UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d)

of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): April 4, 2007 (April 4, 2007)

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 1-13105 (Commission File Number) 43-0921172 (I.R.S. Employer Identification No.)

CityPlace One

One CityPlace Drive, Suite 300

St. Louis, Missouri 63141 (Address, including zip code, of principal executive offices)

Registrant's telephone number, including area code: (314) 994-2700

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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Item 7.01 Regulation FD Disclosure.

On April 4, 2007, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc., will deliver a presentation at the Howard Weil 35th Annual Energy Conference that will include written communication comprised of slides. The slides from the presentation are attached hereto as Exhibit 99.1 and are hereby incorporated by reference.

A copy of the slides will be available at www.shareholder.com/archcoal/events.cfm for 30 days.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibits are attached hereto and furnished herewith.

Exhibit	
Exhibit No.	Description
99.1	Slides from the presentation at the Howard Weil 35th Annual Energy Conference.
	1

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: April 4, 2007

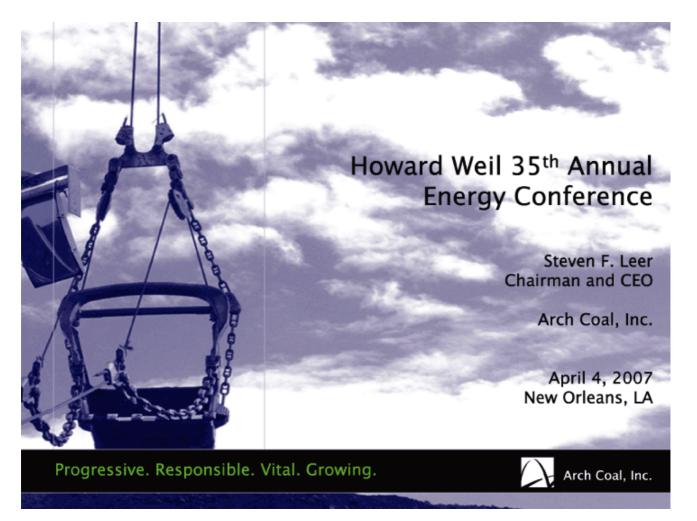
Arch Coal, Inc.

By: /s/ Robert G. Jones Robert G. Jones Vice President – Law, General Counsel and Secretary

Exhibit No. 99.1

Exhibit Index

Description Slides from the presentation at the Howard Weil 35th Annual Energy Conference.







been included at the end of this presentation.

This presentation contains "forward-looking statements" - that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from changes in the demand for our coal by the domestic electric generation industry; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from operational, geological, permit, labor and weatherrelated factors; from fluctuations in the amount of cash we generate from operations; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission.

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative to net income from operations, cash flows from operations, earnings per fully-diluted share or other measures of profitability, liquidity or performance under generally accepted accounting principles. You should be aware that our presentation of these measures may not be comparable to similarly-titled measures used by other companies. A reconciliation of these financial measures to the most comparable measures presented in accordance with generally accepted accounting principles has

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U.S. coal markets weakened in 2006, but may be on the rebound

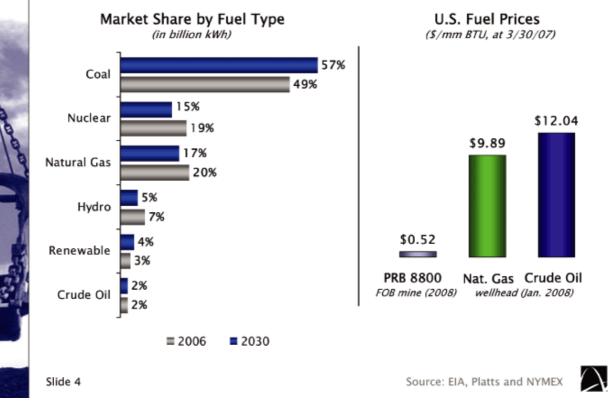
 2006 (in millions of tons) Supply +26 -10 Demand	 Factors causing demand decline Mild winter; mild summer (East) Near-record nuclear availability Strong hydro year Low gas prices allowed coal stockpile conservation efforts Led to generator stockpile increase of an estimated 35 million tons
 Correction may be near Stronger gas prices Return of normal weather Electric generation up 5% YTD Coal production flat YTD Renewed CAPP permitting issued 	 Seaborne coal markets strengthening Met market - tugging at steam Long-term supply pressures in East New plants on horizon

Source: ACI and NMA

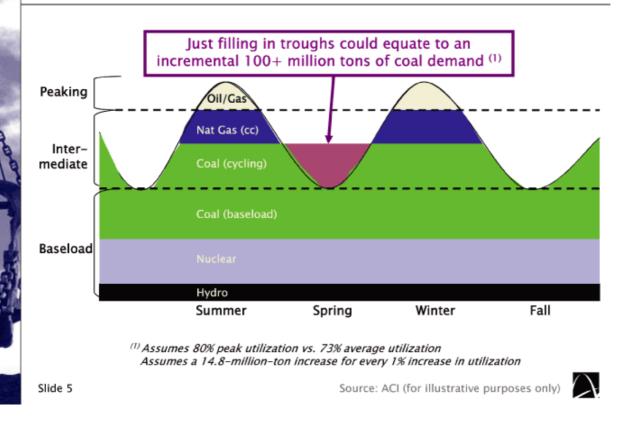




EIA projects U.S. coal use and market share to increase over next 25 years



Increased utilization at existing coal-fueled generation plants can expand demand





Construction is now underway on more than 11 GW of new coal-fueled capacity



WPS Weston #4 (Wisc.) 500 MW / June 2008



Cleco Rodemacher #3 (La.) 600 MW / June 2008



OPP Nebraska City #2 (Neb.) 663 MW / May 2009



200 MW / Jan. 2010



T.S. Power Boulder Valley (Nev.) MidAmer. Council Bluffs (Iowa) 790 MW / May 2007

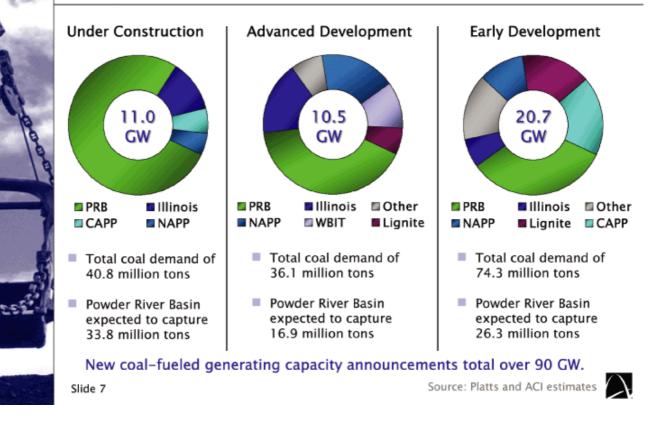


Elm Road Generating (Wis.) 600 MW / July 2009





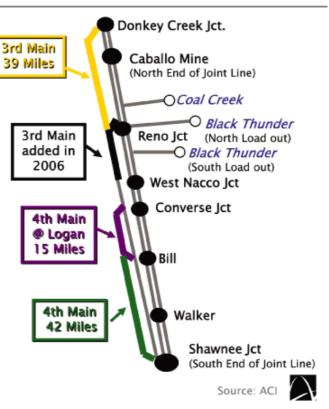
Powder River Basin is expected to supply majority of new coal-fueled capacity





We expect railroads to facilitate future growth in moving Western coals eastward

- Railroads have facilitated doubling of production in Powder River Basin since 1992
 - New expansion projects are underway
 - *39 miles of triple track to be added north of Reno Junction*
 - 15 miles of quadruple track to be added at Logan Hill
 - 42 miles of quadruple track planned for Shawnee Junction
 - These expansions are projected to increase capacity by at least 75 million tons

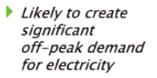


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Over the long-term, clean-coal technologies can create new markets for coal



A plug-in hybrid is one entry for coal into the transportation market





Coal can be converted into ultra-low-sulfur diesel fuel

At current oil prices, coal-to-liquids facilities appear economically feasible



- Gasification can reduce emissions & transform coal into pipelinequality natural gas
 - IGCC & CCS should enable coal to prosper in a carbon constrained world

Public policy initiatives aimed at domestic energy security are leading to energy legislation and financial incentives for clean-coal-technology development.



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Debate on potential future CO₂ regulation is focused on energy security *and* climate

Cannot reduce dependence on foreign oil without increased coal use
 Can advance clean-coal technology investment

Progress on carbon capture and storage (CCS) is accelerating

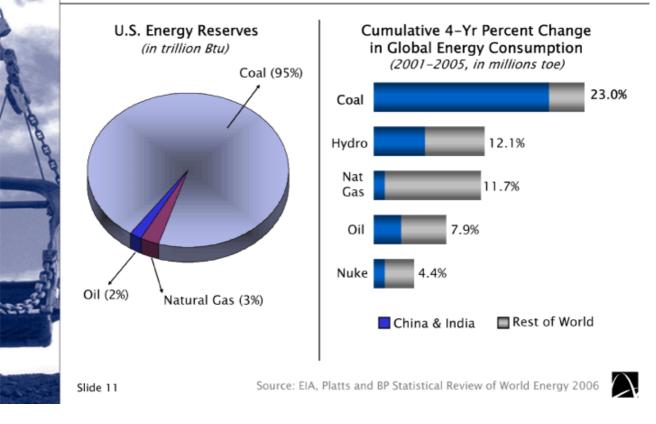
- Stabilizing CO₂ concentrations without CCS is virtually impossible
- Recent announcement by AEP shows real progress on CCS

IGCC plants are now gaining traction

- Technology providers eager to establish the industry standard
- Most realistic way to de-carbonize automotive fleet is to electrify (employing centralized CCS)
 - Plug-in hybrids increasingly viewed as key part of solution
 - Off-peak power demand will most benefit lowest cost fuels

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Coal will remain a vital part of America's and the developing world's - energy future





- One of the largest U.S. coal producers
- Headquartered in St. Louis, MO, with large, modern mining operations and strategic reserves spread across the U.S.
- Core business is providing U.S. power generators with clean-burning, low-sulfur coal for electric generation
 - Supplies roughly 11% of U.S. coal needs
 - Provides source fuel for roughly 6% of U.S. electricity
- Industry leader in mine safety, productivity and land reclamation



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Arch's long-term success hinges on three crucial areas of performance

- Operating the world's safest coal mines
- Acting as highly responsible stewards of the land and good corporate citizens
- Delivering superior shareholder value
 - Achieving industry-leading rates of productivity
 - Implementing continuous improvements and cost control initiatives
 - Serving the growing needs of our utility and industrial customers





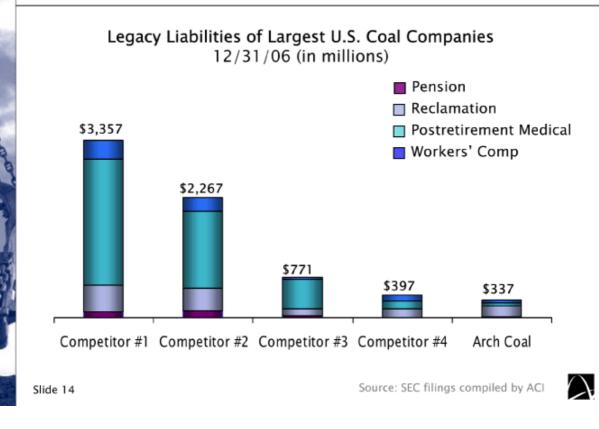


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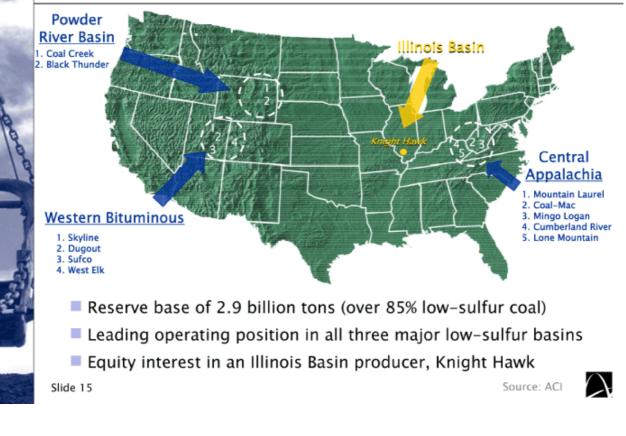


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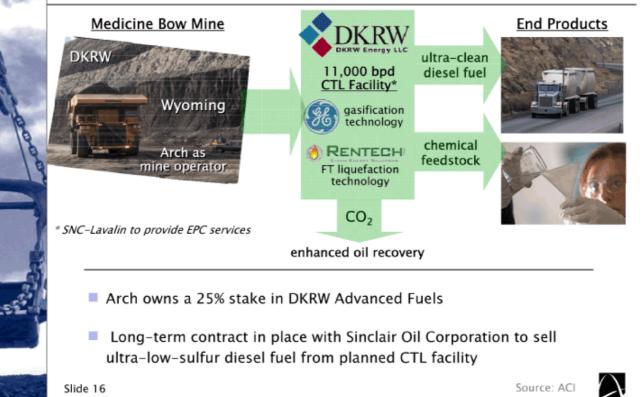
Arch has the cleanest balance sheet among major U.S. coal producers



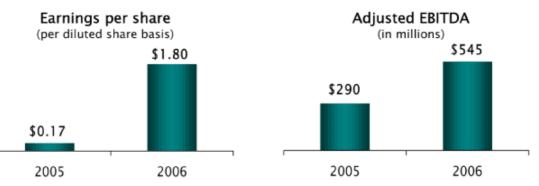
Arch's national scope of operations includes presence in four major U.S. coal basins



Arch is expanding coal markets through investment in coal-conversion technologies



Arch's 2006 operating results demonstrated significant progress



- Achieved rising price realization per ton in all regions due to the roll-off of lower-priced contracts
- Expanded operating margin per ton in all regions due to better price realization and cost control initiatives

Note: Reconciliation appears on last page of handout, may not tie due to rounding

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Arch plans to reduce production levels and contain costs in weak market cycle

Reduce production targets

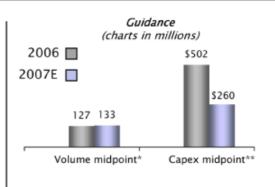
Preserve value of reserves for future when demand rebounds

Lower capital spending

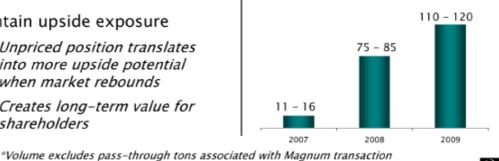
- Align spending with market demand and reduced production levels
- Focus on cost control

Maintain upside exposure

- Unpriced position translates into more upside potential when market rebounds
- Creates long-term value for shareholders



Unpriced tons at 12/31/06



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**Capex excludes reserve additions



Arch's future strategic growth possibilities are exciting







- Invest in core businesses to enhance profit growth and return on capital as well as evaluate opportunities to further upgrade and expand reserve base
- Consider acquisitions or investments that strategically fit and create shareholder value
- Expand market for coal through Btu conversion technologies that provide significant upside

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Reconciliation to Non-GAAP Measures (Adjusted EBITDA)

Adjusted EBITDA:

Adjusted EBITDA is defined as net income before the effect of net interest expense; income taxes; our depreciation, depletion and amortization; expenses resulting from early extinguishment of debt; and other non-operating expenses.

Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded to calculate Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation nor as an alternative to net income, income from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. We believe that Adjusted EBITDA presents a useful measure of our ability to service and incur debt based on ongoing operations. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

			Year Ended			
	December 31,					
		2006		2005		
		(Unaud	dited)			
Net income		260,931	\$	38,123		
Income tax (benefit) expense		7,650		(34,650)		
Interest expense, net		60,639		63,120		
Depreciation, depletion and amortization		208,354		212,301		
Expenses from early debt extinguishment and other non-operating	_	7,447	_	11,264		
Adjusted EBITDA	\$	545,021	\$	290,158		



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