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): September 7, 2006 (September 7, 2006)

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 September 7, 2006, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc., will deliver a presentation at the Lehman Brothers CEO Energy/Power 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 No.	
99.1	Slides from the presentation at Lehman Brothers CEO Energy/Power Conference.
	1

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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: September 7, 2006 Arch Coal, Inc.

By: /s/ Robert J. Messey

Robert J. Messey

Senior Vice President and Chief Financial Officer

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Exhibit Index

Exhibit No.	Description
99.1	Slides from the presentation at Lehman Brothers CEO Energy/Power Conference.



Lehman Brothers CEO Energy/Power Conference

Steven F. Leer Chairman and CEO Arch Coal, Inc.

New York, NY September 7, 2006

Progressive. Responsible. Vital. Growing.



Arch Coal, Inc.



Forward-looking information

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.

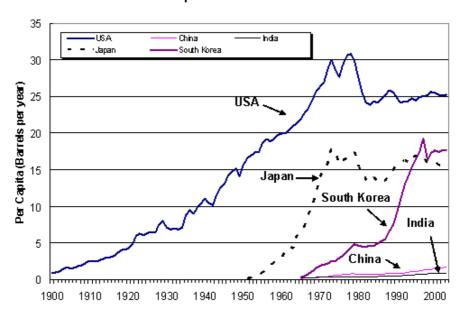
This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing 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 been included at the end of this presentation.





Economic growth around the world is putting pressure on energy markets

Oil Consumption and Industrialization



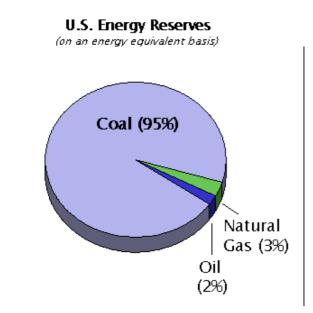
Slide 3

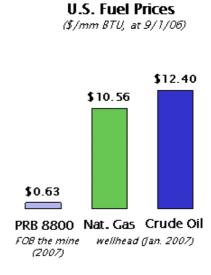
Source: BP Statistical Review of World Energy, Respective Census Bureaus, Stifel Nicolaus, Marc Faber Limited, Raymond James





Coal is the most plentiful and economical fossil fuel source for U.S. electric generation





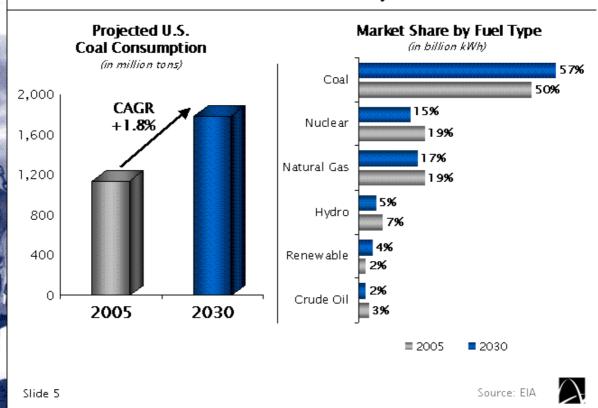
Slide 4

Source: NMA, Argus Coal Daily and NYMEX



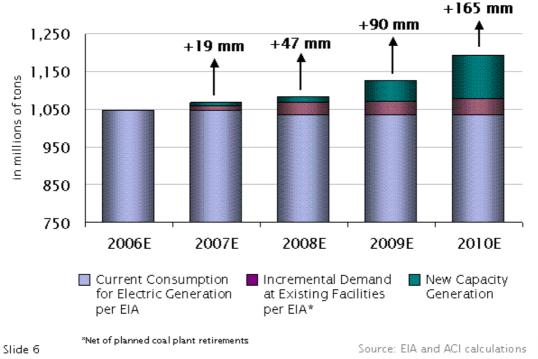
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EIA projects U.S. coal use and market share to increase over the next 25 years



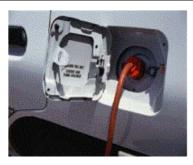


Over the near-term, incremental electricity generation will drive growth in coal demand





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
 - Likely to create significant off-peak demand for electricity
- 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

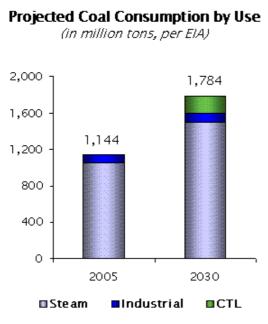
Public policy initiatives aimed at domestic energy security are leading to energy legislation and financial incentives for clean coal technology development.

Source: ACI Slide 7





The long-term implications of coal conversion technologies are profound

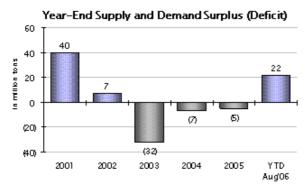


- EIA projects conversion of 190 mm tons of coal by 2030
 - At current oil prices, volumes could be higher and adoption faster
- Potential to transform coal marketplace
 - Currently captive to one principal industry
- Creates flexibility in developing new reserves
 - Steam or CTG/CTL
 - Pursue highest return development opportunity

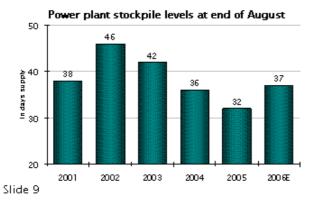




Coal production is up year-to-date after three years of shortages



- Coal consumption has outstripped demand for the past 3 years
- Coal supply has rebounded year-to-date in 2006



- Coal inventories have been rebuilt from critically low level in 2005
- Year-to-date days supply still lower than prior years

Source: EIA and ACI estimates

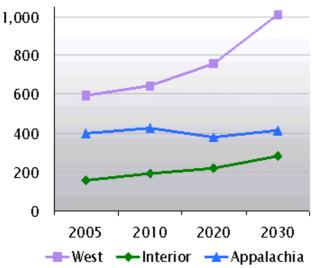




EIA expects coal supply to continue shifting from East to West

Long-Term Coal Production Forecast

(in million tons, per EIA)



- Powder River Basin will continue to supply most growth over next 5 years
- Illinois should play a larger role in future
- Western coal is expected to grow market share to close to 60% by 2030 despite scrubber technology coming online

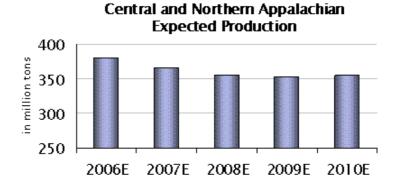
Slide 10

Source: EIA and ACI





Pressures on Appalachian coal production continue to build



- Cost pressures show no signs of abating
- Consolidation and rationalization are widely anticipated
- Loss of synfuel tax credits may idle some high cost mines
- Even largest CAPP producers have announced plans to close high-cost operations
- Only salvation appears to be substantially higher prices

Slide 11

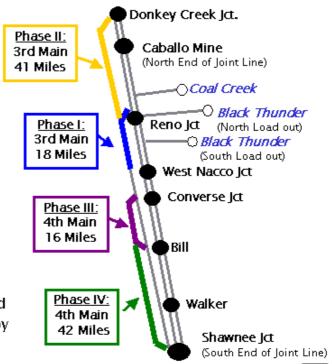
Source: ACI estimates





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

- Railroads have facilitated doubling of production in PRB since 1992
- Progress is being made:
 - Phase I: 18 miles of triple track to be added by October 2006
 - Phase II: 41 miles of triple track planned
 - Phase III & IV: 58 miles of fourth track planned
- These expansions are projected to increase joint line capacity by at least 75 million tons





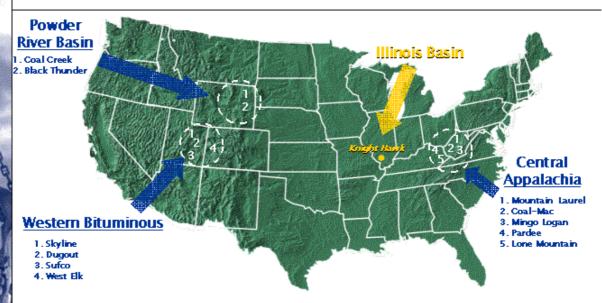
Arch Coal Overview

- Second largest U.S. coal producer and one of the largest coal producers in the world
- 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 12% of U.S. coal needs
 - Provides source fuel for roughly 6% of U.S. electricity
- Industry leader in mine safety, productivity and land reclamation

Slide 13 Source: ACI



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



- Leading operating position in all three major *low-sulfur* basins
- Equity interest in an Illinois Basin producer, Knight Hawk

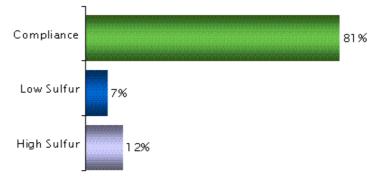
Slide 14 Source: ACI



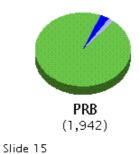


Arch's operations are supported by a unique mix of Western and Eastern reserves

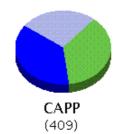
Over 80% of Arch's 3.1 billion-ton reserve base is compliance quality

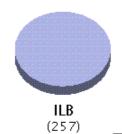


Reserves by region (in million tons)





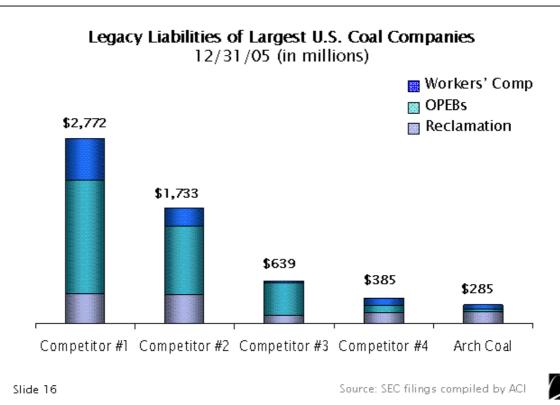




Source: ACI



Arch has the industry's cleanest balance sheet among major coal producers





Arch is focused on operating the industry's safest mines

Accident Rates Ranked by Lost-Time Incidents

Per 200,000 employee-hours worked

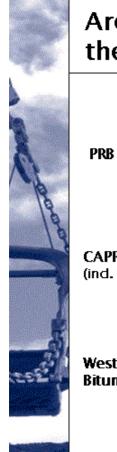


- Arch has industry leading safety practices
 - Cross-operational audits to share best practices
 - Custom training videos
 - PED communication systems
 - Test site for new communications
 - Evaluating refuge chambers
- We're also sharing our expertise with the industry and Congress

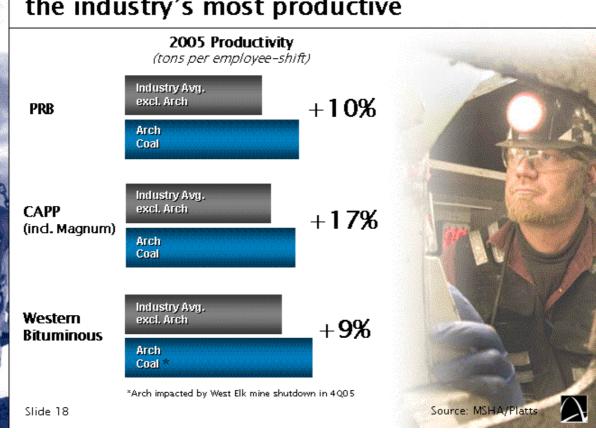
Slide 17

*MSHA Mine Injury and Worktime Quarterly Statistics





Arch's large, modern mines are among the industry's most productive





Arch continues to seek new and inventive ways to increase productivity at its mines

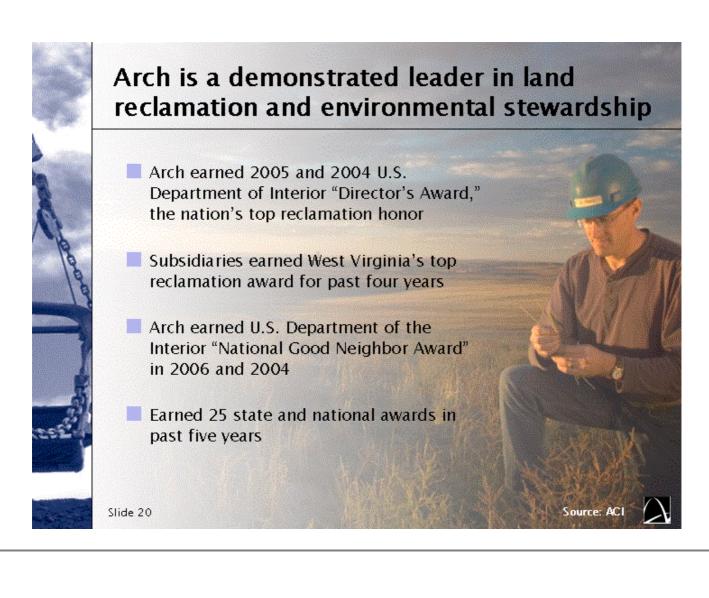
- Intensified process improvement efforts and extended best practices
 - Identify 3-5 projects per year per location with high degree of achievability and ROI
 - » One example includes extending tire life by 30%, a savings of \$3 million in 2005
- Shifted focus from optimizing production to optimizing margins
 - Predictive maintenance saved more than \$5 million in 2005
 - In 2006, expanding on predictive techniques and improving maintenance planning, scheduling, reporting and analysis





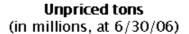


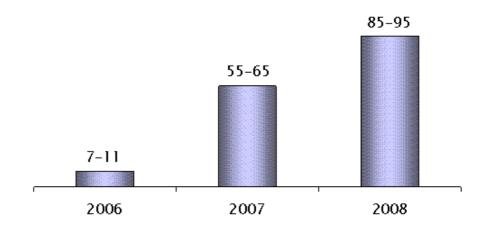






Arch is layering in new contracts while maintaining exposure to market dynamics



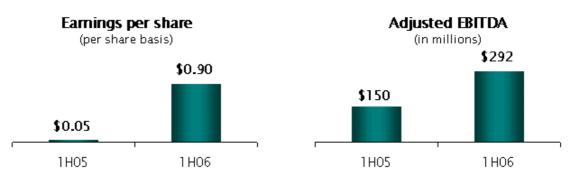


Slide 21 Source: ACI





Arch's first half 2006 operating results validate its strategy



- 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

Source: ACI





Arch is pursuing profitable growth in core basins through organic growth projects

- 2006 expansion projects are well underway
 - Reopened Coal Creek surface mine in Powder River Basin of Wyoming
 - Opened North Lease longwall mine at Skyline complex in Utah
 - Continued development of Mountaineer II longwall mine in Central Appalachia
- Potential future expansion projects
 - Development of Spruce surface mine in Central Appalachia
 - Development of surface mine in Carbon Basin of southern Wyoming

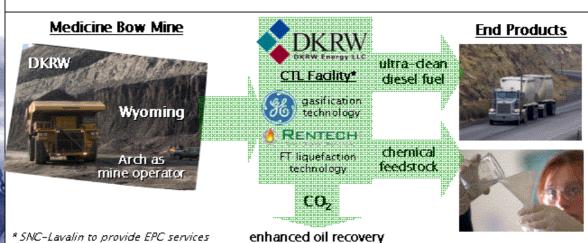




Slide 23 Source: ACI



Arch is expanding coal markets through partnership in emerging CTL industry



 Arch acquired a 25% stake in DKRW Advanced Fuels in exchange for extending and expanding the existing option agreement and investing \$25 million

Slide 24 Source: ACI





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

Source: ACI











Reconciliation to Non-GAAP Measures (Adjusted EBITDA)

Arch Coal, Inc. and Subsidiaries Reconciliation of Non-GAAP Measures

(In thousands, except per share data)

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 is clation 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.

Not in come

Income tax expense (benefit)
Interest expense, net
Depreciation, depletion and amortization
Expenses from early debt extinguishment and other non-operating

Adjusted EBITDA

2006 2005
(Uraidhed)
\$ 130,404 \$ 10,049
30,900 (600)
29,480 33,934
97,534 103,045
3,201 4,063

Sk Months Ended June 30,

\$ 291,519 \$ 150,491

Slide 26 Source: ACI

