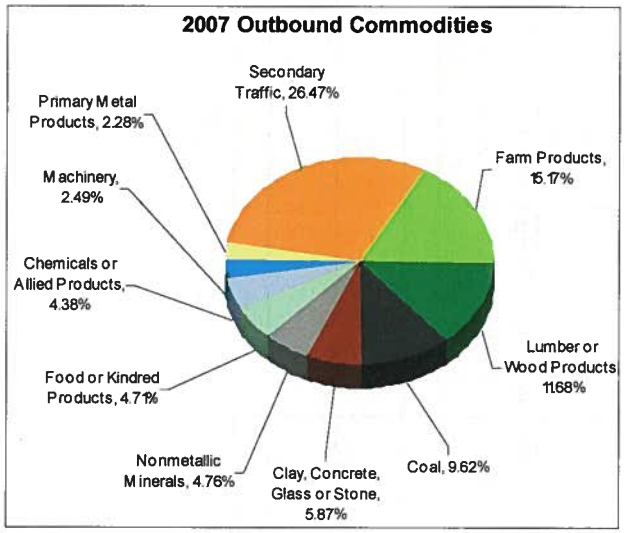


Exhibit C 13: 2007 and 2017 Central Counties Top Ten Outbound Commodities



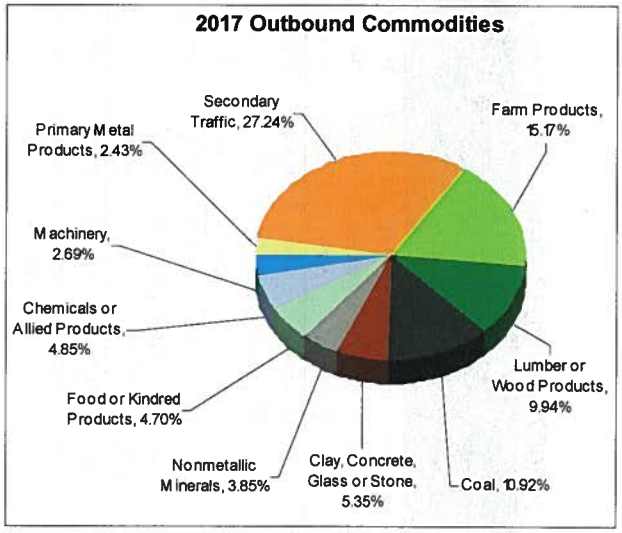


Exhibit C 14: 2007 and 2017 Central Counties Commodities Forecast Changes

Central Counties Inbound Top 20 Commodities	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Nonmetallic Minerals	22.18%	5,898,736	(17.89%)	4,843,591	18.83%
Lumber or Wood Products	13.42%	3,570,781	(22.47%)	2,768,578	10.76%
Secondary Freight	11.93%	3,173,717	7.46%	3,410,334	13.26%
Coal	9.53%	2,534,905	16.57%	2,955,010	11.49%
Food or Kindred Products	6.56%	1,744,637	1.15%	1,764,623	6.86%
Clay, Concrete, Glass or Stone	6.13%	1,630,992	(7.99%)	1,500,634	5.83%
Petroleum or Coal Products	5.74%	1,526,093	3.70%	1,582,573	6.15%
Chemicals or Allied Products	5.45%	1,450,293	4.94%	1,522,002	5.92%
Farm Products	4.63%	1,231,331	0.48%	1,237,190	4.81%
Primary Metal Products	3.44%	915,278	6.31%	972,999	3.78%
Transportation Equipment	1.53%	407,078	37.64%	560,287	2.18%
Fabricated Metal Products	1.31%	349,519	(2.83%)	339,623	1.32%
Pulp, Paper or Allied Products	1.17%	311,778	(2.73%)	303,267	1.18%
Rail Intermodal Drayage from Ramp	1.02%	272,237	(6.14%)	255,510	0.99%
Electrical Equipment	0.98%	259,496	13.89%	295,541	1.15%
Rail Intermodal Drayage to Ramp	0.79%	211,332	20.61%	254,878	0.99%
Machinery	0.73%	192,885	17.98%	227,568	0.88%
Rubber or Misc Plastics	0.55%	145,185	5.60%	153,311	0.60%
Misc Mixed Shipments	0.51%	135,760	(6.10%)	127,474	0.50%
Waste or Scrap Materials	0.40%	105,101	27.61%	134,118	0.52%

Central Counties Outbound Top 20 Commodities	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Secondary Freight	26.47%	7,109,401	(6.87%)	6,621,252	27.24%
Farm Products	15.17%	4,075,401	(9.53%)	3,687,198	15.17%
Lumber or Wood Products	11.68%	3,136,953	(23.00%)	2,415,372	9.94%
Coal	9.62%	2,583,149	2.72%	2,653,434	10.92%
Clay, Concrete, Glass or Stone	5.87%	1,575,272	(17.37%)	1,301,693	5.35%
Nonmetallic Minerals	4.76%	1,277,532	(26.69%)	936,605	3.85%
Food or Kindred Products	4.71%	1,265,232	(9.75%)	1,141,878	4.70%
Chemicals or Allied Products	4.38%	1,175,388	0.22%	1,178,017	4.85%
Machinery	2.49%	669,599	(2.17%)	655,066	2.69%
Primary Metal Products	2.28%	611,628	(3.37%)	590,989	2.43%
Fabricated Metal Products	2.11%	567,492	(8.64%)	518,474	2.13%
Transportation Equipment	1.64%	439,877	14.60%	504,105	2.07%
Electrical Equipment	1.34%	358,834	(34.96%)	233,399	0.96%
Petroleum or Coal Products	1.29%	346,946	(9.78%)	313,018	1.29%
Pulp, Paper or Allied Products	1.18%	316,925	(11.11%)	281,716	1.16%
Rail Intermodal Drayage from Ramp	1.18%	316,179	(14.94%)	268,945	1.11%
Waste or Scrap Materials	1.16%	312,885	1.49%	317,556	1.31%
Furniture or Fixtures	0.73%	196,923	0.70%	198,293	0.82%
Rail Intermodal Drayage to Ramp	0.38%	101,407	1.99%	103,421	0.43%
Rubber or Misc Plastics	0.37%	99,631	(1.15%)	98,481	0.41%

Exhibit C 15: 2007 and 2017 Southern Counties Inbound Tonnage

Southern Counties Inbound Tonnage		2007	2017	Growth	% Growth
Local Freight					
Truck Only	Tonnage & Growth Rate	3,532,327	4,846,167	1,313,840	37.2%
Rail Only	Tonnage & Growth Rate	5,016	5,815	799	15.9%
Truck + Rail	Tonnage & Growth Rate	3,537,343	4,851,982	1,314,639	37.2%
Directional Freight (to West, East, North or South)					
Truck Only	Tonnage & Growth Rate	2,934,598	4,419,367	1,484,769	50.6%
Rail Only	Tonnage & Growth Rate	432,208	545,920	113,712	26.3%
Truck + Rail	Tonnage & Growth Rate	3,366,806	4,965,287	1,598,481	47.5%
Combined Local and Directional Freight					
Truck Only	Tonnage & Growth Rate	6,466,925	9,265,534	2,798,609	43.3%
Rail Only	Tonnage & Growth Rate	437,224	551,735	114,511	26.2%
Truck + Rail	Tonnage & Growth Rate	6,904,149	9,817,269	2,913,120	42.2%

Exhibit C 16: 2007 and 2017 Southern Counties Inbound Distribution

Southern Counties Inbound Tonnage			Local Freight Circulates within IPH Counties		Inbound from Western Origins: Routes = I-90, US2, US12, US20		Inbound from Eastern Origins: Routes = I-90, US2, US12, ID200		Inbound from Northern Origins: Routes = US95, US195, US395		Inbound from Southern Origins: Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Nez Perce County, ID	2007	Tonnage	1,118,226		121,334	84,640	276,841	88,328	14,250	85,320	438,423	12,440	2,239,802	32.4%
	2017	Tonnage	1,341,228		126,875	102,465	355,407	86,638	20,644	103,311	659,794	14,268	2,810,630	28.6%
		% vs 2007	19.9%		4.6%	21.1%	28.4%	(1.9%)	44.9%	21.1%	50.5%	14.7%	25.5%	
Whitman County, WA	2007	Tonnage	675,425	3,120	571,510	7,960	26,333	22,600	52,578	23,120	25,807		1,408,454	20.4%
	2017	Tonnage	888,788	3,608	849,174	6,816	49,576	26,248	78,399	37,199	58,615		1,998,423	20.4%
		% vs 2007	31.6%	15.6%	48.6%	(14.4%)	88.3%	16.1%	49.1%	60.9%	127.1%		41.9%	
Asotin County, WA	2007	Tonnage	731,238		153,019		16,143		35,755		9,064		945,219	13.7%
	2017	Tonnage	1,375,928		164,803		22,380		55,400		15,977		1,634,488	16.6%
		% vs 2007	88.2%		7.7%		38.6%		54.9%		76.3%		72.9%	
Latah County, ID	2007	Tonnage	390,477		121,933		142,110		8,152		251,361		914,032	13.2%
	2017	Tonnage	410,892		140,456		248,073		11,209		511,404		1,322,034	13.5%
		% vs 2007	5.2%		15.2%		74.6%		37.5%		103.5%		44.6%	
Clearwater County, ID	2007	Tonnage	244,104		23,160	1,840	62,268		5,606		153,526		490,505	7.1%
	2017	Tonnage	375,078		23,682	2,142	100,030		7,444		260,906		769,282	7.8%
		% vs 2007	53.7%		2.3%	16.4%	60.6%		32.8%		69.9%		56.8%	
Benewah County, ID	2007	Tonnage	302,385	1,896	19,113		59,725		7,081		142,328		532,529	7.7%
	2017	Tonnage	356,296	2,207	13,965		72,246		9,805		205,903		660,423	6.7%
		% vs 2007	17.8%	16.4%	(26.9%)		21.0%		38.5%		44.7%		24.0%	
Garfield County, WA	2007	Tonnage	491		6,805		329	32,240	26,344	52,960	182	15,600	134,952	2.0%
	2017	Tonnage	2,182		20,037		691	45,004	41,962	86,110	571	30,234	226,790	2.3%
		% vs 2007	344.0%		194.4%		110.0%	39.6%	59.3%	62.6%	214.0%	93.8%	68.1%	

Southern Counties Inbound Tonnage (continued)			Local Freight Circulates within IPH Counties		Inbound from Western Origins: Routes = I-90, US2, US12, US20		Inbound from Eastern Origins: Routes = I-90, US2, US12, ID200		Inbound from Northern Origins: Routes = US95, US195, US395		Inbound from Southern Origins: Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Lewis County, ID	2007	Tonnage	51,913		3,442		28,989		6,635	5,160	29,781		125,919	1.8%
	2017	Tonnage	67,621		7,082		63,838		8,735	5,485	72,557		225,318	2.3%
		% vs 2007	30.3%		105.8%		120.2%		31.6%	6.3%	143.6%		78.9%	
Columbia County, WA	2007	Tonnage	18,068		52,395		4,884		33,420		3,969		112,737	1.6%
	2017	Tonnage	28,154		68,450		12,501		53,291		7,486		169,882	1.7%
		% vs 2007	55.8%		30.6%		156.0%		59.5%		88.6%		50.7%	
County Summary	2007	Tonnage	3,532,327	5,016	1,072,711	94,440	617,622	143,168	189,822	166,560	1,054,442	28,040	6,904,149	100.0%
	2017	Tonnage	4,846,167	5,815	1,414,524	111,423	924,741	157,890	286,889	232,104	1,793,213	44,502	9,817,269	100.0%
		% vs 2007	37.2%	15.9%	31.9%	18.0%	49.7%	10.3%	51.1%	39.4%	70.1%	58.7%	42.2%	

2007 Truck Freight	2007	Tons %	51.2%		42.5%								100.0%
2007 Rail Freight	2007	Tons %		0.1%	6.3%								
2017 Truck Freight	2027	Tons %	49.4%		45.0%								100.0%
2017 Rail Freight	2027	Tons %		0.1%	5.6%								
2007 Truck + Rail	2007	Tons %	51.2%		16.9%		11.0%		5.2%		15.7%		100.0%
2027 Truck + Rail	2027	Tons %	49.4%		15.5%		11.0%		5.3%		18.7%		100.0%

Exhibit C 17: 2007 and 2017 Southern Counties Outbound Tonnage

Southern Counties Outbound Tonnage		2007	2017	Growth	% Growth
Local Freight					
Truck Only	Tonnage & Growth Rate	4,862,539	6,883,240	2,020,702	41.6%
Rail Only	Tonnage & Growth Rate	3,800	2,654	(1,146)	(30.2%)
Truck + Rail	Tonnage & Growth Rate	4,866,339	6,885,894	2,019,555	41.5%
Directional Freight (to West, East, North or South)					
Truck Only	Tonnage & Growth Rate	6,532,864	9,311,771	2,778,907	42.5%
Rail Only	Tonnage & Growth Rate	492,712	377,670	(115,042)	(23.3%)
Truck + Rail	Tonnage & Growth Rate	7,025,576	9,689,441	2,663,866	37.9%
Combined Local and Directional Freight					
Truck Only	Tonnage & Growth Rate	11,395,402	16,195,011	4,799,609	42.1%
Rail Only	Tonnage & Growth Rate	496,512	380,324	(116,188)	(23.4%)
Truck + Rail	Tonnage & Growth Rate	11,891,914	16,575,335	4,683,421	39.4%

Exhibit C 18: 2007 and 2017 Southern Counties Outbound Distribution

Southern Counties Outbound Tonnage			Local Freight: Circulates within IPH Counties		Outbound to Western Destinations. Routes = I-90, US2, US12, US20		Outbound to Eastern Destinations. Routes = I-90, US2, US12, ID200		Outbound to Northern Destinations. Routes = US95, US195, US395		Outbound to Southern Destinations. Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Nez Perce County, ID	2007	Tonnage	2,069,127		287,991	34,120	787,416	194,160	20,461		1,961,931	72,000	5,427,206	45.6%
	2017	Tonnage	2,467,904		478,621	39,757	795,556	165,956	29,313		2,249,371	62,489	6,288,968	37.9%
		% vs 2007	19.3%		66.2%	16.5%	1.0%	(14.5%)	43.3%		14.7%	(13.2%)	15.9%	
Whitman County, WA	2007	Tonnage	723,642		255,846	43,552	169,394	1,920	40,103		182,741		1,417,199	11.9%
	2017	Tonnage	796,076		273,568	18,032	169,515	1,363	56,794		225,555		1,540,903	9.3%
		% vs 2007	10.0%		6.9%	(58.6%)	0.1%	(29.0%)	41.6%		23.4%		8.7%	
Asotin County, WA	2007	Tonnage	170,099		520,987		31,299		12,407		44,226		779,018	6.6%
	2017	Tonnage	918,378		2,752,121		86,269		22,817		181,235		3,960,819	23.9%
		% vs 2007	439.9%		428.3%		175.6%		83.9%		309.8%		408.4%	
Latah County, ID	2007	Tonnage	664,561		46,457		100,352	28,760	4,153		173,310	3,600	1,021,193	8.6%
	2017	Tonnage	1,266,296		67,090		272,973	18,665	5,668		129,917	2,257	1,762,867	10.6%
		% vs 2007	90.5%		44.4%		172.0%	(35.1%)	36.5%		(25.0%)	(37.3%)	72.6%	
Clearwater County, ID	2007	Tonnage	391,256		62,451		57,792	3,560	3,066		209,517	2,920	730,562	6.1%
	2017	Tonnage	355,493		52,231		35,109	3,556	3,607		80,080	3,138	533,213	3.2%
		% vs 2007	(9.1%)		(16.4%)		(39.3%)	(0.1%)	17.6%		(61.8%)	7.5%	(27.0%)	
Benewah County, ID	2007	Tonnage	654,388	3,800	69,464		629,686	59,680	6,095		424,874	30,600	1,878,586	15.8%
	2017	Tonnage	851,580	2,654	72,186		578,961	37,811	7,102		331,664	16,589	1,898,547	11.5%
		% vs 2007	30.1%	(30.2%)	3.9%		(8.1%)	(36.6%)	16.5%		(21.9%)	(45.8%)	1.1%	
Garfield County, WA	2007	Tonnage	52,507		8,586		6,380		5,561		9,337		82,371	0.7%
	2017	Tonnage	58,799		8,622		27,790		7,643		8,678		111,532	0.7%
		% vs 2007	12.0%		0.4%		335.6%		37.4%		(7.1%)		35.4%	

Southern Counties Outbound Tonnage (continued)			Local Freight: Circulates within IPH Counties		Outbound to Western Destinations: Routes = I-90, US2, US12, US20		Outbound to Eastern Destinations: Routes = I-90, US2, US 12, ID200		Outbound to Northern Destinations: Routes = US95, US195, US395		Outbound to Southern Destinations: Routes = US95, US195, US395		Commodity Total	County %
County	Year	Data	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail		
Lewis County, ID	2007	Tonnage	99,498		17,427		57,981	6,800	1,477		108,330	7,600	299,113	2.5%
	2017	Tonnage	117,441		5,960		26,324	2,733	1,814		58,217	1,227	213,716	1.3%
		% vs 2007	18.0%		(65.8%)		(54.6%)	(59.8%)	22.8%		(46.3%)	(83.9%)	(28.6%)	
Columbia County, WA	2007	Tonnage	37,460		194,335		130	3,440	8,314		12,988		256,667	2.2%
	2017	Tonnage	51,275		184,106		121	4,096	11,429		13,743		264,770	1.6%
		% vs 2007	36.9%		(5.3%)		(6.9%)	19.1%	37.5%		5.8%		3.2%	
County Summary	2007	Tonnage	4,862,539	3,800	1,463,544	77,672	1,840,430	298,320	101,636		3,127,254	116,720	11,891,914	100.0%
	2017	Tonnage	6,883,240	2,654	3,894,506	57,789	1,992,619	234,180	146,187		3,278,459	85,700	16,575,335	100.0%
		% vs 2007	41.6%	(30.2%)	166.1%	(25.6%)	8.3%	(21.5%)	43.8%		4.8%	(26.6%)	39.4%	

2007 Truck Freight	2007	Tons %	40.9%		54.9%				100.0%
2007 Rail Freight	2007	Tons %		0.0%	4.1%				
2017 Truck Freight	2027	Tons %	41.5%		56.2%				100.0%
2017 Rail Freight	2027	Tons %		0.0%	2.3%				
2007 Truck + Rail	2007	Tons %	40.9%		13.0%	18.0%	0.9%	27.3%	100.0%
2027 Truck + Rail	2027	Tons %	41.5%		23.8%	13.4%	0.9%	20.3%	100.0%

Exhibit C 19: 2007 and 2017 Southern Counties Top Ten Inbound Commodities (no water transport)

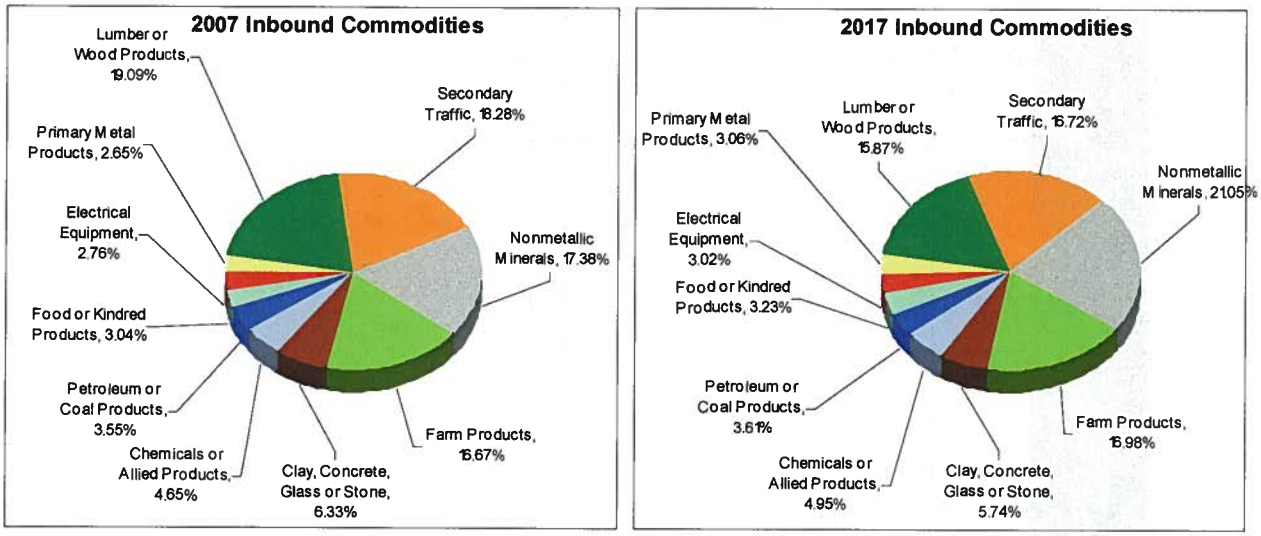


Exhibit C 20: 2007 and 2017 Southern Counties Top Ten Outbound Commodities (no water transport)

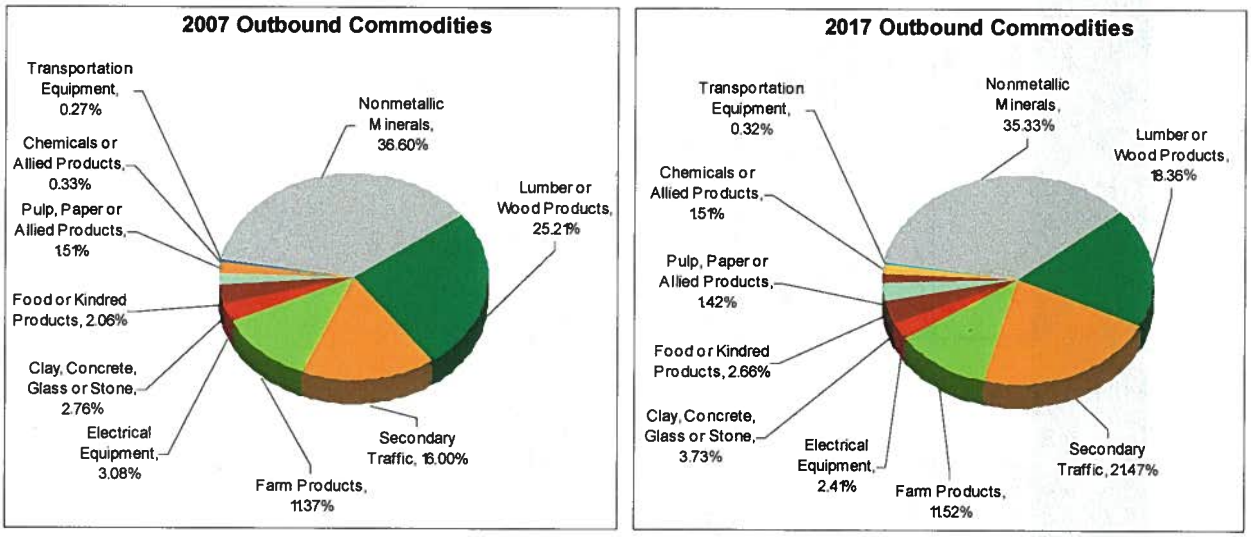


Exhibit C 21: 2007 and 2017 Southern Counties Top Ten Inbound Commodities (with water transport)

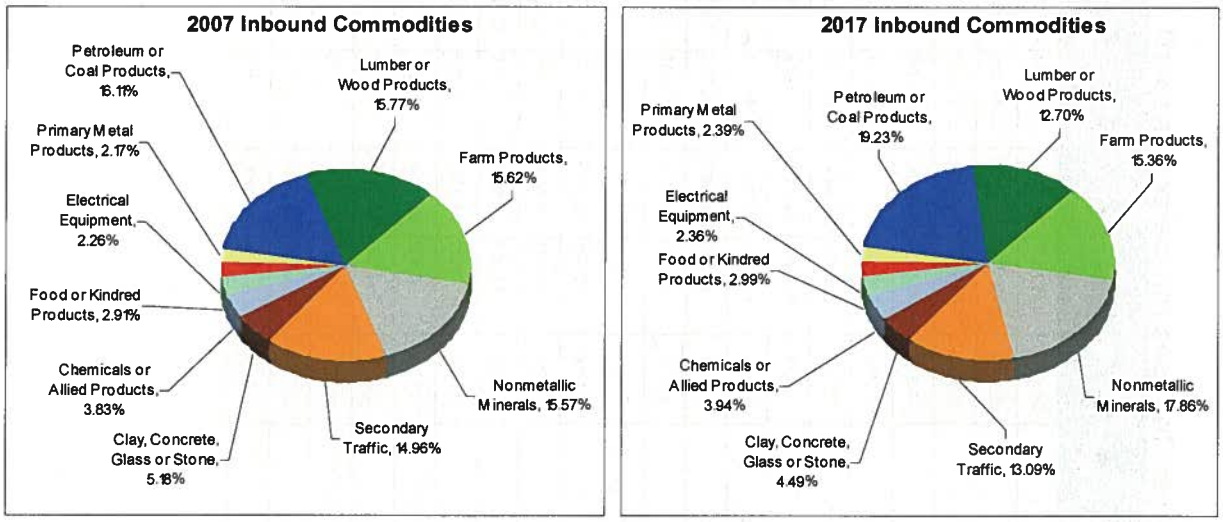


Exhibit C 22: 2007 and 2017 Southern Counties Top Ten Outbound Commodities (with water transport)

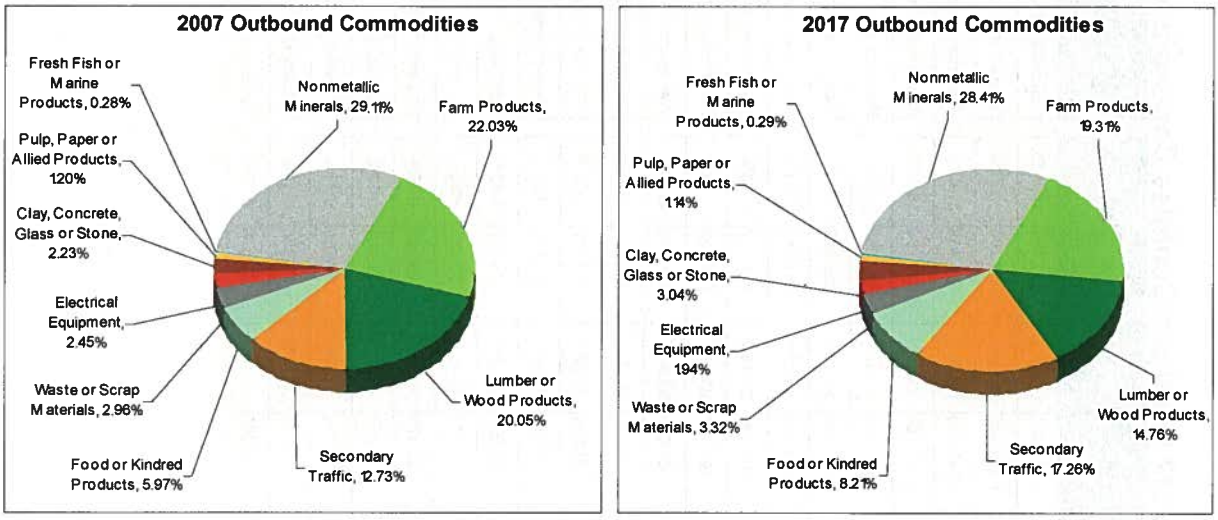


Exhibit C 23: 2007 and 2017 Southern Counties Commodities Forecast Changes (no water transport)

Southern Counties Inbound Top 20 Commodities (no Water Freight)	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Lumber or Wood Products	19.09%	1,318,031	(5.97%)	1,239,391	15.87%
Secondary Freight	18.28%	1,262,325	3.48%	1,306,265	16.72%
Nonmetallic Minerals	17.38%	1,199,653	37.07%	1,644,419	21.05%
Farm Products	16.67%	1,151,150	15.26%	1,326,784	16.98%
Clay, Concrete, Glass or Stone	6.33%	437,045	2.60%	448,397	5.74%
Chemicals or Allied Products	4.65%	321,136	20.30%	386,322	4.95%
Petroleum or Coal Products	3.55%	245,249	14.95%	281,917	3.61%
Food or Kindred Products	3.04%	209,895	20.16%	252,217	3.23%
Electrical Equipment	2.76%	190,701	23.60%	235,697	3.02%
Primary Metal Products	2.65%	183,082	30.39%	238,729	3.06%
Pulp, Paper or Allied Products	1.92%	132,290	1.31%	134,027	1.72%
Transportation Equipment	1.32%	91,270	31.29%	119,827	1.53%
Printed Matter	0.35%	24,243	5.90%	25,674	0.33%
Coal	0.35%	24,053	39.98%	33,670	0.43%
Machinery	0.34%	23,573	42.45%	33,579	0.43%
Waste or Scrap Materials	0.34%	23,479	19.29%	28,007	0.36%
Fabricated Metal Products	0.32%	21,808	15.46%	25,181	0.32%
Furniture or Fixtures	0.15%	10,153	2.04%	10,360	0.13%
Misc Manufacturing Products	0.15%	10,128	37.74%	13,950	0.18%
Rubber or Misc Plastics	0.09%	6,369	23.69%	7,878	0.10%

Southern Counties Outbound Top 20 Commodities (no Water Freight)	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Nonmetallic Minerals	36.60%	4,352,127	3.75%	4,515,274	35.33%
Lumber or Wood Products	25.21%	2,997,451	(21.71%)	2,346,688	18.36%
Secondary Freight	16.00%	1,903,133	44.18%	2,743,854	21.47%
Farm Products	11.37%	1,352,620	8.82%	1,471,980	11.52%
Electrical Equipment	3.08%	365,999	(15.68%)	308,616	2.41%
Clay, Concrete, Glass or Stone	2.76%	328,158	45.14%	476,290	3.73%
Food or Kindred Products	2.06%	244,741	38.78%	339,648	2.66%
Pulp, Paper or Allied Products	1.51%	179,129	1.18%	181,246	1.42%
Chemicals or Allied Products	0.33%	38,750	398.00%	192,972	1.51%
Transportation Equipment	0.27%	31,743	28.17%	40,685	0.32%
Misc Manufacturing Products	0.23%	27,544	146.19%	67,812	0.53%
Waste or Scrap Materials	0.18%	20,826	39.86%	29,128	0.23%
Printed Matter	0.12%	14,476	49.86%	21,694	0.17%
Fabricated Metal Products	0.10%	11,313	50.49%	17,026	0.13%
Machinery	0.06%	7,522	32.32%	9,953	0.08%
Rail Intermodal Drayage to Ramp	0.05%	5,407	22.21%	6,607	0.05%
Metallic Ores	0.04%	4,165	(45.01%)	2,291	0.02%
Instrument, Photo Equip, Optical Eq	0.03%	3,273	58.95%	5,203	0.04%
Primary Metal Products	0.01%	1,422	(20.69%)	1,128	0.01%
Tobacco Products	0.01%	676	(25.80%)	501	0.00%

Exhibit C 24: 2007 and 2017 Southern Counties Commodities Forecast Changes (with water transport)

Southern Counties Inbound Top 20 Commodities (+ Water Freight)	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Petroleum or Coal Products	16.11%	1,359,242	41.20%	1,919,252	19.23%
Lumber or Wood Products	15.77%	1,329,859	(4.74%)	1,266,886	12.70%
Farm Products	15.62%	1,317,378	16.37%	1,533,094	15.36%
Nonmetallic Minerals	15.57%	1,313,702	35.64%	1,781,860	17.86%
Secondary Freight	14.96%	1,262,325	3.48%	1,306,265	13.09%
Clay, Concrete, Glass or Stone	5.18%	437,045	2.60%	448,397	4.49%
Chemicals or Allied Products	3.83%	323,258	21.49%	392,739	3.94%
Food or Kindred Products	2.91%	245,306	21.76%	298,681	2.99%
Electrical Equipment	2.26%	190,701	23.60%	235,697	2.36%
Primary Metal Products	2.17%	183,082	30.39%	238,729	2.39%
Pulp, Paper or Allied Products	1.57%	132,290	1.31%	134,027	1.34%
Waste or Scrap Materials	1.20%	101,566	18.54%	120,396	1.21%
Transportation Equipment	1.08%	91,270	31.29%	119,827	1.20%
Printed Matter	0.29%	24,243	5.90%	25,674	0.26%
Coal	0.29%	24,053	39.98%	33,670	0.34%
Machinery	0.28%	23,573	42.45%	33,579	0.34%
Fabricated Metal Products	0.26%	21,808	15.46%	25,181	0.25%
Furniture or Fixtures	0.12%	10,153	2.04%	10,360	0.10%
Misc Manufacturing Products	0.12%	10,128	37.74%	13,950	0.14%
Rubber or Misc Plastics	0.08%	6,369	23.69%	7,878	0.08%

Southern Counties Outbound Top 20 Commodities (+ Water Freight)	2007 %	2007 Tons	Growth % ►	2017 Tons	2017 %
Nonmetallic Minerals	29.11%	4,352,342	3.75%	4,515,514	28.41%
Farm Products	22.03%	3,294,072	(6.84%)	3,068,860	19.31%
Lumber or Wood Products	20.05%	2,997,451	(21.71%)	2,346,688	14.76%
Secondary Freight	12.73%	1,903,133	44.18%	2,743,854	17.26%
Food or Kindred Products	5.97%	892,061	46.29%	1,304,991	8.21%
Waste or Scrap Materials	2.96%	442,744	19.33%	528,321	3.32%
Electrical Equipment	2.45%	365,999	(15.68%)	308,616	1.94%
Clay, Concrete, Glass or Stone	2.23%	333,049	45.20%	483,596	3.04%
Pulp, Paper or Allied Products	1.20%	179,481	1.14%	181,534	1.14%
Fresh Fish or Marine Products	0.28%	42,061	10.44%	46,451	0.29%
Chemicals or Allied Products	0.26%	38,750	398.00%	192,972	1.21%
Transportation Equipment	0.21%	31,743	28.17%	40,685	0.26%
Misc Manufacturing Products	0.18%	27,544	146.19%	67,812	0.43%
Printed Matter	0.10%	14,476	49.86%	21,694	0.14%
Fabricated Metal Products	0.08%	11,313	50.49%	17,026	0.11%
Machinery	0.05%	7,522	32.32%	9,953	0.06%
Rail Intermodal Drayage to Ramp	0.04%	5,407	22.21%	6,607	0.04%
Metallic Ores	0.03%	4,165	(45.01%)	2,291	0.01%
Instrument, Photo Equip, Optical Eq	0.02%	3,273	58.95%	5,203	0.03%
Primary Metal Products	0.01%	1,422	(20.69%)	1,128	0.01%

APPENDIX D: TRANSEARCH™ DATA ERRATA

The TRANSEARCH™ database on freight flows is developed in a top down process. Due to the large aggregate amounts for freight flows at the national level small shifts in shipping tonnage at the county level produce very small changes in percentage of growth. However, that same amount of absolute change at the county level will generate a much larger percentage change because the base number of tonnage at the county level is only a very small aggregate portion of the national total.

Focus on Benewah County, ID

During final review of Working Paper 4.1 – County Profiles, in Table 20, on page 64, it was observed that the rate of growth for Benewah County for miscellaneous manufactured products grew 1101 percent from 2007 to 2027. In 2007 total outbound tonnage was 11,472 and in 2027 it was shown to be 137,739 tons. The 126,666 tons of growth, when divided by the small starting base number of 11,472 produced the large percentage. The growth in question appeared to be eastbound truck freight to New York and Pennsylvania forecast to grow over the 20 years from 2007. The large end result number was considered to be a computational or transpositional error in the dataset that resulted in the decimal point being shifted one space to the right. After adjusting the decimal location on space to the left, the 2027 tonnage would be 13,774 tons with a resulting growth rate of 19.6 percent. This is reasonable as Benewah County does not have a large manufacturing activity base. That said, the amount for miscellaneous manufactured products in Working Paper 4.1 – County Profiles, in Table 20, on page 64, was adjusted to 13,774 tons. The total amount for the column was also adjusted. The same adjustments were made for values in Table 20.

The IPH regional impact from the adjustment was observed in Working Paper 3.2 – Regional Freight Profile, across the following Exhibits: Exhibit 1 and Exhibit 7. Adjusting the 126,266 ton variance for the new 2027 amount of 13,774 tons leaves a net adjustment of 112,492 tons. Error! Reference source not found. indicates where freight flow total amounts could be impacted. Overall outbound tonnage in the lower right hand corner of the table would change the 2027 total from 86,199,468 tons as shown in the initial Working Paper 3.2 – Regional Freight Profile Exhibit 7 down to 86,086,976 or only 0.13 percent. Note it should be taken into consideration this reflects a very small change on assumptions about a 20 year forecast. Observation at a finer level of detail, in **Error! Reference source not found.** the 2027 eastbound truck tonnage would adjust from 6,168,589 down to 6,056,097. This equates to a 1.82 percent for 2027 eastbound truck freight adjustment in 20 years; again it is not a very significant change considering it is on a 20 year forecast. Because the forecast spans many years, and the absolute amount as well as percentage of change are not significant to the outbound freight flows, much less the total inbound, outbound and through freight flows from Exhibit 1 which would be less than seven hundredths of a percent, it was determined the remaining tables in all working papers and technical memos would not be materially impacted and were allowed to remain as initially presented.

Exhibit D 1: Errata Table List of Changes

Exhibit Number & Cell Location	Initial 2027 Amount	Adjusted 2027 Amount	Percent Change
Exhibit 7: Row 4: Truck Outbound Column 6: Eastern Flows	6,168,589	6,056,097	1.82%
Exhibit 7: Row 4: Truck Outbound Column 9: Totals	48,484,473	48,371,981	0.23%
Exhibit 7: Row 12: Truck + Rail Outbound Column 6: Eastern Flows	7,501,800	7,389,308	1.50%
Exhibit 7: Row 12: Truck + Rail Outbound Column 9: Totals	55,457,046	55,344,564	0.20%
Exhibit 7: Row 13: Truck + Rail Column 6: Eastern Flows	15,631,046	15,518,555	0.72%
Exhibit 7: Row 13: Truck + Rail Outbound Column 9: Totals	86,199,468	86,086,976	0.13%
Exhibit 10: Row 9: Outbound To Column 8: Eastern Flows	1,992,619	1,866,353	6.34%
Exhibit 10: Row 9: Outbound To Column 12: Southern Flows	3,278,459	3,152,193	3.85%
Exhibit 10: Row 10: Outbound To Column 9: Eastern Flows	2,226,799	2,100,533	5.67%
Exhibit 10: Row 10: Outbound To Column 12: Southern Flows	3,364,159	3,237,893	3.75%
Exhibit 10: Row 10: Outbound To Column 14: Commodity Total	16,575,335	16,449,069	0.76%
Exhibit 10: Row 15: Subtotal Column 8: Eastern Flows	2,917,360	2,791,094	4.33%
Exhibit 10: Row 15: Subtotal Column 12: Southern Flows	5,071,672	4,945,406	2.49%

Exhibit Number & Cell Location	Initial 2027 Amount	Adjusted 2027 Amount	Percent Change
Exhibit 10: Row 16: Subtotal Column 8: Eastern Flows	3,309,431	3,183,165	3.82%
Exhibit 10: Row 16: Subtotal Column 12: Southern Flows	5,201,875	5,075,609	2.43%
Exhibit 10: Row 16: Subtotal Column 14: Commodity Total	26,392,604	26,266,338	0.48%
Exhibit 10: Row 28: Outbound To Column 8: Eastern Flows	6,168,589	6,042,323	2.05%
Exhibit 10: Row 28: Outbound To Column 12: Southern Flows	9,024,875	8,898,609	1.40%
Exhibit 10: Row 29: Outbound To Column 8: Eastern Flows	7,501,800	7,375,534	1.68%
Exhibit 10: Row 29: Outbound To Column 12: Southern Flows	9,629,743	9,503,477	1.31%
Exhibit 10: Row 29: Outbound To Column 14: Commodity Total	55,457,056	55,330,790	0.23%
Exhibit 10: Row 34: Total Column 8: Eastern Flows	9,597,171	9,470,905	1.32%
Exhibit 10: Row 34: Total Column 12: Southern Flows	9,024,875	8,898,609	1.40%
Exhibit 10: Row 35: Total Column 8: Eastern Flows	15,631,046	15,504,780	0.81%
Exhibit 10: Row 35: Total Column 12: Southern Flows	14,611,037	14,484,771	0.86%
Exhibit 10: Row 35: Total Column 14: Commodity Total	86,199,468	86,073,202	0.15%

Exhibit Number & Cell Location	Initial 2027 Amount	Adjusted 2027 Amount	Percent Change
Exhibit 34: Row 4: Truck Only Column 4: 2027	9,311,771	9,185,505	1.36%
Exhibit 34: Row 4: Truck Only Column 5: Growth	2,778,907	2,652,641	4.54%
Exhibit 34: Row 6: Truck + Rail Column 4: 2027	9,689,441	9,563,175	1.30%
Exhibit 34: Row 6: Truck + Rail Column 5: Growth	2,663,866	2,537,600	4.74%
Exhibit 34: Row 8: Truck Only Column 4: 2027	16,195,011	16,068,745	0.78%
Exhibit 34: Row 8: Truck Only Column 5: Growth	4,799,609	4,673,343	2.63%
Exhibit 34: Row 10: Truck + Rail Column 4: 2027	16,575,335	16,449,069	0.76%
Exhibit 34: Row 10: Truck + Rail Column 5: Growth	4,683,421	4,557,155	2.67%
Exhibit 35: Row 17: Benewah County, ID Column 8: Truck	578,961	452,695	21.81%
Exhibit 35: Row 17: Benewah County, ID Column 14: Commodity Total	1,898,547	1,772,281	6.65%

Observation on Latah County, ID

During final review of Working Paper 4.1 – County Profiles, it was pointed out that in Table 60, on page 128, the rate of growth for Latah County for chemicals and allied products grew 540 percent from 2007 to 2027. In 2007 total outbound tonnage was 35,560 and in 2027 it was shown to be 278,138 tons. The chemical and allied products growth in questions appeared to be eastbound and southbound truck freight going to many destinations enabling the amount of growth to be plausible considering it was off of a low starting number in 2007 and no adjustment was needed.

Observation on Lincoln County, WA

Also during final review of Working Paper 4.1 – County Profiles, it was pointed out that in Table 70, on page 144, the rate of growth for Lincoln County for machinery grew 430 percent from 88,516 tons in 2007 up to 469,932 tons in 2027. The machinery growth in question appeared to be westbound, eastbound and southbound truck freight going to many destinations so this growth also seemed plausible and no adjustment was needed.

PUBLIC

BEFORE THE
SURFACE TRANSPORTATION BOARD

STB Docket No. 35305

PETITION OF ARKANSAS ELECTRIC COOPERATIVE CORPORATION FOR A DECLARATORY ORDER

BNSF RAILWAY COMPANY'S OPENING EVIDENCE AND ARGUMENT

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March 16, 2010

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BEFORE THE
SURFACE TRANSPORTATION BOARD

STB Finance Docket No. 35305

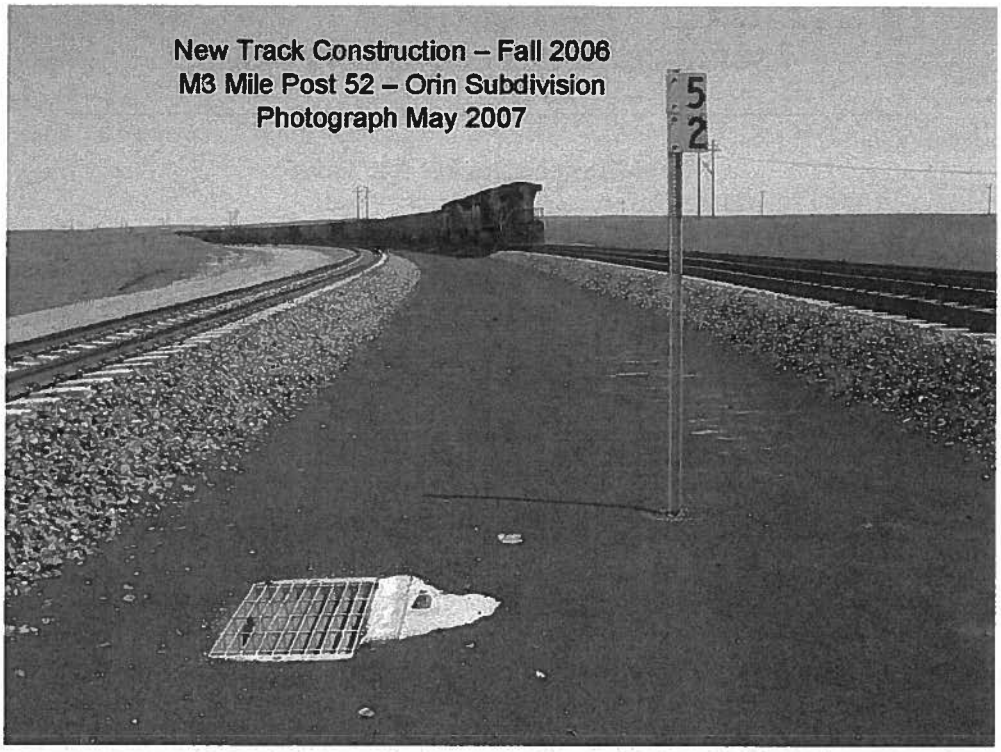
PETITION OF ARKANSAS ELECTRIC COOPERATIVE CORPORATION FOR A DECLARATORY ORDER

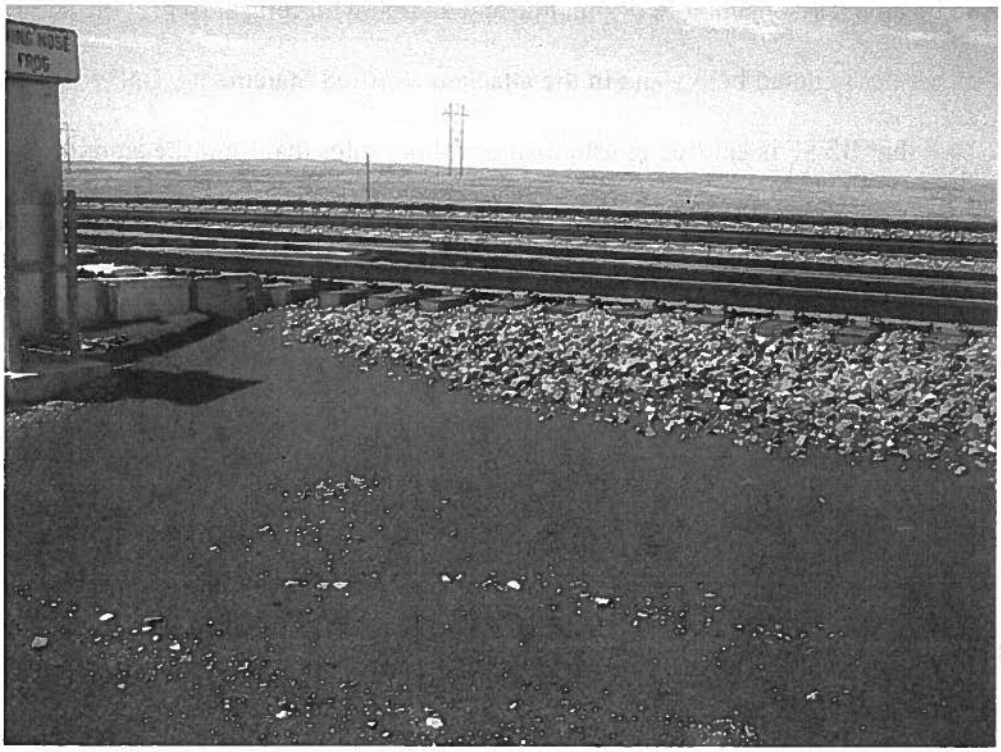
BNSF RAILWAY COMPANY'S OPENING EVIDENCE AND ARGUMENT

In accordance with the Board's decision served on December 1, 2009, BNSF Railway Company submits its opening evidence and argument in this declaratory order proceeding. Petitioner Arkansas Electric Cooperative Corporation ("AECC") has asked the Board to declare BNSF's coal dust emissions standards set out in BNSF's Rules Publication 6041-B, Items 100 and 101, to be an unreasonable rule or practice and an unlawful refusal to provide service. For the reasons set out in detail below and in the attached Verified Statements, BNSF urges the Board to find that BNSF is entitled to establish operating rules that limit the amount of coal dust that can be emitted from loaded coal cars in transit over rail lines in the Powder River Basin ("PRB") and to find that the specific coal dust emissions standards set out in BNSF's Rules Publication 6041-B, Items 100 and 101 are not unreasonable.

COUNSEL'S SUMMARY OF EVIDENCE AND LEGAL ARGUMENT

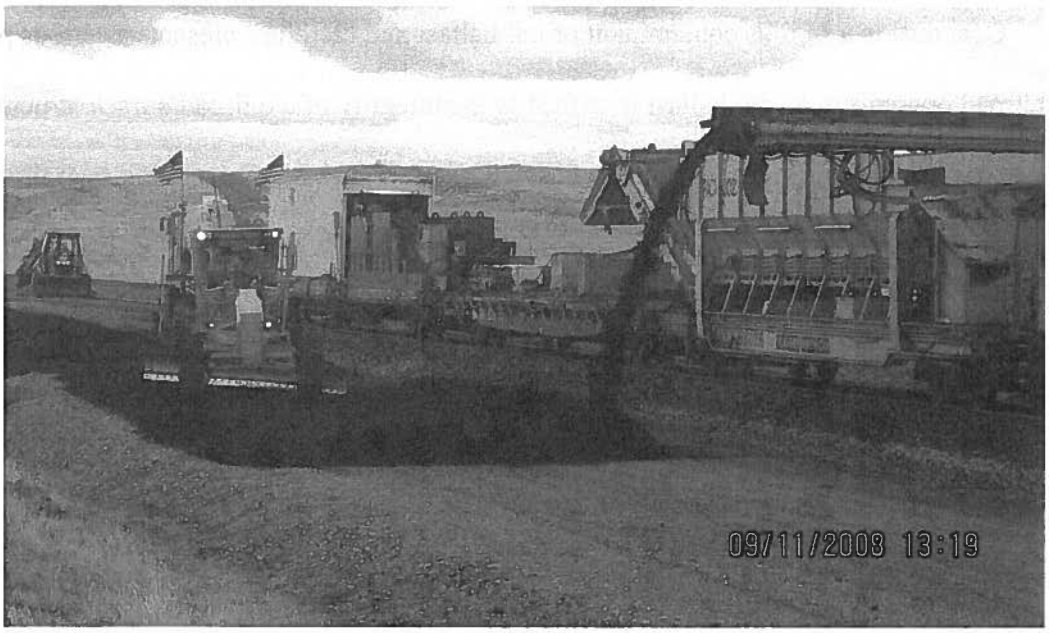
Coal dust emitted from moving coal trains is pervasive along the rail lines in the PRB. Coal dust deposits are visible between the rails, between the sets of tracks, along bridge abutments and in creek beds.


New Track Construction – Fall 2006
M3 Mile Post 52 – Orin Subdivision
Photograph May 2007
5
2



Additional photographs of coal dust deposits are included in Counsel's Exhibit 1. Even in areas that appear to be free of coal dust, coal accumulations are found just beneath the surface.

See additional photographs in Counsel's Exhibit 2. Maintenance work uncovers vast amounts of coal dust deep in the rail ballast under the track structure.

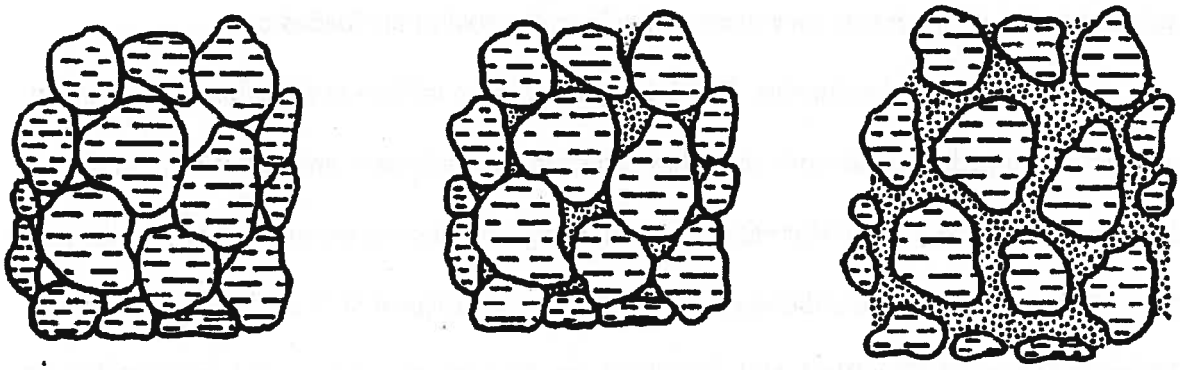


See additional photographs in Counsel's Exhibit 3. It is undeniable that coal dust is emitted in large quantities off of the top of loaded coal cars in transit along the PRB lines, and anyone who has spent time in the PRB is aware of the problem.

Short videos of coal dust episodes are contained on the CD at Counsel's Exhibit 4. When a coal train passes, it is usually necessary to avert your face or roll up your car window to avoid being pelted with coal dust flying off the coal cars. A parked car left near the rail lines will be covered with black coal dust by the end of the day.

Coal dust is a serious contaminant of rail ballast and therefore presents a serious problem for railroad operations, as rail ballast is critical to the integrity of a railroad's track structure. Ballast provides structural support for the heavy loads applied by trains moving over the tracks and provides for the drainage of water from under the tracks. When ballast becomes fouled, its

ability to support heavy loads is compromised, as illustrated in the following figure:



(a) Clean ballast (b) Partially fouled ballast (c) Heavily fouled ballast

See the attached Verified Statement of Professor Tutumluer. In 2005, two derailments occurred on the Joint Line, the rail line in the PRB owned jointly by BNSF and Union Pacific Railroad Company ("UP") that extends from Coal Creek Junction, WY in the North to Shawnee Junction, WY in the South. The presence of coal dust in the ballast was a contributing factor to the derailments. Since 2005, several studies have shown that the physical properties of coal dust make it one of the worst possible contaminants of ballast.

The coal dust falling onto the railroad right of way and fouling the railroad ballast belongs to the coal shippers who take ownership of their coal at PRB coal mines. The coal is the shippers' freight and therefore it is their responsibility to keep their coal in the loaded railcars. Unsurprisingly, BNSF does not allow the freight of any other shipper to escape from the railcars and damage the rail property. While BNSF has dramatically expanded its maintenance and inspection of the PRB rail lines to deal with the increasing problem of coal dust, BNSF should not be required to clean up after the shippers' freight has fallen out of the loaded cars. Moreover, expanded maintenance is not an acceptable solution to a problem that has the potential for disrupting the PRB coal supply chain. The risk of service interruptions from coal dust and the

impact of expanded maintenance on limited PRB rail capacity mean that the only responsible solution to this problem is to take measures to keep the coal in the loaded cars.

Since the 2005 derailments, BNSF has paid over $4 million to consultants to set up an extensive data gathering network and it has collected a considerable amount of data on the sources of coal dust and the alternatives for curtailing coal dust emissions. BNSF has measured the coal dust emissions from thousands of trains passing Milepost 90.7 on the Joint Line and Milepost 558 on BNSF's Black Hills Subdivisions. The data show that it is possible to identify specific trains that are emitting excessive levels of coal dust as they pass a particular location. Using the data, BNSF calculated limits on coal dust emissions at those two locations that would, if met by all passing trains, substantially eliminate coal dust. BNSF set these standards only after it concluded that it had done enough testing and data collection to support the standards. The standards, set out in the BNSF operating rules at issue in this proceeding, are conservative and achievable.

It is possible that other environmental scientists and statisticians would take different approaches to setting a limit on coal dust emissions than the approach that BNSF has taken. But the question here is not whether BNSF's standards are the only defensible standards. Rather, the question here is whether BNSF's standards are a reasonable response to a problem that could have a serious impact on the reliability of PRB coal transportation. New monitoring equipment might become available and new coal dust detection techniques might be developed in the future. But it has been almost five years since the 2005 derailments, and BNSF's studies and experience since then have confirmed the need to act now to curtail coal dust emissions. It would be highly imprudent to put off further action until the perfect solution—if it even exists—can be found.

BNSF has not dictated what measures PRB shippers and their mine agents must adopt to meet the coal dust emissions limits. Under BNSF's approach, individual shippers and their mine agents have the leeway to determine the most efficient and cost-effective method of coal dust suppression. BNSF has actively assisted shippers and mines in identifying effective dust suppression approaches. Through extensive laboratory and field testing, BNSF has shown that it is possible to substantially eliminate coal dust emissions and has collected data that will allow shippers and mines to choose optimal solutions. By leaving the solution to individual shippers and mines, BNSF believes that a market will emerge in which suppliers of coal dust suppression methods and products will have the incentive to innovate and develop the least costly and most effective dust suppression measures.

BNSF explains in this opening evidence and argument why the Board should reject the claim of petitioner Arkansas Electric Cooperative Corporation that the coal dust emissions standards in BNSF's Rules Publication 6041-B Items 100 and 101 are unreasonable. BNSF's submission in this opening evidence and argument has two components: (1) Counsel's Summary of Evidence and Legal Argument, and (2) Verified Statements of seven witnesses and accompanying exhibits.

The witnesses submitting Verified Statements on behalf of BNSF and the subject matter of their testimony are identified below.

Gregory C. Fox: Mr. Fox is BNSF's Vice President, Transportation. Mr. Fox led BNSF's efforts to restore operations on the Joint Line after the 2005 derailments and subsequently to rehabilitate the track structure. He initiated a proactive coal dust study to ensure that the service dislocations experienced in the aftermath of the 2005 derailments would not recur. Mr. Fox explains that the coal dust emissions standards that resulted from that coal dust study are necessary and appropriate operating rules that are intended to ensure safe, efficient and reliable PRB coal transportation service.

Stevan B. Bobb: Mr. Bobb is Group Vice President, Coal Marketing for BNSF. Since taking that position in 2006, Mr. Bobb has been extensively involved in outreach to PRB

coal shippers and mines to keep them informed about BNSF's ongoing study of coal dust and to help explore dust suppression alternatives. Mr. Bobb describes his efforts to promote a consensual solution to the problem of coal dust in which shippers will voluntarily accept responsibility for curtailing coal dust emissions.

William VanHook: Mr. VanHook is Assistant Vice-President and Chief Engineer-Systems Maintenance and Planning for BNSF. He is the BNSF employee who has had primary responsibility for investigating the causes and the scope of the coal dust problem that BNSF has encountered on its PRB coal lines and for overseeing the development of standards intended to limit the emissions of coal dust from loaded coal cars. Mr. VanHook provides an overview of the steps BNSF has taken to understand and address the coal dust problem.

Craig Sloggett: Mr. Sloggett is General Director Maintenance for BNSF with responsibility for maintenance and maintenance planning on BNSF's Powder River Division. Mr. Sloggett describes the unprecedented maintenance challenges presented by coal dust accumulations in the PRB and explains why expanded maintenance is not a responsible solution to the problem of coal dust in the PRB. He explains why coal dust emissions must be substantially curtailed to ensure reliable coal transportation service.

Charles Sultana: Mr. Sultana is a Six Sigma Specialist in BNSF's Mechanical Department. Mr. Sultana is responsible for bringing an advanced level of analytical and problem solving skills to bear on important problems identified by BNSF's management. Mr. Sultana was asked in 2006 to work with BNSF's coal dust study group to help understand and evaluate the extensive data being gathered on coal dust emissions and to develop a conservative and achievable limit on coal dust emissions based on the data. Mr. Sultana describes the process by which the standards at issue here were developed and explains the logic underlying the standards.

G. David Emmitt: Dr. Emmitt is the President and Senior Scientist of Simpson Weather Associates ("SWA"), a scientific research and development firm that BNSF hired in 2005 to assist in BNSF's coal dust study. Dr. Emmitt, who had worked with Norfolk Southern Railway Company in the 1980s to address coal dust issues, describes the extensive data gathering network that SWA helped BNSF set up. Dr. Emmitt also explains how SWA helped BNSF identify changes in the loading profile of coal cars to reduce coal dust emissions and how SWA has assisted BNSF and its shippers to evaluate coal dust suppression measures, particularly the application of surfactants.

Erol Tutumluer: Dr. Tutumluer is Professor of Civil and Environmental Engineering at University of Illinois at Urbana-Champaign. He has done extensive research on issues relating to railroad track structure and has studied in detail the impact of coal dust on rail ballast integrity. Dr. Tutumluer explains that based on the physical and mechanical properties of coal dust, it is one of the worst possible ballast fouling agents. When rail ballast is fouled by coal dust, the load bearing capacity of the track structure is significantly reduced, which can lead to unstable track conditions and, potentially, to derailments.

FACTUAL BACKGROUND

The facts relevant to the issues in this proceeding are discussed in detail in the Verified Statements of BNSF's witnesses. The most salient facts are summarized briefly below.

The PRB rail lines are among the highest volume rail lines in the world. Coal originated in the PRB moves primarily to electrical utilities located throughout the western United States and is interchanged with eastern railroads for delivery to utilities in the east as well. Two carrier operations over the Joint Line began in 1984, and in that year approximately 76 million tons of coal were originated by BNSF and UP predecessors on the Joint Line. By 1997, Joint Line originated tonnage had increased to 212 million tons, and by 2008, the Joint Line traffic had increased another 53 percent to 375 million tons of coal. Thousands of loaded coal cars move each day out of the PRB on the Joint Line and on BNSF's Black Hills Subdivision lines. PRB coal transportation is a critical component of the U.S. energy supply chain.

A 1983 Joint Line Agreement between BNSF and UP predecessors governs rail operations over the Joint Line. This Agreement, which was approved by the Interstate Commerce Commission, establishes BNSF as the operator of the Joint Line, makes BNSF responsible for the maintenance of the Joint Line, and gives BNSF the right to establish rules for Joint Line operations without discrimination in favor of either party.

On May 14 and 15, 2005, two derailments occurred on the Joint Line within a few miles of one another. These derailments and the work required to repair the affected lines severely disrupted coal operations in the PRB. BNSF, in consultation with UP, took immediate short-term measures to address the derailments and to rehabilitate track and roadbed conditions. But the remedial track maintenance reduced available track capacity and required slow orders because of safety concerns. As a result, coal loadings at PRB mines served by the Joint Line

were briefly halted after the derailments and were substantially reduced during the rest of 2005. Congestion and reduced loadings on the Joint Line depleted some utilities' coal stockpiles just as they were about to experience high demand for electricity during the hot summer months.

BNSF studied the causes of the derailments and concluded that the derailments had resulted from a confluence of events. An extraordinary amount of rain and snow had fallen at the same time that the frozen ground was thawing and additional sub-surface moisture was rising up through the roadbed. Coal dust accumulations in the rail ballast had exacerbated the drainage problems caused by the excessive moisture in the roadbed. The mixture of coal dust and water caused the ballast to weaken to the point that the roadbed no longer provided adequate support for the rails.

BNSF concluded that it had to take measures to prevent a recurrence of the derailments and the severe service disruption caused by these outages. BNSF had been studying the problem of coal dust and possible dust suppression measures before the derailments, but BNSF substantially expanded its efforts to understand the scope and causes of the coal dust problem in the PRB and to investigate possible ways to address the problem of coal dust emissions. BNSF gave the highest priority to the study. BNSF retained an environmental and energy research and development firm, SWA, to assist in setting up a data gathering network so that there would be a solid factual record for understanding the coal dust problem and developing possible solutions. SWA had worked extensively with Norfolk Southern Railway Company in the 1980s on coal dust issues in the East. SWA worked with BNSF and an environmental engineering firm, Conestoga-Rovers Associates ("CRA"), to implement the data gathering network and to set up protocols for conducting field and laboratory tests and data analyses.

The data gathering network set up after the derailments consisted of three basic parts. First, an extensive network of dustfall collectors was set up at several different locations along the PRB rail lines. Coal accumulating in the dustfall collectors is gathered at 30-day intervals and measured. These instruments allow BNSF to keep track of overall coal dust deposition rates along the PRB lines and at varying distances from the track. However, these dust collectors cannot be used to measure dust emissions from individual trains.

Second, SWA set up Trackside Monitors ("TSMs") at Milepost 90.7 on the Joint Line and at Milepost 558 on BNSF's Black Hills Subdivision lines. The TSMs consist of a tower on which is mounted a weather system and a sophisticated electronic dust monitor referred to as an e-sampler. The dust monitor measures the number of dust units in the air at five-second intervals. It is therefore able to measure the total amount of coal dust emitted by a passing train as the train moves past the TSM location. Dust monitors are mounted on both sides of the track so that dust levels can be measured on the downwind monitor for each train. Equipment installed on and near the tracks allows BNSF to identify each train and therefore to produce reliable train-specific coal dust measurements.

Third, SWA assisted BNSF in monitoring coal dust emissions from certain instrumented trains so as to test the effectiveness of various dust suppression measures. The instruments include mobile weather stations (called Rail Transport Emission Profiling Systems or "RTEPS") and Passive Collectors ("PCs") that are attached to the cars in a test train. The passive collectors are mounted on the rear sill of cars at specified intervals within the train and the coal captured in the PCs over the course of a train trip can be measured and compared to determine the impact of various suppression alternatives being tested. For example, since 2005, SWA and BNSF have run several instrumented trains testing the effectiveness of different surfactants on limiting the

amount of coal dust released in transit. Surfactants are chemical solutions that are sprayed onto the top of loaded coal to keep the coal from being blown out of a car during transit.

BNSF worked closely with its shippers and their mine agents to inform them of the results of BNSF's extensive data gathering efforts. BNSF regularly attended meetings of the National Coal Transportation Association ("NCTA"), whose members include numerous coal shippers and mines, and made extensive presentations on the results of the ongoing tests and analyses. BNSF also undertook numerous studies at the request of NCTA members to investigate various issues of concern to shippers and the mines and presented the results of those studies to the NCTA.

In addition to these data gathering efforts, BNSF sought to understand better the physical impact of coal dust on rail infrastructure. Since 2006, BNSF has worked with Dr. Erol Tutumluer, a Professor of Civil and Environmental Engineering at University of Illinois at Urbana-Champaign, who has done extensive studies of railroad track structure and the causes of track failures. Dr. Tutumluer advised that while coal dust had not previously been identified as a significant ballast contaminant, it actually has characteristics that make it one of the worst possible fouling agents. He found that coal dust has a very high water holding capacity which limits drainage in ballast fouled by coal dust. His tests also showed that ballast contaminated by coal dust has a much lower load bearing capacity than ballast fouled with other contaminants, which is an obvious problem for PRB lines that carry a greater volume and annual tonnage of freight than any other rail lines in the United States. Particularly when it gets wet, coal dust can have a highly destabilizing effect on rail ballast.

BNSF concluded that coal dust emissions had to be substantially eliminated. During BNSF's study of the coal dust problem, BNSF was surprised to see how quickly coal dust

accumulated in the ballast. In one area of new track construction, BNSF discovered a few months after the new track had been installed that the ballast had already become fouled. BNSF carried out a coal dust cleaning effort in 2008, focused on gathering visible deposits of coal dust along the right of way, in creek beds next to tracks, and along bridge abutments, and filled over 300 railcars with coal dust for disposal at a landfill.

Expanded maintenance, while necessary to deal with the rapid accumulation of coal dust, is clearly not an adequate or responsible solution to a problem that has the potential for disrupting the supply of PRB coal. It is often difficult to detect coal dust before it becomes a problem because the coal dust quickly makes its way down into the ballast. Visual inspection of the rail bed cannot be relied on to locate areas where fouling has occurred. More widespread maintenance activity must be carried out to make sure problems do not develop, but such extraordinary maintenance of way activities are intrusive and disrupt train operations. Tracks must be taken out of service and slow orders issued to allow maintenance work to proceed. Maintenance effectively consumes capacity on the railroad, and on the heavily traveled PRB lines, the capacity available for maintenance activities is limited. Eventually, new track would need to be added just to be able to maintain the existing rail infrastructure.

BNSF therefore set out to determine whether there were ways to meaningfully limit coal dust emissions from loaded railcars. BNSF determined that coal dust emissions could be reduced by changing the load profile of loaded coal cars. SWA had previously studied the aerodynamics of loaded coal cars for Norfolk Southern. SWA provided BNSF with an idealized load profile which, if achieved during the loading process, would reduce the impact of wind and air currents on the loaded coal and thereby reduce coal dust emissions during transit. PRB mines adopted a modified loading chute that makes it possible, if sufficient care is given during the

loading process, to achieve the ideal load profile. The load profile and modified loading chute design are described in Appendix A to BNSF's Rules Publication 6041-B. Subsequent monitoring of loading practices indicates that additional care needs to be taken in the loading process to achieve the load profile.

Even if coal cars are loaded to the ideal load profile, substantial dust emissions still occur. Therefore, BNSF set out to identify a coal dust emission limit that could be established as an operating rule applicable to the Joint Line and BNSF's Black Hills Subdivision. BNSF concluded that the data gathered at the TSMs set up with the assistance of SWA could be used to set a limit on coal dust emissions at the location of the TSMs which, if met by all trains passing the TSMs, would effectively eliminate coal dust at those locations. The data gathered by BNSF on test trains and in the dustfall collectors showed that coal trains emit dust sporadically throughout a trip. However, BNSF concluded that if shippers pursued methods sufficient to limit coal dust emissions to levels permitted at the TSM location, e.g., the application of a surfactant to the loaded coal car, those same measures would effectively limit coal dust emissions along the entire length of the movement and the problem of dusting on coal lines would be effectively eliminated. The TSM dust monitors would act like a "traffic cop" at a fixed location to ensure that coal dust emissions had been successfully curtailed along the PRB rail lines.

BNSF carried out extensive field and laboratory tests on the electronic dust monitors and concluded that the readings taken from these monitors between September 2005 and August 2007 could be used to set a coal dust emission standard that could be applied to individual trains and used to identify specific trains emitting unacceptable amounts of coal dust. The dust monitors measure in real time the number of dust units emitted by a train passing the TSM. The dust units for a particular train can be summed up while the train passes the TSM location to

produce an Integrated Dust Value ("IDV.2") for the train. Mr. Sultana identified a maximum IDV.2 value for each TSM location which, if met by all trains at that location, would give BNSF a very high degree of confidence that at least 85% (and possibly as much as 95%) of the coal dust emissions historically measured at that TSM location would be eliminated. The emissions limits are set out in the BNSF's Rules Publication 6041-B. Mr. Sultana explains his methodology in detail in his Verified Statement.

BNSF has given individual shippers the flexibility to choose a dust suppression method that ensures compliance with BNSF's coal dust emissions standards. One promising way to ensure compliance is to apply a surfactant to the top of a loaded coal car. BNSF and its consultants carried out numerous laboratory and field tests beginning in 2005 on the effectiveness of various surfactants in reducing coal dust emissions. As noted above, several instrumented trains were run to determine the relative effectiveness of different chemical surfactants. BNSF found that the use of surfactants, particularly with properly groomed coal cars, can substantially eliminate coal dust emissions. BNSF is in the process of carrying out at the request of several PRB shippers a large scale trial of dust suppression alternatives, and BNSF has expanded its use of instrumented trains to assist in developing data through the current trial that will enable shippers to choose effective dust suppression measures.

BNSF first established its coal dust emissions standard as an operating rule under the Joint Line Agreement and communicated the new rule to UP on November 7, 2008. BNSF subsequently published its coal dust emissions standards in BNSF's Rules Publication 6041-B on April 30, 2009 and expanded the rule to cover BNSF's Black Hills Subdivision on May 27, 2009. The coal dust emissions standards in BNSF's Rules Publication had an effective date of November 1, 2009. On October 2, 2009, AECC filed a petition for a declaratory order seeking a

declaration from the Board that BNSF's coal dust emissions standards set out in BNSF's Rules Publication constitute an unreasonable rule or practice and an illegal refusal to provide service. AECC also sought a stay of the effective date of BNSF's emissions standards to give the Board an opportunity to address AECC's declaratory order petition. BNSF responded on October 21, 2009, indicating that it had suspended the effective date of the emissions standards in BNSF's Rules Publication 6041-B until August 1, 2010 and further stating that it welcomed the opportunity to have the Board examine the reasonableness of BNSF's measures to address the problem of coal dust in the PRB. On December 1, 2009, the Board initiated this proceeding.

ARGUMENT

I. The Board Should Declare that BNSF May Establish Rules Designed to Limit the Emission of Coal Dust from Coal Trains Operating Over its Lines.

In this declaratory order proceeding, BNSF seeks confirmation from the Board that it is pursuing a legally permissible course of action in establishing rules that are designed to limit the emission of coal dust from coal trains operating over its lines. BNSF believes that the standards that have been challenged here are needed to assure safe, efficient and reliable operations on BNSF's coal lines. The goal of these standards is not simply to protect BNSF's physical plant from being degraded by coal dust but also to guard against the risks of disruption in the provision of coal transportation service.

Long-established judicial and agency decisions compel the conclusion that BNSF can regulate coal dust emissions from trains operating over its lines. These decisions establish that rail carriers have broad authority to adopt operating rules to promote safe, efficient, and reliable operation of their railroads. *See Platt v. LeCocq*, 158 F. 723, 730-31 (8th Cir. 1907) ("A common carrier has the right to conduct its business in its own way in accordance with the rules of the common and statutory law. . . . It has the right to make and enforce reasonable regulations

which may lawfully fix the times, the places, the methods, and the forms in which it will receive the various commodities it undertakes to carry, and the rules which it thus adopts are presumptively right and reasonable."); *M. Longo Fruit Co. v. Ill. Traction Sys.*, 38 I.C.C. 487, 489 (1916) ("Both this Commission and the courts have held that carriers have the right to make reasonable and appropriate rules respecting the acceptance and transportation of traffic."). Unsurprisingly, rail carriers' power to set reasonable operating rules is accompanied by the power to modify existing operating rules and practices. *See Robinson v. Baltimore & O.R. Co.*, 129 F. 753, 755 (4th Cir. 1904) (noting the established rule that "the power to make reasonable regulations as to the manner and place where the railroad would receive coal for shipment implied the power to change and modify such regulations from time to time upon reasonable notice to the public").

A rail carrier's broad authority to establish operating rules that promote safety and efficiency was recently affirmed by the Board's decision in *N. Am. Freight Car Ass'n v. BNSF Railway Co.*, STB Dkt. 42060 (Sub-No. 1) ("*Freight Car*") at 6 (Jan. 24, 2007), which rejected an unreasonable-practices challenge to BNSF's charges for holding empty private cars on its system. The Board recognized that BNSF's charges "encourage shippers to utilize their private cars more efficiently" and that BNSF's past practice of not imposing such charges "does not mean that [the new charges are] unlawful . . . under today's conditions." *Id.* Under the logic of the *Freight Car* decision, the fact that BNSF had not taken steps prior to the issuance of the challenged standards to restrict coal dust emissions is not a valid reason for questioning the standards. The growth in coal volumes over the Joint Line and other lines have made it necessary to restrict coal dust emissions "under today's conditions."

Long-standing case law supports the authority of BNSF to adopt the very sort of operating rule that is at issue in this proceeding. Rail carriers' broad authority to establish operating rules includes the power to set reasonable standards for packing and loading freight in railcars. *See, e.g., In re Suspension of W. Classification No. 51, I.C.C. No. 9*, 25 I.C.C. 442, 486 (1912) ("Carriers have an undoubted right to demand and insist upon secure packages for the protection of the commodities contained in them, as well as for the protection of other freight."). Moreover, the ICC long ago held that railroads could require shippers to bear the expense of special measures necessary to prevent cargo such as grain and flaxseed from leaking from railcars. *See Chicago Bd. of Trade v. Abilene & S. Ry. Co.*, 220 I.C.C. 753, 761 (1937) ("We find that, as the installation of grain doors is an incident of loading bulk grain, it is not unreasonable to require that the shipper should, at his own expense, install the doors furnished by the carriers and made available to him . . . ."); *In re W. Trunk Line Rules, Regulations, and Exceptions to Classifications*, 34 I.C.C. 554, 578 (1915) (allowing rail carrier to issue rule "that shipments of flaxseed in bulk will not be accepted for transportation unless loaded in cars which have been properly lined at shipper's expense to prevent loss by leakage").

It follows from rail carriers' broad authority to set packing and loading standards designed to prevent leakage that BNSF may set reasonable standards designed to minimize the emission of coal dust. Similar authority is regularly exercised through a range of rules intended to ensure safe and efficient carrier operations. In the context of loading railcars, these rules recognize the commonsense principle that the best way to ensure safe, efficient, and reliable rail operations is for shippers to load freight in a manner that does not allow the freight to escape from railcars. This commonsense principle is reflected in BNSF's general loading rule, which provides that the "[s]hipper is responsible for loading railcar . . . so that lading will not be

released, discharged or inadvertently removed from railcar during rail carrier handling . . . ." *See* Fox Verified Statement ("V.S."), Exhibit 4. BNSF has numerous rules that apply this general rule in particular contexts. For example, there are rules governing the manner in which heavy equipment is loaded and secured in railcars to ensure safe operations and avoid service disruptions. *See* Fox V.S., Exhibit 5. Other rules govern the loading of scrap metal into open top cars so that the scrap metal does not escape from the cars in transit. *See* Fox V.S., Exhibit 6. Additionally, there are operating rules governing the leakage of materials in transit. *See* Fox V.S., Exhibit 7.

Like all of these rules, BNSF's coal dust emissions standards fit within rail carriers' broad authority to adopt operating rules that promote safe, efficient, and reliable operations by requiring shippers to keep their freight in railcars. The coal dust emissions standards are entirely consistent with BNSF's common carrier obligation because they are intended to assure that the transportation that BNSF is required to provide as a common carrier is operationally sound and consistently reliable.[1]

Importantly, the Board's predecessor, the Interstate Commerce Commission, has previously recognized BNSF's authority to promulgate reasonable rules governing rail

[1] Apart from promoting reliable common carriage, the coal dust emissions standards at issue here are an appropriate means of protecting BNSF's interest in preventing its property from being degraded by coal dust contamination. It would clearly be a trespass if a party, without permission, entered BNSF's right of way and dumped coal dust on the tracks. *See* Restatement (Second) of Torts § 158(a) ("One is subject to liability for trespass, irrespective of whether he thereby causes harm to any legally protected interest of the other, if he intentionally enters land in the possession of the other, or causes a thing . . . to do so."). The heavy emissions of coal dust that BNSF has experienced are the effective equivalent of having coal dumped on BNSF's right of way without its permission. BNSF has a legitimate interest in acting to protect its interest in its property. Indeed, a regular feature of railroad operating rules is that, in addition to promoting safe and efficient transportation, they have the effect of protecting a rail carrier's interest in its real property and tangible assets. For example, there are rules that set specific standards so that rail cars do not damage BNSF's property beyond normal wear and tear. *See* Fox V.S., Exhibit 8.

operations over the PRB Joint Line. Under the Joint Line Agreement between BNSF and UP predecessors, BNSF is entrusted with maintaining safe and efficient operations over the Joint Line. Section 2.7 of the Agreement provides that operations over the Joint Line shall be "in strict accordance with the Consolidated Code of Operating Rules and such other rules and regulations as promulgated by [BNSF], as modified and amended from time to time. . . ." The Joint Line Agreement was approved by the ICC in connection with its approval of the construction and operation of the Joint Line. *See Chicago & N. W. Transp. Co. Approval of Terms of Construction, Ownership & Operation of a Line of R.R. in Campbell & Converse Counties, Wyo.*, ICC Finance Docket No. 29066 (served Oct. 22, 1982).

II. BNSF's Coal Dust Emissions Standards Are Not Unreasonable.

A. The Reasonableness Inquiry

Because Congress has not defined in 49 U.S.C. § 10702 what constitutes a reasonable rule or practice, "[t]he [Board] has been given broad discretion to conduct case-by-case fact-specific inquiries to give meaning to these terms, which are not self-defining, in the wide variety of factual circumstances encountered." *Granite State Concrete Co. v. STB*, 417 F.3d 85, 92 (1st Cir. 2005) (rejecting challenge to STB's conclusion that railroad operating restrictions were reasonable). In performing this inquiry, the Board should not substitute its judgment for BNSF's judgment. Instead, the focus of the inquiry is whether BNSF's coal dust tariff is reasonable. The issue, in other words, is not whether the coal dust emissions standard that BNSF has adopted is the standard that the Board would have adopted if the Board were in the business of imposing railroad operating rules, but whether there is a rational basis for the approach BNSF has taken to dealing with the coal dust problem and whether the standard that BNSF adopted is rationally related to the problem it seeks to address.

B. It Was Rational for BNSF to Conclude that Coal Dust Emissions Need to Be Curtailed Rather than Dealt with Exclusively through Maintenance.

There can be no serious dispute that the accumulation of coal dust on BNSF's coal lines poses a risk to safe and efficient operations on the Joint Line and BNSF's other PRB coal lines. The combination of coal dust accumulation and heavy flooding in 2005 led to serious disruptions in coal transportation service that must be avoided in the future. BNSF is committed to preserving the integrity of the coal supply chain.

In its initial Petition for a Declaratory Order, AECC contended that the adverse effects of coal dust emissions should be addressed exclusively through "normal maintenance." AECC's Petition for Decl. Order at 3. Based on BNSF's experience, that suggestion is simply not realistic. BNSF has determined that not even the enhanced levels of maintenance that BNSF has been pursuing are sufficient to eliminate all the risk inherent in coal dust accumulation. As explained in the Verified Statement of Craig Sloggett, who has responsibility for maintenance and maintenance planning on BNSF's Powder River Division, BNSF has been pursuing extraordinary maintenance efforts on the Joint Line and Black Hills Subdivision. Sloggett V.S. at 6-9. Even with these efforts, it has not been possible to keep up with the rapid accumulation of coal dust. Sloggett V.S. at 5-6.

Gregory C. Fox, Vice President of Transportation for BNSF, explains that "[f]rom a maintenance of way perspective, it is better to keep coal dust out of the ballast in the first place, rather than to undertake extraordinary measures to maintain a railroad that is compromised by coal dust." Fox V.S. at 8. This is the case because, as Messrs. Fox and Sloggett explain, there are limitations on what even vigilant maintenance can accomplish. One limitation stems from the difficulty of identifying all areas where ballast has been fouled by the accumulation of coal dust. While many areas potentially compromised by coal dust accumulation are visible to the

naked eye, there are other areas where the surface of the roadbed or shoulder ballast reveals no visible accumulation of dust, and yet the ballast beneath the surface has been fouled. If the sub-surface dust has built up rapidly, the areas of undetected dust buildup may not be addressed in a timely manner, even under a regime of enhanced maintenance.

A second drawback in relying exclusively on maintenance to address the coal dust problem, is that maintenance activities impinge upon rail operations, and the more intensive the maintenance is, the greater the impingement. Fox V.S. at 8-9; Sloggett V.S. at 9. Maintenance requires that tracks be taken out of service and that slow orders be issued. The effect is to reduce line-haul capacity. As Mr. Fox explains, "it is not a question of simply expanding maintenance to deal with coal dust. Eventually, new track would need to be added just to be able to maintain the existing rail infrastructure." Fox V.S. at 8.

BNSF believes that addressing the problem of coal dust solely through enhanced maintenance is not a responsible way to address the risk of potential disruption in the supply of PRB coal to coal-fired electric utilities. The Board itself has stated that it "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." *Establishment of a Rail Energy Transportation Advisory Committee*, STB Ex Parte No. 670, at 2 (served July 17, 2007). Given the vital public interest in assuring the reliable transportation of coal, BNSF has concluded that it must act to limit coal dust emissions rather than merely dealing with them after the fact.

C. BNSF Acted Rationally in Adopting a Performance Based-Emissions Standard.

The IDV.2 coal dust emissions standards at issue in this proceeding are performance-based standards in that they measure whether individual coal trains emit quantities of dust that

exceed or fall below a specified dust emissions level. As an alternative approach, BNSF could have prescribed an activity-based standard for limiting coal dust emissions. That is, BNSF could have required shippers to put tops on their coal cars, or it could have required them to spray the coal loaded in cars with surfactants. BNSF elected to adopt a performance-based standard because it believed that that approach would give shippers the leeway to determine on an individual basis the method of complying with the standard that best suits each shipper's needs.

The performance based approach not only allows shippers to choose how they will comply with the emissions standards, but it should also encourage market-based innovations in coal dust emission control techniques that will result over time in reduced costs and improved methods of dust suppression. As BNSF's witnesses Messrs. Bobb and VanHook note, various suppliers of coal dust suppression products are already competing to supply shippers with products that will allow them to achieve compliance with the emissions standards. Given the size of the potential market – over 300 millions tons per year of PRB coal – one would expect vigorous competition to supply shippers with effective surfactants and alternative dust suppression products. The likely result of such competition is the availability of improved dust suppression products at lower cost.

The Board has been a strong proponent of market-based, private sector solutions to a wide variety of problems that arise in the rail transportation sector. By adopting a performance based standard, BNSF has sought to create an environment in which market based solutions to the coal dust problem are most likely to emerge. There is no reason to conclude that BNSF's approach is anything other than reasonable.

D. BNSF's IDV.2 Standards Are Practical and Conservative.

BNSF's witnesses explain in detail the steps that BNSF took to develop the IDV.2 emissions standards at issue in this proceeding. In fashioning its standards, BNSF relied upon (1) extensive data collection,[2] (2) extensive analysis of the data,[3] and (3) statistically sophisticated methods to formulate an emissions standard that is practical given the limited options for measuring dust emitted from moving coal trains.[4]

BNSF applies its coal dust emissions standards to loaded coal trains moving past track-side dust monitors at specific locations on BNSF's coal lines. This approach is practical because it allows the dusting from individual trains to be monitored without disrupting mine loading or train operations. Given the episodic nature of coal dusting and the large geographic territory covered by moving coal trains, the "traffic cop" approach to the monitoring of coal dust emissions is a logical way to apply the IDV.2 standards to individual trains.

The IDV.2 standards themselves are conservative, as Mr. Sultana explains. The standards were devised specifically by identifying a desired level of reduction in coal dust emissions and by taking into account the variability in the e-samplers used to monitor coal dust emissions. By establishing a dust level of 300 IDV.2 on the Joint Line, Mr. Sultana identified a dust emissions level that any shipper should be able to achieve if it makes a good faith effort to comply with BNSF's standard. The same is true for the standard that Mr. Sultana developed for the Black Hills Subdivision.

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[2] *See* VanHook V.S. at 4-8; Emmitt V.S. at 4-12.

[3] *See* VanHook V.S. at 4-8; Emmitt V.S. at 4-12.

[4] *See* Sultana V.S. at 6-11.

It may be that the specific IDV.2 levels that BNSF calculated will be the target of second guessing in this proceeding. But those levels are not "arbitrary" as AECC contended in its Petition for Declaratory Order. The standards are the product of careful investigation and analysis by highly trained professionals. BNSF has been thorough and rigorous in its search for a solution to the coal dust problem, and this includes the development of the specific IDV.2 standards by Mr. Sultana. It is certainly possible that a more refined IDV.2 standard may be developed in the future as more sophisticated dust measurement equipment becomes available. But it would be irrational to deem the existing standards unreasonable simply because they do not meet some illusory ideal of accuracy.

III. BNSF's Position Regarding Compliance with its Coal Dust Emissions Standard

A. The Board's Review of Any Compliance Provisions that BNSF Might Adopt Would Be Limited to the Application of those Provisions to BNSF Common Carrier Shippers.

One of the many unfounded claims in AECC's Petition for a Declaratory Order was the assertion that BNSF's rules publication setting forth its coal dust emissions standard constitutes "a refusal to provide service." Declaratory Order Petition at 1. As BNSF explained in its reply to AECC's petition, BNSF has not adopted any particular measures to ensure compliance with its coal dust emissions standards. Consideration of specific enforcement measures is therefore premature. However, BNSF understands that there is an interest in what approach to compliance it would pursue if it became necessary to implement enforcement measures, so BNSF offers a framework for its likely approach to enforcement.

As a threshold matter it is important to recognize that the Board has authority to assess the reasonableness of the challenged emissions standards only as they apply to BNSF's common carrier transportation. Thus, the only question that could arise before the Board regarding

enforcement is whether BNSF could require its common carrier shippers to comply with the coal dust emissions standards set forth in BNSF's Rules Publication. BNSF intends to apply the coal dust standards to its contract shippers in accordance with the terms of privately negotiated coal transportation contracts, but BNSF may not disclose or discuss specific terms of those confidential agreements in this proceeding.

The coal dust standards set out in BNSF's Rules Publication do not apply to UP's Joint Line coal shippers unless and only to the extent that they are also BNSF coal shippers. However, BNSF is responsible for operating the Joint Line and, as BNSF's witness Stevan Bobb explains, BNSF has issued an operating rule under the Joint Line Agreement with UP that adopts the same coal dust emission standard set out in the Rules Publication at issue here. The operating rule requires that the coal dust emissions standard must be met as soon as practicable for all movements on the Joint Line. BNSF expects that UP will comply with the operating rule.

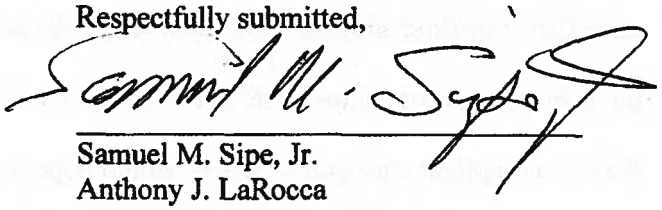
B. A Proposed Framework For Addressing Enforcement of the Challenged Rule

BNSF expects that shippers will voluntarily comply with the coal dust standards at issue here if the Board finds that they are not unreasonable. If any enforcement measures were necessary, they would be set out in separate notices and they would be limited to circumstances of inadvertent or intentional non-compliance. BNSF's enforcement approach would turn on individual shippers' good faith intention to comply with the coal dust emissions standards. Shippers' intent to comply would be presumed unless or until there is a failure by a shipper's train to meet the IDV.2 level. At that point, BNSF would consider requiring that the shipper execute a certificate indicating its intent to comply with BNSF's coal dust standards.

Where a shipper has executed a certificate indicating its intent to comply with the standards but is not immediately able to implement its proposed method of compliance or the

compliance method adopted is ineffective and the standard is not met, BNSF might consider publishing a new operating item that would provide for some type of special handling charge for the non-compliant coal trains. BNSF would hope that instances of willful non-compliance with the emissions standards would be non-existent. Were such a circumstance to arise, BNSF would reserve the right to decline to provide service until the shipper had manifested a good faith intention to comply with the standards.

Respectfully submitted,



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March 16, 2010

CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of March, 2010, I caused a copy of the foregoing, along with the Confidential and Highly Confidential Exhibit Volumes, to be served on the following Parties of Record by hand delivery or by Federal Express:

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Counsel's Exhibits

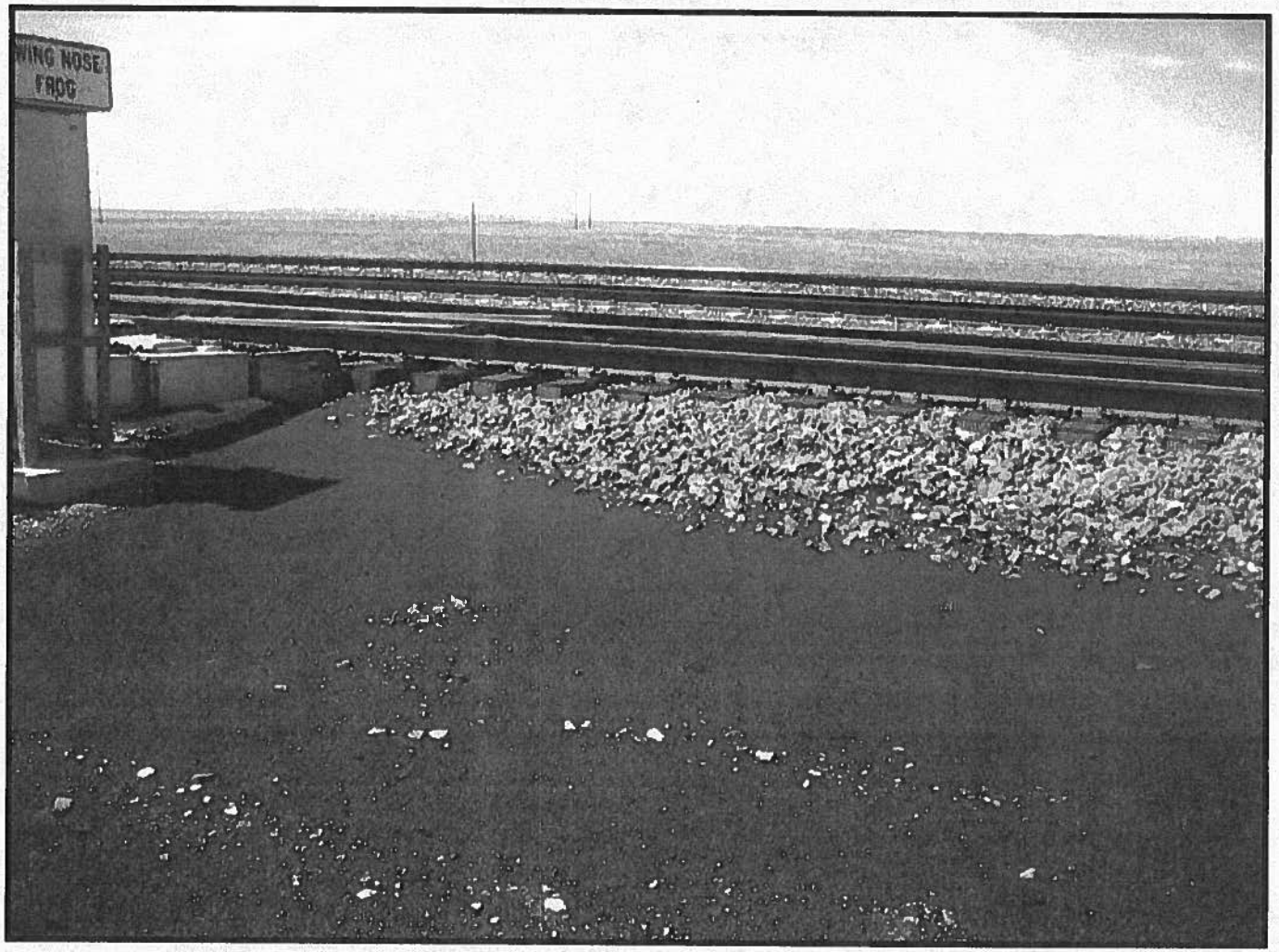
COUNSEL'S EXHIBITS

EXHIBIT 1

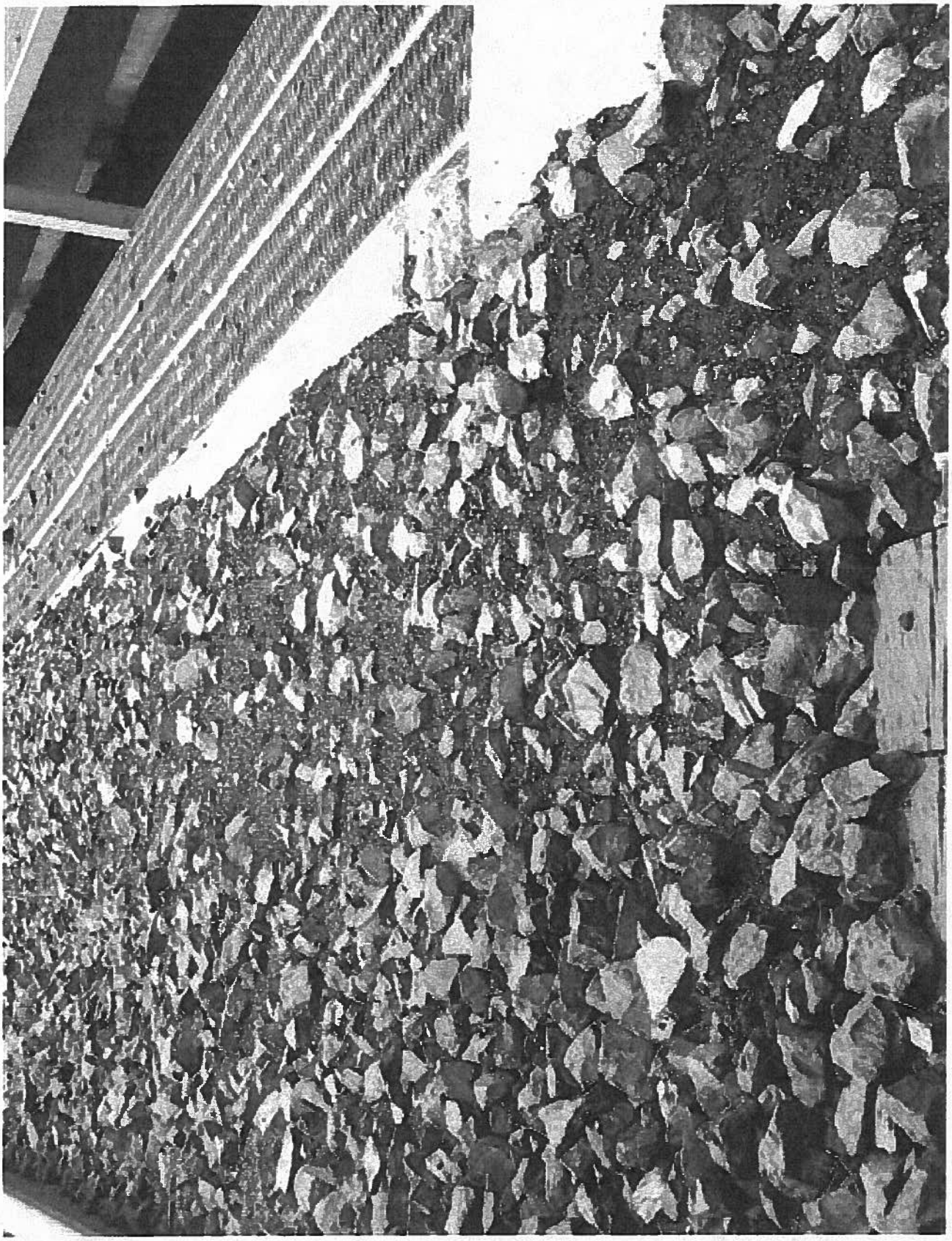

New Track Construction – Fall 2006
M3 Mile Post 52 – Orin Subdivision
Photograph May 2007
5
2

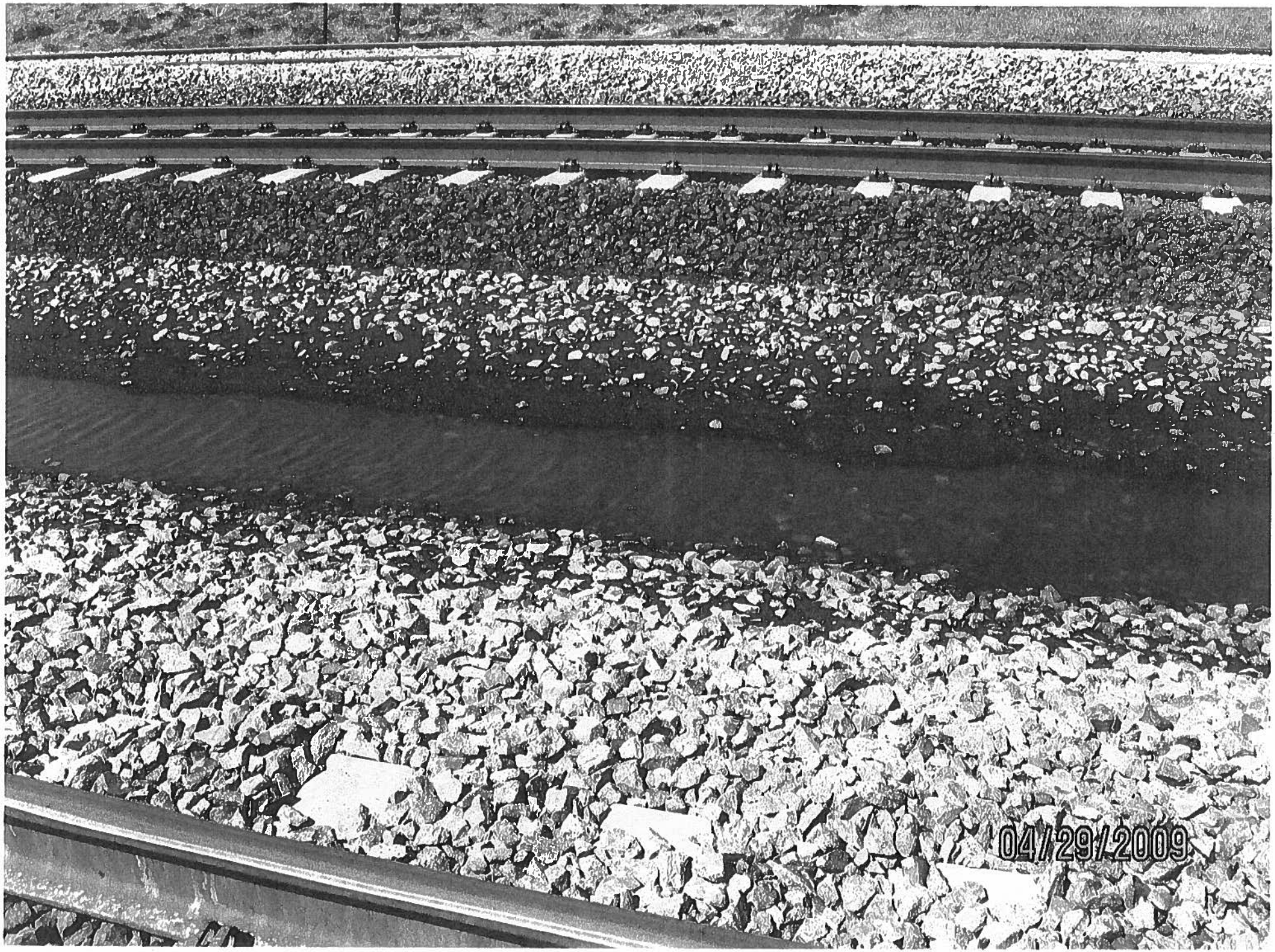
Orin Subdivision MP 45.7

2009
Note coal dust
Accumulation
Alongside track



BNSF

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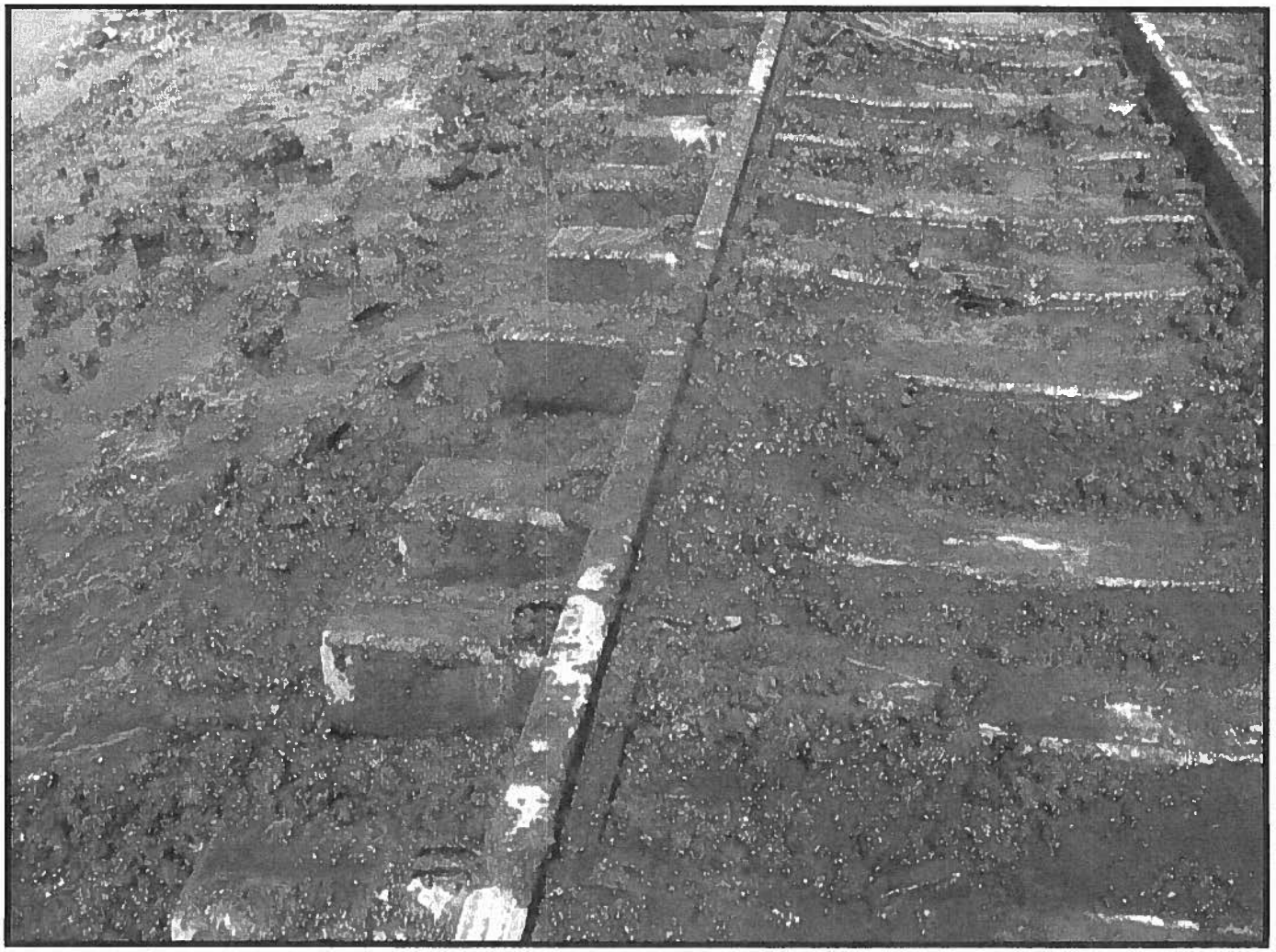
Orin Subdivision 90.5 - 97

2009
What you end up
With when ballast
Contaminated with
Coal dust and it
rains



BNSF