Issue 1 2009

coal energy

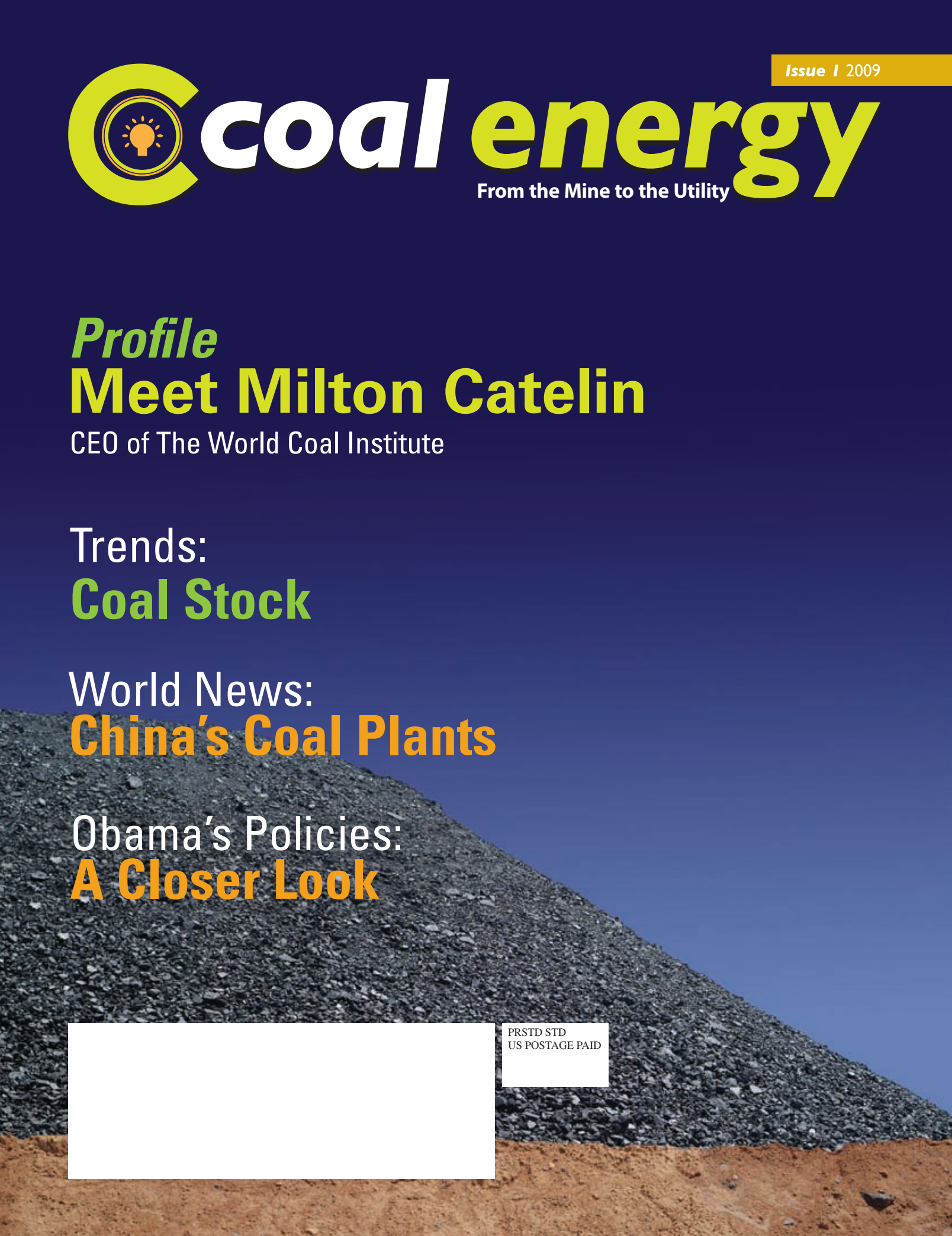
From the Mine to the Utility

Profile
Meet Milton Catelin
CEO of The World Coal Institute

Trends:
Coal Stock

World News:
China's Coal Plants

Obama's Policies:
A Closer Look



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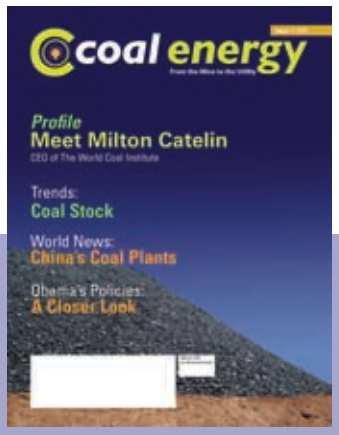

letter from the publisher

Dear Readers,

I am so glad you have picked up this second issue of Coal Energy. Our goal is to cover the latest news and events in the production of energy from coal all the way from the mine to the utility.

This issue of Coal Energy includes a variety of editorial content including easy to read light pieces all the way to our getting technical piece about rail cant.

In this issue, we also look at investing in coal and our new president Obama's policies. In our world news, China's advanced coal plants are analyzed and compared to those in the US.

We pride ourselves in continuing to be the only publication reaching all five of the main industry associations, including but not limited to NCTA, ACC, ACAA, ASMR & RMEL. Another one of our goals is to help you simplify the amount of publications that you have to use to refer to industry events. This is why we include all submitted events for each association. In every issue, you will find brief descriptions that will allow you to compare industry associations. Helping you stay informed to make the best decisions about your involvements.

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Thank you as always for your loyal readership,

Maria Martonick
President
Martonick Publications, Inc.

Association Comparisons

AMERICAN SOCIETY OF MINING AND RECLAMATION

Mission

ASMR, American Society of Mining and Reclamation was established in 1983 to serve the mining and reclamation community as an outlet for scientific research and demonstration papers through our annual National meetings. These reclamation projects include activities associated with all kinds of drastically disturbed lands.

Originated in: 1983
Dues: $50 - $1000
For more information:
http://fp1.ca.uky.edu/asmr/

AMERICAN COAL ASH ASSOCIATION

Mission

The ACAA advances the management and use of coal combustion products in ways that are environmentally responsible, technically sound, commercially competitive and more supportive of a sustainable global community.

Originated in: Not listed
Dues: $1650 - $13500
For more information:
www.acaa-usa.org

RMEL

Mission

It is RMEL's mission to provide a forum for education and the sharing of ideas to better serve the electric energy industry and its customers.

Originated in: 1903
Dues: $200 - $3250
For more information:
www.rmel.org

NATIONAL MINING ASSOCIATION

Mission

NMA is the public policy voice of one of America's great basic industries whose primary mission is helping the nation realize the contribution made to our economic well being and quality of life by resources derived from mining.

Originated in: Not listed
Dues: Not listed
For more information:
www.nma.org

AMERICAN COAL COUNCIL

Mission

The American Coal Council (ACC) is dedicated to advancing the development and utilization of coal as an economic, abundant/secure and environmentally sound energy fuel source. The Association promotes the lawful exchange of ideas and information regarding the coal industry. It serves as an essential resource for companies that mine, sell, trade, transport or consume coal. The ACC provides educational programs, advocacy support, peer-to-peer networking forums and market intelligence that allow members to advance their marketing and management capabilities.

Originated in: 1982
Dues: $2500
For more information:
www.americancoalcouncil.org

NATIONAL COAL TRANSPORTATION ASSOCIATION

Mission

Mission: The Mission of the NCTA is to provide education and facilitation for the resolution of coal transportation issues in order to serve the needs of the general public, industry, and all modes of transportation. This is accomplished through the sponsoring of educational fora and providing opportunities for the lawful exchange of ideas and knowledge with all elements of the coal transportation infrastructure.

Originated in: Not listed
Dues: $1250
For more information:
www.nationalcoaltransportation.org

To have your coal industry association or organization included in the next issue of Coal Energy, please send information to info@martonickpublications.com.

COAL, Should America be investing?

By C. Nooriel Nolan

With the wave of enthusiasm for renewable energy sources, is coal a smart investment?

In this current economic climate, Americans are searching for smart places to invest their earnings. Few would probably consider turning to the stock market given the downturn stocks have taken recently. However, this is exactly what stock analysts are suggesting…and the commodity they are advising investing in is coal.

Americans have relied on coal for generations. It has become intrinsic to all aspects of our society. Coal-fired power plants account for 22 percent of the current energy supply in the United States; plastics, paper products and synthetic fibers are made from coal energy; by-products of coal (ethylene and methanol) are used in medications; the food industry uses coal energy for corn milling and fruit and vegetable canning. When baked, coal becomes coke, which in turn is used to produce steel. Steel is used in the construction of our buildings, bridges and the beloved automobile. Because coal is so important to American industries, and with oil and natural gas prices continuously rising, the demand for coal isn't likely to wane in the foreseeable future. The Energy Information Administration estimates that our reliance on coal-fired power plants will continue into the year 2030. This makes coal an appealing investment.

Among the coal companies appearing across analysts' discussions of coal investment, the most frequently mentioned are the following: (1) Peabody Energy, the largest coal producer in the United States with an estimated 235 million tons of production, is a common pick among financial advisors. {Stock listing: BTU, current trading at $27.27/share} (2) Arch Coal, Inc, the second largest U.S. coal producer, is another common recommendation. With 130 million tons of its low sulfur coal produced annually, mainly for electricity, this company's stock is alluring. {Stock listing: ACI, currently trading at $14.63/share} (3) Alpha Natural Resources is mentioned due to its status as the largest coal exporter; the company owns one of the busiest coal ports in Virginia. This will be an important advantage as global demand for coal increases. {Stock listing: ANR, currently trading at $19.82/share}

Like the rest of the financial sector, coal stock has taken a considerable hit. Looking at last year's figures, coal was trading at an average of $60/share. Many analysts would suggest that purchasing stocks trading below $15/share is a risky investment, but they concede that in the current market it is reasonable to buy at $10/share. Consider that Google, a highly valued stock, is currently trading at half its peak value (from January 2008), but is upwardly mobile. Both commodities (coal and tech stocks) are vital to the modern business world. Therefore, it is safe to project coal will also rebound.

American coal companies will likely play a vital role in future global coal production. China is saving reserves to meet domestic demand and importing coal to supplement recent weather disruptions in coal production, quickly making the nation a coal importer rather than the major coal exporter. Coal mine flooding has limited Australian coal exporting abilities. This means the nations they supply coal to will be searching for a new supplier. With rising coal prices overseas, U.S. coal is appealing because it is cheap. Therefore, coal seems like a smart American investment.

Until there is a breakthrough in alternative energies that renders them reliable on a vast enough scale to support the world's energy needs, demand for coal will be great. But reserves won't last forever–The U.S. Department of Energy, EIA, estimates the United States coal reserves will last 225 years at current level of use. But with increases in global dependence on coal predicted, production will undoubtedly increase to meet that demand. It appears now is the time to invest in coal.

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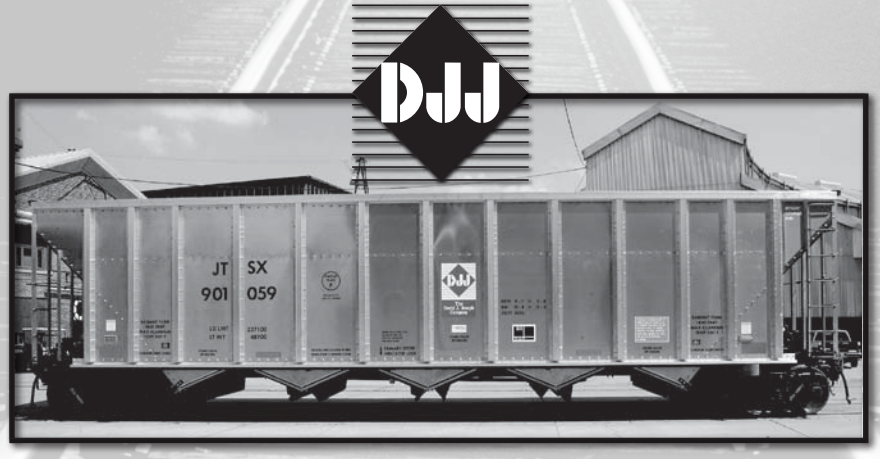

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In the Press

Wabtec Reports 4Q EPS Of 64 Cents, Full-Year EPS Of $2.67, And Strong Cash Flow From Operations; Affirms 2009 Guidance

WILMERDING, PA, Feb. 24, 2009 – Wabtec Corporation (NYSE: WAB) today reported its 2008 fourth quarter and full-year results, including the following highlights:

• In the fourth quarter, sales increased 11 percent to $405 million, mainly due to strong growth in the Transit Group as well as continued execution of the company's growth strategies, and earnings per diluted share were 64 cents, a 10 percent increase over the year-ago quarter.

• For the full year, Wabtec had record earnings per diluted share of $2.67, a 20 percent increase compared to 2007; and record sales of $1.58 billion, an increase of 16 percent compared to 2007. Income from operations increased to $213 million, or 13.5 percent of sales, compared to $180 million, or 13.2 percent of sales, in 2007. The increase in margins was due to benefits from the Wabtec Performance System and operating leverage from higher sales. In 2008, the company generated strong cash flow from operations of about $159 million, or about 10 percent of sales.

• At year-end, the company had $142 million of cash and $387 million of debt, and believes it has adequate capacity to invest in future growth opportunities. During the fourth quarter, the company completed the acquisition of Standard Car Truck for about $300 million.

• During the year, Wabtec repurchased 1.3 million shares of company stock for $46 million.

• At year-end, the company's multi-year backlog remained above $1 billion for the 11th consecutive quarter, even as the company had another record sales year.

Also today, Wabtec affirmed its 2009 earnings per diluted share guidance of $2.45-$2.75. Revenues in 2009 are expected to be flat to slightly down, as increases from recent acquisitions, a good transit market and other growth initiatives will be offset by a decline in the U.S. railcar build, changes in foreign currency exchange rates, lower materials surcharges and the overall impact of current economic conditions around the world.

Albert J. Neupaver, Wabtec's president and chief executive officer, said: "We finished 2008 on a positive note due partly to continued strength in our transit markets, even as demand softened dramatically in certain segments of the global freight rail market. With uncertain economic conditions continuing around the world, we do not expect demand to improve in the short term and are taking appropriate actions to reduce our costs. In this very challenging environment, Wabtec has benefited from its diversified business model, global growth initiatives, strong balance sheet and good cash generation, and our Wabtec Performance System. We will remain focused on these efforts and are optimistic about Wabtec's long-term growth opportunities around the world."

Peabody Energy Announces 2009 Production Cutbacks in Powder River Basin and Australia Metallurgical Coal

ST. LOUIS, -- Peabody Energy (NYSE: BTU) announced Jan 7th that it is reducing its 2009 targets for Powder River Basin coal and Australian metallurgical coal production, reflecting the effects of the global recession.

2009 U.S. production is now targeted at 190 to 195 million tons, compared with actual 2008 production in excess of 200 million tons. Targeted 2009 Powder River Basin volumes are being reduced by approximately 10 million tons from 2008 levels to better match production with expected demand and address the current excess customer inventories. The Powder River Basin reductions will be concentrated in lower-quality, lower-margin coal products. Equipment will be relocated to other locations to optimize production and reduce capital spending. Following these cutbacks, U.S. production is essentially fully priced for 2009.

2009 metallurgical coal production from Australia operations also will be reduced by up to 2 million tons due to the decline in worldwide steel demand. The company's total Australia production is expected to be 22 to 24 million tons in 2009 compared with 2008 sales of approximately 24 million tons.

"We are taking prompt market-driven actions to make adjustments to our production platform and respond to the global economic downturn," says Peabody Chairman and Chief Executive Officer Gregory H. Boyce. "We remain confident in the mid- and long-term outlook for coal demand and expect Peabody to prosper in this environment as we await an economic rebound."

Actual 2009 production will depend on a number of factors, including the speed of recovery in global markets for electricity generation and steel, as well as the magnitude and timing of stimulus initiatives in the United States, China and other nations.

Peabody Energy (NYSE: BTU) is the world's largest private-sector coal company. Its coal products fuel approximately 10 percent of all U.S. electricity generation and 2 percent of worldwide electricity.

Certain statements in this press release are forward-looking as defined in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on numerous assumptions that the company believes are reasonable, but they are open to a wide range of uncertainties and business risks that may cause actual results to differ materially from expectations as of Jan. 7, 2009. These factors are difficult to accurately predict and may be beyond the company's control. The company does not undertake to update its forward-looking statements. Factors that could affect results include those described in this press release as well as risks detailed in the company's reports filed with the Securities and Exchange Commission.

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NMA Says Carbon Technology Is Key To Climate Change, Economic Growth

Washington, D.C. Swift development and deployment of technology capable of capturing and storing carbon dioxide (CO2) from the world's coal-based power plants is essential for addressing climate change in an economically sustainable way, said a U.S. mining industry spokesman today at a hearing before the House Subcommittee on Energy and the Environment.

"Our current economic crisis reminds us all the more of the importance of structuring any actions responsibly so we can meet both our environmental and our economic goals," said National Mining Association (NMA) president and CEO Hal Quinn.

Quinn said the nation's and the world's increasing use of coal to fuel electricity generation makes it imperative that Congress accelerate the widespread use of carbon capture and storage (CCS) technology. Global greenhouse gas emissions are projected to grow by 57 percent in the next couple of decades, with most coming from large, rapidly growing developing countries, said Quinn. "Consequently, even if the U.S. and all advanced industrial countries stopped using coal, most of the world's CO2 emissions sources would remain untouched," he said.

Quinn urged Congress to expedite CCS development to ensure that global emissions are reduced and that coal can continue to provide affordable electricity for U.S. homes and businesses at a time of deepening economic crisis and rising unemployment. Greater federal support will be critical for timely deployment of CCS technology so that coal-based power plants, which provide half the nation's electricity, will be able to reduce CO2 emissions without switching to fuels more costly for households and industries. Otherwise, said Quinn, a sharp drop in coal consumption could have a devastating effect throughout the U.S. coal community, from which it would be

very difficult to recover, even with CCS technology available in the future. This "valley of death" scenario can be avoided, he said, if Congress harmonizes the deadlines for reducing emissions with the commercial availability of CCS technologies. Expediting CCS development will be costly, said Quinn, but up to a third less so than not making the effort, according to the UN's Intergovernmental Panel on Climate Change.

Quinn said climate change policy is a responsibility of our elected representatives, and pledged NMA's continued cooperation with Congress and the administration to find solutions that result in the lowest cost to American families and businesses.

Mary Peters Named to HDR's Board of Directors

Mary Peters has been named to the board of directors of HDR. She will serve a one-year term and stand for re-election in 2010. Peters also will provide consulting services to HDR on a limited basis.

Peters was the United States Secretary of Transportation from 2006 to 2009. She also served as administrator of the Federal Highway Administration from 2001 to 2005, when she joined HDR as national director of transportation policy and consulting.

A respected national expert on transportation policy and public-private partnerships, Peters also is former director of the Arizona Department of Transportation, where she served from 1985 to 2001. She was named its director in 1998.

HDR is an employee-owned architectural, engineering and consulting firm with nearly 7,500 professionals in more than 165 locations worldwide. All of them are committed to helping clients manage complex projects and make sound decisions.

Arch Coal's West Elk Mine Earns Two Colorado Awards for Pollution Prevention and Monument Dam Projects

DENVER - Arch Coal, Inc. (NYSE:ACI) announced that Mountain Coal Company's West Elk mine employees were honored today with two Colorado state environmental awards at the 111th National Western Mining Conference and Exhibition in Denver.

The Colorado Division of Reclamation Mining and Safety recognized West Elk mine for the proactive reconstruction of Monument Dam. The Colorado Department of Public Health and Environment in cooperation with the Colorado Mining Association presented West Elk with Colorado's Pollution Prevention Award for its proactive conservation and recycling measures.

According to the Colorado Division of Reclamation Mining and Safety, Mountain Coal funded the entire Monument Dam project to ensure the highest degree of protection for the dam and the area residents. "They were instrumental in providing the permitting, engineering design and project management for the entire Monument Dam project. The employees of Mountain Coal are to be commended for their extraordinary efforts."

West Elk's preventative measures included stabilizing the landslide on the south abutment; buttressing the downstream face of the dam; installing a primary spillway valve and piping; installing trench drains, gravel filter, clay liner, piezometers and inclinometers; and rip-rapping the upstream face and emergency spillway. Also associated with the project was the installation of a remote survey station and five accelerometers for monitoring the dam.
The Minnesota Reservoir Company's Monument Dam, located near West Elk mine, was constructed in 1891 and the last enlargement to the dam was completed in 1936.

Mountain Coal Company's West Elk mine is located in Somerset, Colo. Nearly 450 people are employed at West Elk. West Elk has operated for more than nine years without a state SMCRA environmental violation.

St. Louis-based Arch Coal is one of the nation's largest and most efficient coal producers. The company's core business is providing U.S. power generators with cleaner-burning, low-sulfur coal for electric generation. Through its national network of mines, Arch supplies the fuel for approximately 6 percent of the electricity generated in the United States.

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Most Requested Statistics - U.S. Coal Industry

	2000	2001	2002	2003	2004	2005	2006	2007 p/
Production (1,000 Short Tons) *	1,073,612	1,127,689	1,094,283	1,071,753	1,112,099	1,131,498	1,162,750	1,146,635
East of Mississippi River 5/	507,517	528,781	492,915	469,247	484,796	493,801	490,798	478,162
West of Mississippi River	566,094	598,908	601,368	602,506	627,303	637,697	671,952	668,474
Appalachian 5/	419,419	432,919	397,214	376,071	390,875	397,363	391,911	378,956
Interior	143,531	146,890	146,622	145,992	146,038	149,165	151,389	146,668
Western	510,661	547,879	550,446	549,690	575,186	584,970	619,449	621,012
Refuse Recovery	n/a	1,754	988	989	990	696	752	1,156
U.S. Recoverable Reserves (Mil. Sht. Tons)	273,656	272,664	269,457	268,396	267,312	267,554	263,781	262,689
Recoverable Reserves at Producing Mines								
(Million Short Tons) 1/	18,330	17,801	18,216	17,955	18,122	18,944	18,880	18,584
Total Value ($1,000)	$18,015,209	$19,568,750	$19,675,208	$19,130,791	$22,164,133	$26,692,038	$29,254,790	$30,041,837
Consumption (1,000 Short Tons)	1,084,095	1,060,146	1,066,355	1,094,861	1,107,255	1,125,476	1,112,292	1,129,281
Electric Utilities/power	859,335	806,269	767,803	1,005,116	1,016,268	1,037,485	1,026,636	1,046,424
Other Power Producers	126,486	158,165	209,704	N/A	N/A	N/A	N/A	N/A
Coking	28,939	26,075	23,656	24,248	23,670	23,434	22,957	22,715
Other Industrial	65,208	65,268	60,747	61,261	62,195	60,340	59,472	56,615
Residential/Commercial	4,127	4,369	4,445	4,236	5,122	4,217	3,226	3,526
Stocks at End of Year (1,000 Short Tons)								
Consumers 2/	108,377	146,012	148,870	127,190	112,855	109,333	150,398	158,687
Producer/Distributor	31,905	35,900	43,257	38,277	41,151	34,971	36,548	33,977
Exports (1,000 Short Tons)	58,489	48,666	39,601	43,014	47,998	49,942	49,647	59,163
Imports (1,000 Short Tons)	12,513	19,787	16,875	25,044	27,280	30,460	36,246	36,347
Price Indicators (Avg. $/Short Ton)								
Value F.O.B. Mines 3/	$16.78	$17.38 *	$17.98 *	$17.85 *	$19.93 *	23.59 *	$25.16	$26.20
Cost of Coal at Electric Utility (delivered price)	$24.28	$24.68	$24.75	$25.72	$27.30	$31.22	$34.09	$35.65
Cost of Coking Coal at Coke Plants (delivered price)	$44.38	$46.42	$50.67	$50.63	$61.50	$83.79	$92.87	$94.97
Cost of Coal for Industrial Uses (delivered price)	$31.46	$32.26	$35.49	$34.70	$39.30	$47.63	$51.67	$54.42
Railroad Freight Charge (Frt. Rev./Tons Orig.)	$10.28	$10.21	$9.93	$10.06	$10.64	$11.68	$12.70	$13.50
Methods of Mining 6/								
Underground (1,000 Short Tons)								
Continuous	178,617	180,337	163,343	160,763	175,723	177,757	175,034	173,500
Conventional	2,353	4,520	6,024	8,178	1,987	2,571	3,525	2,184
Longwall	188,972	195,304	187,766	183,523	187,948	188,053	180,463	176,106
Other	3,717	466	1,240	1,573	1,899	231	N/A	N/A
Total Underground Production	373,659	380,627	358,373	354,037	367,557	368,612	359,022	351,790
% of Total Production	34.8%	33.8%	32.7%	33.0%	33.0%	33.0%	31.0%	31.0%
Total Surface (1,000 Short Tons)	699,953	747,062	735,910	717,716	744,542	762,190	802,976	793,690
% of Total Production	65.2%	66.2%	67.3%	67.0%	67.0%	67.0%	69.0%	69.0%
Number of Mines (EIA)	1,453	1,478	1,427	1,316	1,379	1,415	1,438	1,374
Underground Mines (includes refuse)	707	719	682	602	586	606	612	579
Surface Mines (includes refuse)	746	759	745	714	793	809	812	795
Number of Mine Operations (MSHA)	2,124	2,144	2,065	1,972	2,011	2,063	2,113	2,030
Average Number of Miners Working Daily (EIA)3/	72,748	77,088	75,466	71,023	73,912	79,283	82,959	81,278
Underground Mines (includes refuse)	43,172	45,085	43,000	40,123	42,016	44,614	47,475	46,828
Surface Mines (includes refuse)	29,576	32,003	32,466	30,900	31,896	33,572	35,398	34,450
Average Coal Mining Employment (MSHA)6/	108,098	114,458	110,966	104,824	108,734	116,433	122,974	122,936
Number of Mine Injuries 4/								
Fatal	38	42	27	30	28	22	47	34
All Injuries	6,429	6,299	6,039	5,168	5,129	5,182	5,249	4,881
Production Per Miner Per Hour 3/	6.99	6.82	6.81	6.95	6.80	6.36	6.26	6.27
Underground Mines	4.15	4.02	3.98	4.04	3.96	3.62	3.37	3.34
Surface Mines	11.01	10.61	10.38	10.76	10.57	10.04	10.19	10.25

Notes:

p/ Preliminary estimates. r/ Revised. e/ Estimated. n/a Not available.

1/ At active producing coal mines. 2/ The residential/commercial sector not included.

3/ Excludes mines producing less than 10,000 short tons of coal during the year.

4/ Includes contractors and office workers. Excludes mines producing less than 10,000 short tons and prep plants with less than 5,000 employee hours.

5/ Includes refuse. 6/ Includes contractor employees.

* Starting in 2001 EIA is reporting only open market price. Prior years are the weighted average of captive and open market.

Sources: U.S. DOE/EIA, Mine Safety & Health Administration, Association of American Railroads, and NMA estimates.

Obama on Energy

Barack Obama's New Energy For America plan proposes long-term solutions to get America closer to energy independence by taking action to transform our economy.

Barack Obama believes that the energy challenge the United States faces is great, and actions must be quick to transform the economy. With Obama and Biden's New Energy For America campaign, a new economy powered by clean and secure energy can be built.

On Feb. 24th in Obama's first address to congress, energy was stated to be one of the "three areas that are absolutely critical to our economic future."

He said $15 billion in investments per year would be given to solar, wind and biofuels, and "clean coal." In three years he wants to double renewable energy making it a "profitable kind of energy."

Obama has had an environmentally concerned past, and in 2007 he secured $200 million in the federal budget for "clean coal" technologies.

In 2006, Obama caught the interest of the coal industry when he pushed for subsidies for developing liquefied coal as an alternate transportation fuel, according to the Washington Post. Also during his run as senator, Obama helped pass legislation to give gas credit for installing E85 ethanol refueling pumps, which were to help increase access to and use of renewable fuels.

As Obama is getting comfortable in his presidential seat, his New Energy for America plan is to confront one of the biggest challenges for the U.S.: "our dependence on foreign oil, addressing the moral, economic and environmental challenge of global climate change, and building a clean future that benefits all Americans."

Clean Coal Technology

Developing and deploying clean coal technology is part of Obama's energy plan with goals to provide incentives to accelerate private sector investment in commercial scale zero-carbon coal facilities. Also, 5 commercial scale coal-fired plants with carbon capture and sequestration will be instructed for development.

Reduce greenhouse gas emissions

As of March, according to Reuters, Obama said if carbon dioxide permits are sold to the industry they must be priced to encourage reduced greenhouse gas emissions.

"If you're giving away carbon permits for free, then basically you're not really pricing the thing and it doesn't work, or people can game the system in so many ways that it's not creating the incentive structures we're looking for," Obama said to the Business Roundtable.
According to Obama and Biden's energy plan, they hope to reduce carbon emissions 80 percent below the levels in 1990 by

2050 by implementing a cap-and-trade system. All pollution credits will be auctioned, which will ensure that every ton of emissions released is payed for by the industries.

"I ask this Congress to send me legislation that places a market-based cap on carbon pollution and drives the production of more renewable energy in America," he said in February at his first address to Congress.

Renewable resources

A 10 percent federal Renewable Portfolio Standard will be established by Biden that will require that 10 percent of electricity used in the U.S. is from sustainable energy sources. The year for this goal is 2012, and many states have already achieved their statewide goals. By the year 2025, they hope that 25 percent will be from sustainable energy sources.

Fuel economy standards

The energy plan hopes to increase fuel economy standards by 4 percent each year. Six billion metric tons of greenhouse gases and about a half trillion gallons of gasoline will be saved by the implementation of this plan.

According to the energy plan, it will also help create five million new jobs by investing $150 billion over the next ten years, to save more oil than the nation currently imports from the Middle East and Venezuela combined by the next ten years and have 1 million Plug-In Hybrid cars on the road by 2015.

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Barrett vs. Peabody

About the Companies

By Danielle A. Peterson

Bill Barrett Corporation, a natural gas producer, tried to issue a restraining order against Peabody Energy Corporation.

The order was to temporarily stop Peabody from drilling coal-exploration holes near a Bill Barrett Corporation mine in Wyoming.

However, the restraining order can no longer hinder Peabody Corp. from continuing their exploration.

On March 11th, Judge Leon ordered that Bill Barrett Corporation's "Motion for Preliminary Injunction and Stay of Agency Action Pending Judicial Review is DENIED," said Meg Gallagher, the corporate communications manager of Peabody Energy.

Peabody Energy was previously issued a license by the U.S. Bureau of Land Management to explore a coal reserve adjacent to the North Antelope Rochelle Mine in the southern Powder River Basin.

Bill Barrett Corporation "shares rights to reserves near one of our mines," said Gallagher. "They tried to restrain our coal drilling on the same land."

The company had moved forward with the licensed drilling program because it believed that the restraining order was unmerited.

"Similar drilling activities have been conducted effectively in the area for decades alongside coal-bed methane wells like those operated by Bill Barrett, and our actions comply with all applicable federal and state regulations," she said.
Bill Barrett Corporation was called and sent an e-mail on Thursday, March 19, but did not return calls for comment. The corporation was also called on March 26, but the offices were closed due to severe weather.

About the Companies

Bill Barrett Corporation

The Bill Barrett Corporation was incepted in March 2002 and develops its properties with active drilling in three main areas: West Tavaputs, Piceance Basin and Powder River Basin. The Piceance Basin was the largest acquisition to date with the

company spending $137 million for the properties. According to the 2008 annual report, the numbers show that there is continuous growth for the company.

Production growth is up 27 percent, proved reserve growth is up 47 percent and there was a net income of $107.6 million. "Record production was driven by our solid development assets, which in turn delivered sizable discretionary cash flow and earnings. In addition, our exploration team has a number of exciting prospects in the works, including our internally generated shale gas discovery in the Paradox Basin," Fred Barrett, chairman and chief executive officer, said in a press release for the corporation.

Barrett said that they have taken necessary steps in 2008 to be in a good position for 2009.

"While we believe we are well-positioned in the current environment, we will also maintain flexibility in our operations strategy to best align with business conditions, the regulatory environment and commodity prices going forward," he said.
Bill Barrett Corporation is based in Denver.

Peabody Energy

Peabody Energy is the world's largest private-sector coal company. The company fuels 10 percent of all U.S. electricity generation and 2 percent worldwide. The company had 2008 sales of 256 million tons and had $6.6 billion in revenues.
According to Meg Gallagher, the company serves customers in 21 countries on six different continents. Peabody also has 31 surface and underground mining operations in the United States and Australia.
According to a news release from Peabody Energy on March 17th, the company has entered a long-term coal supply agreement for more than 90 million tons of coal. This will develop the Bear Run Mine in Indiana.

This mine will be the largest surface coal mine in the Eastern United States, which is expected to generate about $6 billion in revenues.

"Long-term coal demand continues to grow. We are the largest producer and reserve holder in the Illinois Basin, which is one of the fastest-growing coal regions. We are pleased to be partnering with our customers to meet their energy needs and develop a major new coal mine," said Peabody Chairman and Chief Executive Officer Gregory H. Boyce in the news release.

Natural Gas vs. Coal

Michael Mellish, a coal analyst for Energy Information Administration, said that natural gas production ranks second to coal production and that these two fuels have been the top two-ranked sources of energy production since 1990. According to the Annual Energy Outlook 2009 Early Release forecast, they are projected to remain as the top two fuels. Mellish said that the United States is generally seeing a reduction in the interest for coal-fired power generation due to increasing concerns over greenhouse gas emissions, although in the AEO 2009 forecast, it shows that 17 gigawatts of new coal-fired generating capacity is either under construction or well into the permitting stage, which is higher than previous editions of the AEO.

From the Short-Term Energy Outlook from EIA, total U.S. natural gas production is forecasted to remain flat in 2009 and coal production is to increase by 2.1 percent due to a significant increase in coal exports in 2008.

COAL ASH: Hazardous Waste or Wonderful by-product?

It is a fortifying component of cement. It can eliminate the amount of carbon dioxide that is released into the atmosphere. The recycling of it has increased twofold in the last 20 years, with more than 43 percent of it reused in the U.S. in 2007. But in December of last year, 1.1 billion gallons of murky coal ash slurry dumped onto almost 400 acres of land in Kingston, Tennessee, destroying homes and creating uproar.

Which leads to the big debate: is coal ash a hazardous waste or a wonderful by-product?

By Meagan McGone

About 50 percent of the electricity consumed in the United States comes from coal-generated electricity. As a result, tons of coal ash is formed.

Coal ash is the very fine, solid residual product formed during the combustion of coal found at coal-fired plants. It is primarily different forms of silicon dioxide, iron, aluminum oxide, calcium oxide, and other trace elements found in coal. This product is commonly referred to as coal combustion product (CCP) because of the many beneficial reuses, according to Regina Embry, an environmental and electric utility engineer for Gainesville Regional Utilities.

Tom Adams, executive director of the American Coal Ash Association (ACAA), said that the benefits of coal combustion products significantly outweigh any hazards associated with them.

"It's alarming to hear people calling these products 'harmful' and 'hazardous.' These labels are unfair and inaccurate," Adams said.

Toxicity

Coal ash is scrutinized for the levels of toxic substances it contains in its composition including arsenic, lead and selenium. However, after the spill in Kingston, containments found

in the water samples by the Tennessee Valley Authorities remained within acceptable levels of toxicity.

"In order for something to be considered toxic, the Environmental Protection Agency states it has to be combustible, ignitable, reactive, or corrosive. Coal ash carries none of these characteristics, so under the EPA's terms it is not toxic to the environment," Adams said.

He compared the levels of harmful substances in CCPs to the levels found in a typical backyard, concluding that the amounts found in both would be close to equal.

"If you are afraid of the soils in your backyard, then yes you should be afraid of it," Adams said. "But there is really no reason to be afraid of the components in coal combustion products."

Uses

CCPs can be classified into groups including bottom ash, boiler slag and the most commonly produced— fly ash.

Fly ash, the finest of these particles, serves as a substitute for Portland cement in concrete, creating a less permeable wall with its small shaped particles. It easily fills voids and creates a more durable bind than cement. Fly ash with high unburned carbon content can also be re-burned in cement kilns for energy recovery, according to an EPA factsheet.

More importantly, fly ash decreases the amount of carbon dioxide emitted into the atmosphere when replacing cement. According to the American Coal Council, for every ton of Portland cement that fly ash replaces, a ton of carbon dioxide is saved from entering the air. Through this method, approximately 10 million tons of carbon dioxide emissions are being displaced each year.

Reusing CCPs also reduces the cost and amount of land that is needed for disposal, which could prevent situations like the spill in Kingston from happening, Adams said.

Disposing of Coal Combustion Products

Some power-generating stations use water to capture, slurry and store the ash in ponds. This is an alternative disposal method to creating ash landfills in a dry state, Embry said.

However, Adams said wet impoundments of ash are not as common as dry landfills, and by the end of the year new there will be new rules regarding wet ash ponds.

The EPA released a plan on March 9 asking that all electric utilities with surface impoundments provide structural information of the landfills, as a response to the spill in Kingston. The EPA will sort through and inspect the approximately 300 impoundments from across the United States. The findings will be compiled into a public report for anyone to have access to, the EPA reports.

"It's alarming to hear people calling these products 'harmful' and 'hazardous.' These labels are unfair and inaccurate."
Tom Adams, executive director of the American Coal Ash Association

The future of fly ash reuse

The Coal Combustion Products Partnership Program, an effort between the EPA, ACAA, and various other groups, formed to promote the benefits of coal combustion products and their environmental uses.

By 2011, the CCPPP hopes to increase the use of coal combustion products to 50 percent. It plans to supplement the composition of concrete by 50 percent, replacing concrete with 18.6 million tons of fly ash. The work could decrease greenhouse gas emissions by nearly 5 million tons, according to the EPA.

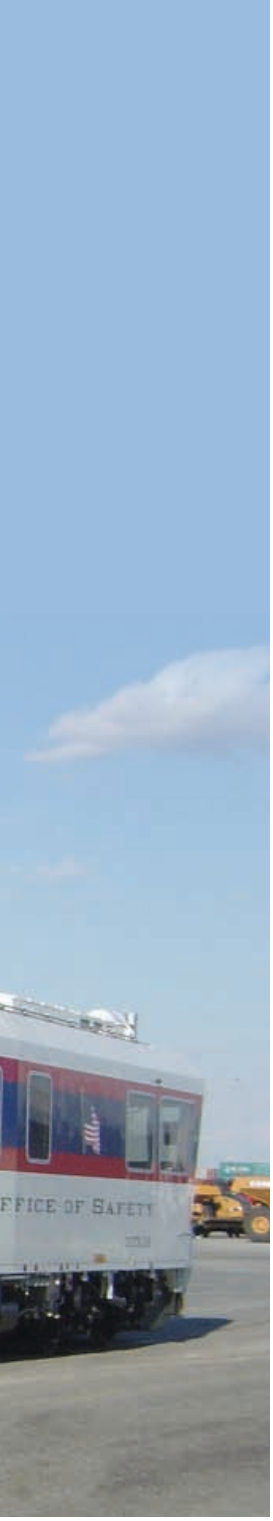
Rail Cant Measurement of Concrete Crossties

By Arthur Clouse

The Federal Railroad Administration operations of fleet of geometry cars as part of its Automated Track Inspection Program (ATIP).

In response to accidents, unregulated causal factors and the National Transportation Safety Board's recommendation (NTSB R-06-19), the Federal Railroad Administration (FRA) Office of Safety together with the Office of Research and Development initiated a study to identify and evaluate the safety of concrete crossties. The FRA established a task force to develop recommendations and provide guidance to the Railroad Safety Advisory Committee (RSAC) Working Group on concrete crossties.

A rail profile measurement system capable of accurately measuring rail cant was installed onboard FRA's Automated Track Inspection Program (ATIP) track geometry cars (see Figure 1) in order to collect valuable data regarding concrete crosstie rail seat deterioration. The intent of this collaborative effort is to provide practical guidance for manual and automated inspections of concrete crossties, and to reduce the number of track geometry-caused derailments that occur when the rail seat pad material deteriorates and exposes the rail base to the concrete (see Figure 2). The deterioration, or abrasion,



is the result of a compressive load and/or the mechanical effects of deterioration from repeated, concentrated wheel loading, which typically develops a triangular void on the field side of the tie and allows the rail to tilt or roll outward under load, increasing track gauge.

Between April 2006 and March 2007, a task force made up of government and railroad personnel studied the problem and addressed the need for a concrete crosstie safety advisory and the potential need for new regulations in the Federal Track Safety Standards. The recommended guidance would primarily promote widespread adoption of a concrete crosstie performance specification in FRA Class 2, 3, 4, and 5 track. The guidance would address (at a minimum) missing, broken, or wear limits for rail seat "abrasion" and tie pad failure; and rail fastener integrity (fatigue failure), including the loss of appropriate toe load pressure, improper fastener configurations, and excessive lateral rail base movement.

The concrete crosstie performance specifications would take into account the data and analytical information associated with the high-profile Amtrak derailments at Stevenson and Sprague, Wash. This includes information relating to track and operating conditions; truck rotation and car and locomotive and car suspension characteristics; the design specifications and research history of concrete crossties; track maintenance practices; and preventive automated and manual track inspection procedures.

Recommendations would also take into account the mechanism (mechanical and compression) of or basis for rail seat failure. They would utilize computer simulation data to compare the truck side L/V, gauge-widening and rail rollover forces associated with the P42-type Amtrak locomotives (versus the freight locomotives operating in the accident area) and why the lightweight passenger locomotives derailed when the more frequent and heavier freight locomotives didn't.

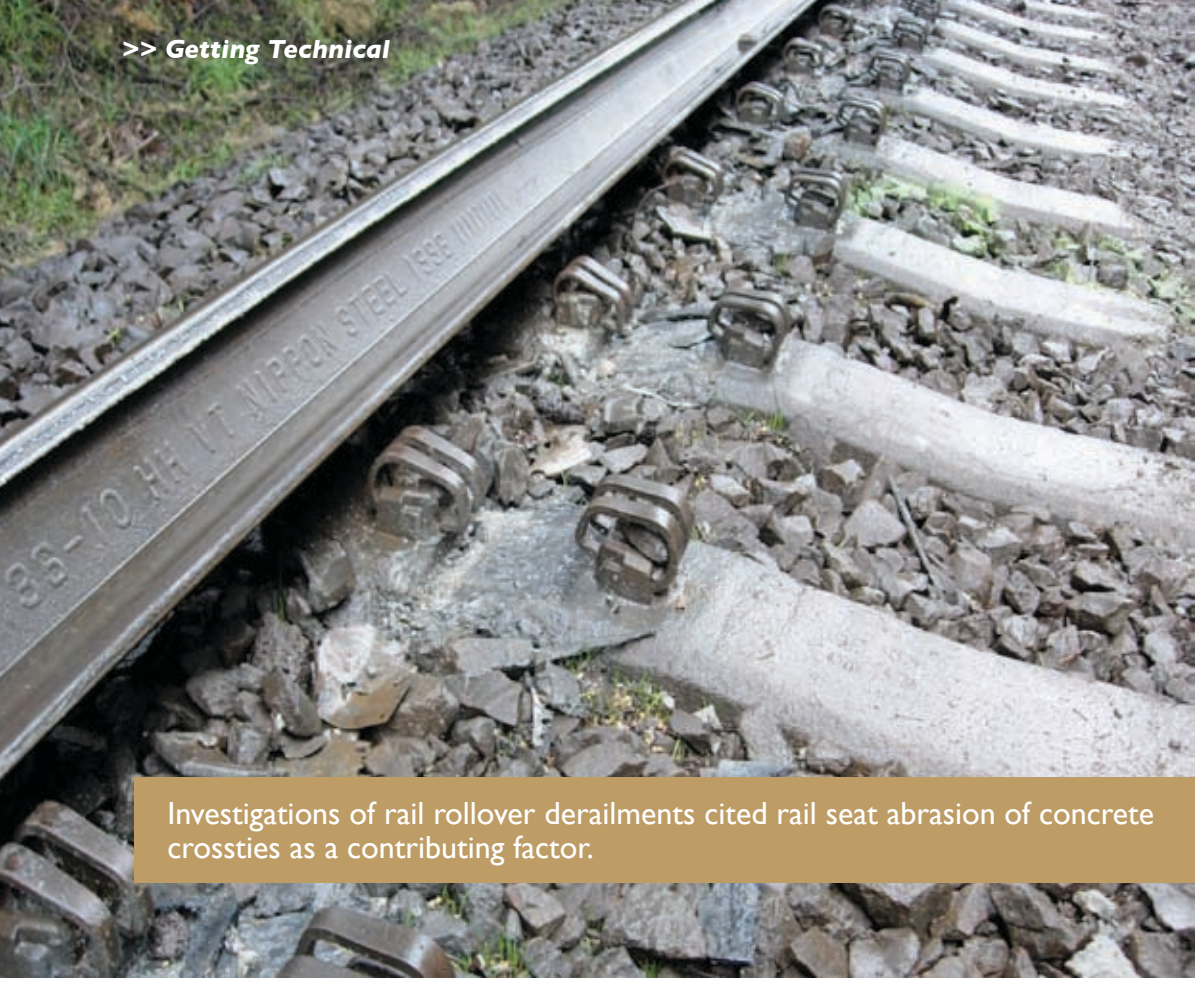
The effort would also examine the combination of FRA-compliant but irregular track geometry conditions such as gauge, profile, crosslevel and alignment that contribute to excessive lateral wheel / rail forces, which may impose greater wheel force than a singular noncompliant geometry condition. The study was designed to lead to a method of detecting rail

Wear on field side of the ties is typically deeper than on gauge side, allowing rail to tilt outward.

seat failure through automated inspections such as the FRA's ATIP geometry cars and R&D geometry and Gauge Restraint Measurement System (GRMS) test cars, railway-operated geometry cars, and hi-rail-based geometry / GRMS cars.

Data from these vehicles would be used to develop performance-based rail cant and base gauge requirements that are specific to concrete crosstie or comparable construction specifications and tolerances focused on establishing, identifying and locating excessive individual or combined values relating to inward / outward rail cant and base gauge measurements. Measurements would be used to establish a basis for automated performance-based thresholds relating to, or caused by, missing, worn, and damaged fasteners (sprung clips); worn or missing tie pads; failed crossties (due to mechanical wear or compression on the surface or underneath); center broken or visible reinforcing strands (in the gauge, crossties rail seat area, and shoulder areas); and worn or damaged concrete rail seat deterioration.

This effort would enable the industry to develop automated procedures and on-the-ground confirmation of rail cant and base gauge measurement values. It would also help the industry to develop and implement the tools and procedures to manually inspect, measure and identify concrete crosstie rail seat deterioration under load. These tools include a toe load (torque or resistance force) gauge and a void (feeler) depth gauge. (Note: 1/8 inch void in the rail seat area equates to one degree of inward or outward rail cant and correspondingly affects track gauge about 1/8 inch.) This effort would also examine the crosstie support required to support typical loadings and to maintain track geometry safety limits, according to track classification.



Investigations of rail rollover derailments cited rail seat abrasion of concrete crossties as a contributing factor.

Concrete Tie History

The use of concrete ties dates back to 1893. The first U.S. railroad to use concrete ties was the Reading Company in Germantown, Pa. (1). In 1961, the Association of American Railroads (AAR) performed comprehensive laboratory and field tests on the performance of pre-stressed concrete ties (2, 3). Replacing timber ties with concrete ties on a one-to-one basis at 19 - 1/2-inch spacing proved acceptable, based on engineering performance, but was deemed uneconomical. Increasing tie spacing from the conventional 19 - 1/2-inch spacing to 24- or 30-inch spacing made the use of concrete ties more economically feasible.

While the greater tie spacing increased rail bending stresses and the load that each tie transmits to the ballast, the rail bending stresses were determined to be within design limits. And by increasing the tie base to 12 inches, the pressure transmitted from the tie to the ballast on concrete ties was no greater than the force transmitted by timber ties. Research showed that increased tie spacing (while maintaining rail, tie, and ballast stresses at acceptable levels), made concrete an economical alternative to timber ties.

Research efforts in the '60s and '70s were focused on the strength characteristics of concrete ties (i.e., bending at the top center and at the bottom of the tie and under the rail seat, material optimization such as aggregate and pre-stressing tendons and concrete failure at the rail-tie and ballast-tie interface.) Abrasion or failure of the concrete surface between the rail and ties became apparent when large sections of track were converted to concrete ties, especially on high-curvature and high-tonnage territories.

In the 1970s, the Portland Cement Association Laboratories undertook a major research effort to optimize tie design. The research included the use of various shapes, sizes and materials to develop an economically desirable concrete tie. During that time, researchers also addressed several of the initial concrete design problems, including quality control problems and "rail seat abrasion." Test installations to evaluate the performance of concrete ties were established by several North American railroads and the Facility for Accelerated Service Testing (FAST) in Pueblo, Colo. (4).

Rail seat abrasion was also noted in one form or another on four major North American railroads: Canadian Pacific (CP), Canadian National (CN), Burlington Northern Santa Fe (BNSF) and Union Pacific (UP) (5). CN's concrete tie program started in 1976; researchers noted rail seat abrasion of less than 0.2 inches by 1991. In a few cases, abrasion of up to 1 inch was noted. Abrasion was not uniform across the rail seat. BNSF, which started its program in 1986, saw the same pattern of abrasion as noted on CN. Most of the abrasion occurred on curves. At UP, rail seat abrasion was present on 5-degree curves.

CP adopted the use of a bonded rail / tie pad to reduce rail seat abrasion, and found that abrasion occurred shortly after the bonded pad failed. Concrete ties installed in less severe environments showed no evidence of rail seat abrasion.

Mechanisms that lead to abrasion include the development of slurry between the rail pad and the concrete tie. Materials found in the slurry include dust particles, fine material from the breakdown of the ballast particles, grinding debris from rail grinders, and sand from locomotive sanding or blown

by the wind. This slurry, driven by rail movement, has been shown to abrade the concrete surface, exposing the concrete aggregate and generating concentrated forces on the rail pads. This abrasion process is accelerated once the pad is substantially degraded and the rail base makes direct contact with the concrete crosstie.

A requirement for the development of this failure mechanism is the presence of moisture between the rail pad and the concrete tie surface. In areas with low moisture, concrete abrasion is generally not a problem. Moisture coupled with a high number of freeze-thaw cycles tends to accelerate abrasion. It appears that moisture enters the concrete voids and breaks up the concrete upon expansion under freezing conditions. Once rail seat abrasion occurs, the only feasible method of repair is to fill the abraded area with epoxy or another rapidly hardening material that will enable the track to be reopened within a reasonable time period.

Railways and suppliers have since developed products and procedures to minimize rail seat abrasion. Elastomeric tie pad materials of various stiffnesses, with steel plates inserted between them, have also been developed to combat rail seat abrasion. Ongoing research efforts are focused on increasing the durability of tie pad materials and their ability to prevent moisture from penetrating the tie / pad interface, and getting under the rail seat.

Arthur Clouse is Manager, Automated Track Inspection Program, Track and Structures Division, Federal Railroad Administration Office of Safety

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Did You Know?

Longwall Mining

A Clean Cut for **Longwall Mining**

By Danielle A. Peterson

Longwall mining originated in England and was eventually brought to the United States. Today it accounts for 15 percent of all U.S. coal production.

Shropshire, England, is believed to be where longwall mining originated, dating back to the 17th century. It primarily saw limited use in Europe because it was less effective than room-and-pillar mining, said John Peters, a senior mining specialist at Skelly and Loy. However, interest in this method increased when Wilhelm Loebbe in Germany developed a continuous system involving a plow in the 1940s.

Despite Europe's advancement, the U.S. did not see this method of mining advance until the 1960s, when the first self-advancing hydraulic roof supports began to appear.

"The first "modern" operation in the United States to take advantage of rapidly developing European technology and longwall methods was Kaiser Steel Corp. at its Sunnyside mine near Price, UT.," said Peters.

The advancement in technology of longwall mining from the 1960s to 2008 is obvious. Longwall faces in the 1960s were generally 300 inches to 400 inches wide and less than 72 feet in height, said Peters, and by 2008, the widest panel was 1,800 inches and the highest seam height was 180 feet.

Today, longwall mining accounts for approximately 15 percent of total U.S. coal production and produces approximately 50 percent of the total underground coal mined, according to the Energy Information Administration.

Longwall mining, along with room-and-pillar mining, are the most common forms of underground mining methods. According to Peters, longwall mines are generally more productive, inherently safer, and permit a higher recovery. The main drawback, however, is the high cost of equipment.

According to Peters, out of the 575 underground mining operations, there are 48 longwall mines operating in the U.S.

Clean coal for China

Could China surpass the United States in clean coal technology?

By C. Nooriel Nolan

Today, more than ever, Americans have begun to pay attention to energy. Perhaps it was the 2009 electoral atmosphere, in which candidates belabored the importance of "clean coal technology," both as a political and environmental issue. Or maybe it is due to the current economic climate that has demanded individuals educate themselves on the amount of energy they use. Regardless of the reason, the American public has a lot invested in energy production--form, function and cost.

Energy from coal has caught the most attention. Coal is seen as a dirty source of energy and, therefore, the public is turning against it. The United States emits more green house gases than any other country in the world. With coal-fired power plants accounting for 60 percent of the U.S. total sulfur dioxide (SO2) emissions and 40 percent carbon dioxide (CO2) emissions in 2005, there is cause for concern.

Part of the problem stems from outdated power plants. Before 1974, the United States boasted 1,064 coal-fired power plants, making the majority of U.S. power plants 30-50 years old. Some are even older. 606 existing plants were built between 1921 and 1959, making some over 80 years old. A "grandfathering" loophole in the Clean Air Act of 1970 allowed these old plants to remain, under the assumption that they would be retired or replaced with newer, cleaner plants. They were not, and they have avoided installing modern pollution controls, continuing to release large amounts of green house gases. Of the top 86 projected dirtiest coal-fired power plants in 2006, 25 were in three of the top four coal-powered production states Ohio, Pennsylvania and Indiana.

However, we can't afford to quit coal. Coal provided 31.2 percent of the United States electric capacity in 2005, and 48.4 percent in 2008. [see figure 2] Coal also contributes $200 billion to the U.S. economy annually. Our national reliance on coal for energy production and our utilization of coal's by-products—used to make everything from paper products and plastics to medication—makes it difficult to forgo using coal. The alternative is to produce and use coal more cleanly.

The United States is the number one producer of coal, with 58 percent of the world's reserves, followed by China (13 percent), India (10 percent) and Australia (8.7 percent). As the leader in coal production, it seems logical to assume that the U.S. should also lead in cleaner coal technology. Although many clean coal technologies have been developed in the United States—Liquefaction, Carbon capture and Storage (CCS), Coal mine methane capture (CMM), Gasification and Syngas cleanup—it is gasification that has new importance.

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makes it possible for any rank of coal to be used, significantly minimizing the cost to these IGCC facilities since low-quality coal can be purchased and turned into a highly efficient energy source.

This U-GAS® gasification technology has been exclusively licensed to Synthesis Energy Systems, Inc., an energy and technology company based in Houston, Texas, that owns, builds and operates coal gasification plants. As of January 2009, SES has already implemented its U-GAS® fluidized bed gasification technology at one plant. But this plant is not located in the United States. It is in Zaozhuang City, Shandong Province, China.

China leading the way:

Being the second-largest coal producer in the world, China is of special importance to the United States coal industry. As the world's leading producer of steel and iron, and the most populated nation, China depends heavily on coal in its energy and industrial sectors. Possessing little other energy resources, only limited oil and natural gas, coal is the primary solution to China's energy needs. The International Energy Agency (IEA) estimates China's dependence on coal will increase 4.1 percent each year until 2030. China is aware of its coal dependence and has been exploring clean coal since the 1970s. (Dr. Li Jinghai, a chemical engineer at the Chinese Academy of Sciences (CAS), holds seven of his country's 41 clean coal patents.) However, China also knows the value of importing technologies from countries like the United States and Australia. China has begun to implement these clean coal initiatives with the completion of its first coal gasification plant, and plans to build facilities with liquefaction, methanol capture, and coal tar processing capabilities in the near future. As news of these technologies hits mainstream media, the newly interested American public will turn toward its own coal industry with expectant eyes, and ask:

Why are U.S-based companies implementing clean coal technologies in China rather than focusing on more IGCC plants in the U.S.? Government ownership of China's largest coal firm, Shenhua Group LLC, may help clean coal technology be implemented faster. With government incentives for new technologies and few outside disruptions during implementation, plant construction, operation, and production can commence rapidly. In contrast, there are 25 major U.S. coal companies, all but one privately owned, that control most of U.S. coal power production. With the United States legislative process, and environmental protection agencies monitoring the coal industry's every move, planning approval, funding and construction takes significant time.

How many clean coal plants do we have in the United States? The first commercial IGCC power plant was built in Tampa in the early 1990s. Cleaning 98 percent of sulfur in the coal, this plant is one of the world's cleanest. The second IGCC plant was built in 1995. Located in West Terre, Indiana, it was the first full-sized commercial gasification plant built in the United States. This was an ideal location. Indiana is the second-largest supplier of U.S. coal power, Ohio being the first. However, over ten years later, clean coal projects are slow to develop.

According to the Department Of Energy, NETL, twenty-nine IGCC plants were announced in December of 2007, three of which are progressing towards operational. In January 2009, thirteen IGCC plants were announced, six of which are "progressing." Only one IGCC plant has been operational since 2000. Since it is common for projects to be cancelled after being "announced," the number of IGCC plants that will actually reach "operational" status is unclear.

Retrofitting, modernizing old plants with new technology, is the alternative, but the U.S. Department of Energy deemed this method a non-economical solution. Getting companies to agree to retrofitting is also difficult; maintaining current facilities is cheaper because construction costs are paid off leaving only operating and fuel costs to contend with.

What does China's clean coal technology mean for the U.S. coal industry? The International Energy Agency predicts a 73 percent increase in the world's demand for coal due to China' and India's growing economies. There is some speculation that China's new energy production systems will allow it to dominate the coal industry, but the IEA believes that the country will begin consuming the majority of its own coal, limiting the country's exports. If domestic demand prevents China from exporting its coal, perhaps countries that previously imported from China will turn to the United States for their coal supply. Since India's economy is also growing rapidly, will it implement similar technologies in order to utilize more of its own coal reserves? If so, two of the four major coal-producing countries will no longer be contributing to the world coal trade. That will leave the United States and Australia as the world's top coal producers. Australia is projected to become the leading exporter of coal by the IEA. But the United States has the world's largest coal reserve. If it can implement its own clean coal technologies more vigorously, producing cleaner, highly efficient energy from lower quality coal, could it become the world's leading clean coal exporter?

"Because of its abundance, broad geographic distribution and comparatively low and stable delivered cost, coal will remain a key component of the electricity generation and fuel mix for most of this century." (Coal Industry Advisory Board, IEA) Thus, it is imperative that clean coal technologies be thoroughly explored and actively implemented wherever possible. The United States coal industry has a responsibility to American consumers, world markets, and its own future, to produce a cleaner, safer, highly efficient energy source. If China can do it…why not US?

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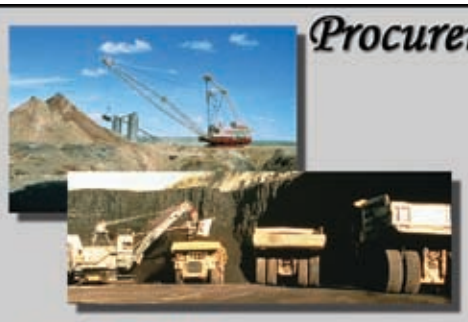

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A Glimpse Into the Life of a CEO

Milton Catelin, CEO World Coal Institute

Every day is different for Milton Catelin, CEO of the World Coal Institute. But one thing stays the same. He wants to make a difference in the coal industry.

By Danielle A. Peterson

Milton Catelin has three main goals he would like to see accomplished in the next five years for himself and the coal industry. He wants to play a part in seeing the first handful of industrial-scale CCS power plants built; he wants more public understanding of the importance of coal; and he'd like to see the start of a more balanced investment approach from governments for all the low carbon technologies we're going to need to effectively combat global warming.

Catelin has been CEO of the World Coal Institute since 2005. WCI is a non-profit, non-governmental organization and the only international body that works on a worldwide basis on behalf of the coal industry. It includes around 40 of the world's largest coal companies, coal associations and other stakeholders that represent most of the developed and developing worlds.

There is no typical day for Catelin as CEO, who runs the small WCI office located in London, because his job takes him all over the world. Averaging about 40 percent of the year outside of the UK, he is taken to countries including the U.S., China, Australia, Brazil, Indonesia, South Africa and various parts of Europe.

He travels to all of these places to give presentations and to participate in conferences, working groups and negotiations. "I also meet with Ministers and senior policy makers to remind them of the importance of coal to economic development and energy security, and the centrality of carbon capture and storage technologies (CCS) to the climate change effort," he said.

The focus for the past and current year, he said, has been on negotiations under the UN Kyoto Protocol on Climate Change to create a post-2012 international architecture on climate change.

Catelin said, "The coal industry is an important factor to economic development and global poverty alleviation. I'm concerned about the global environment, and all the data I've seen has convinced me that there can be no lasting solution to things like global warming without a way to balance the value of coal with an improvement in the way in which it's used".

Catelin sees the greatest challenge for the coal industry is ensuring that governments appreciate the value of coal to the economic system and also support the widespread deployment of carbon capture and storage technologies (CCS). "It's a challenge because CCS – like all low carbon energy options – is more expensive than business as usual, and the benefits to its deployment accrue not to the individual enterprise but to society as a whole through averting dangerous increases in global temperatures."

Catelin previously worked at the United Nations Environment Programme (UNEP) in Geneva and he worked in Australia in various government departments, including the Prime Minister and Cabinet, Environment and Finance.

Catelin's valuable experience within national and UN bureaucracies, serving as a lead negotiator for Australia on climate change and ozone treaties and developing a public private partnership program on hazardous wastes for UNEP, has enabled him to add value to his role in the World Coal Institute.

Catelin didn't always dream of a career in policy management. "In my teens, I remember I had the idea I wanted to be a lawyer. Once at university this changed to a desire to become a lecturer in politics or English literature! However, a three month working holiday in Japan in my honours year changed all this. I joined the Japan External Trade Organisation (JETRO) on my return to Australia and have essentially pursued a career in policy management since."

From traveling around the world and being busy in his role as CEO, Catelin thinks of one thing to do with his spare time. "I have two teenage daughters and a very tolerant and understanding wife and cannot imagine a better use of time than spending every spare minute I can with them," he said.

And if he were not CEO of WCI, what would he be doing?

"I've just renewed by contract with WCI for another three years and I'm looking forward to the challenges ahead. Eventually, I'd like to get back to Australia – maybe even to become a beekeeper!"

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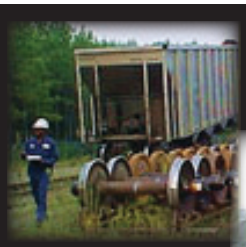

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Upcoming issue

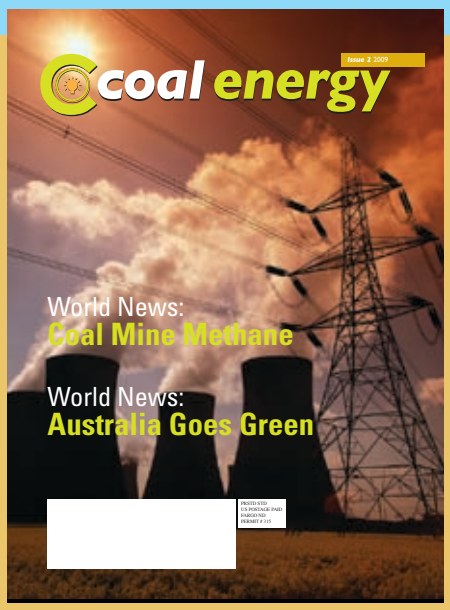
Be sure to look for the following articles in the upcoming issue of Coal Energy:

-Word News : Australia goes green

-Coal mine methane

-Coal's effect on power plant efficiency

If you have any story ideas you would like to see in the next issue, please send an e-mail to maria@martonickpublications.com.



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TieTek LLC, subsidiary of North American Technologies Group Inc (NATG), has emerged as the world leader in the engineered composite railroad tie market. The Company's tie installations have proliferated throughout leading railroads in the United States and internationally.

TieTek ties have been under test at the TTCI rail test center in Pueblo, CO, for 10 years, and have seen over 1.5 billion ton miles of heavy load traffic, without any significant wear or plate cutting. The Union Pacific Railroad has been a major supporter of installing this technology and is aware of its value and benefits in rail operating and maintenance cost management.

TieTek also has installations in numerous mining and industrial applications throughout the US and internationally. TieTek ties are winning favor due to their extraordinary long life which creates exceptional value. Compared to competitive alternatives, TieTek's engineered product performs exceptionally well where heavy load and wet environments are encountered and especially where industry or government seeks a much more environmentally attractive alternative.

Additionally, Chicago Transit Authority, a leader in the transit rail industry, awarded **TieTek** a contract to supply over 63,000 crossties for the Chicago Transit Authority Blue Line Replacement Tie Project.
Alex Rankin, NATG's Chief Executive Officer said, "The supply agreement with the Chicago Transit Authority confirms the value proposition of the company's engineered composite ties for transit applications."

Unlike other ties made with alternative materials of construction (wood, concrete, steel), **TieTek's** composite crossties do not require cast-in fastening systems or unique installation equipment. In addition, concrete tie systems have been found to require significant maintenance during the life of the ties, particularly in heavy load, wet and muddy service.

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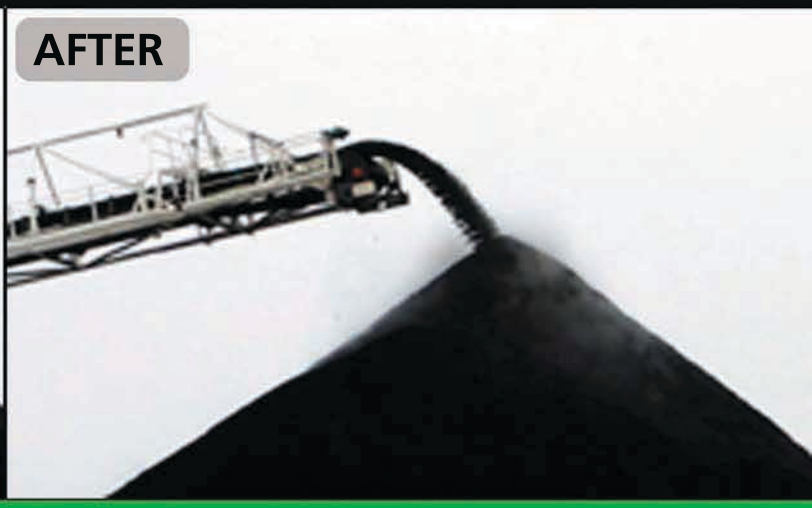

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