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): June 3, 2008 (June 3, 2008)

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))

Item 7.01 Regulation FD Disclosure.

On June 3, 2008, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc., will deliver a presentation at the JP Morgan 3rd Annual Basics and Industrials 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 http://investor.archcoal.com/events.cfm for 30 days.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibit is attached hereto and furnished herewith.

Exhibit No.	Description		
99.1	Slides from the presentation at the JP Morgan 3rd Annual Basics and Industrials 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: June 3, 2008 Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones

Vice President – Law, General Counsel and Secretary

Exhibit Index

Exhibit No. Description

99.1 Slides from the presentation at the JP Morgan 3rd Annual Basics and Industrials Conference.









JP Morgan 3rd Annual Basics and Industrials Conference

Steve Leer, Chairman and CEO Arch Coal, Inc.

New York City June 3, 2008

Forward-Looking Information

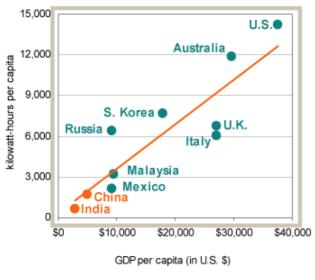
This presentation contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "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 weather-related 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.

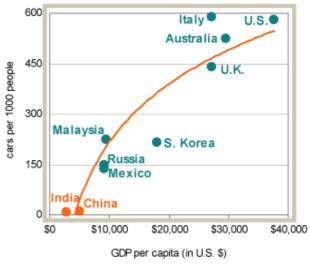


Developing nations will increase energy use, putting pressure on global supply

Electricity Usage per Capita

Passenger Vehicles per 1,000 People







Source: United Nations' Human Development Report 2007, 2006 World Development Indicators (World Bank)

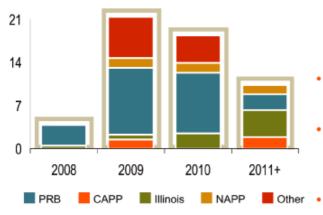
Based on current production levels and proven reserves, coal should outlast both gas supplies and oil reserves by **roughly 4 times**Arch Coal, Inc.

Source: ACI, Bank of America, BP Statistical Review 2007 and Blackwell Energy Research

Largest U.S. coal plant build-out since 1980 is ongoing, but not enough to satisfy America's energy needs

Anticipated Supply Region for Coal Plants Under Construction

(in millions of tons)



- Build-out of 16 GW equates to 59 million tons of new annual coal demand over next five years
 - Arch's reserve base positioned to service two-thirds of these plants
- Roughly 8 GW another **25 million tons** in advanced permitting stages
- Other fuels used for electric generation are challenged to grow or represent niche players
- Reality is that we need all fuels along with conservation and efficiency to meet our growing **energy needs**



Source: Platts and ACI Slide 5

Reserve margins for the U.S. power grid will fall below target levels without adequate investment

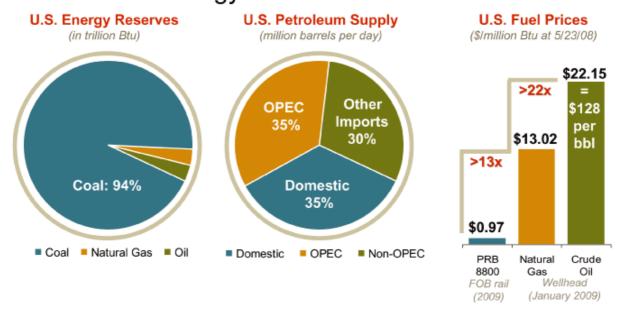
Year when reserve margin is expected to fall below target level, by region 2010 2009 2009 California New England S. Nevada Arizona 2011 **New Mexico** New York Rocky Mtn. WECC 2012 2015 FRCC 2009

America has long had one of the **world's most reliable power systems**.

Without investment, that could soon change.

Source: NERC 2007 Long-Term Reliability Assessment

Coal is – and will remain – a vital part of America's energy future





Source: EIA, Platts, Argus Coal Daily and NYMEX

Over the long term, clean-coal technologies can broaden market demand 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 transportation fuel

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



Gasification can reduce emissions and transform coal into pipeline-quality natural gas

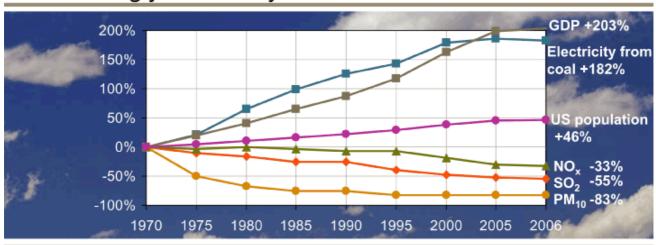
 IGCC and CCS should enable coal to prosper in a carbonconstrained world

Public policy initiatives aimed at domestic energy security are spurring **debate** on energy legislation and **incentives** for clean-coal technology development



Source: ACI Slide 8

Since 1970, coal has been used in increasingly clean ways in the United States



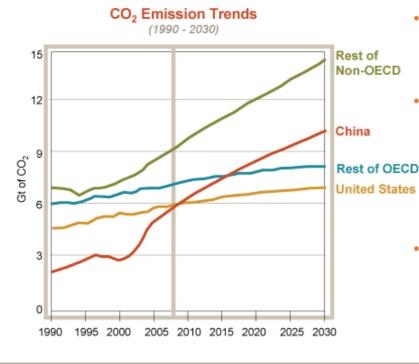
- · More progress is expected under existing regulations
- Higher efficiency rates and carbon capture technologies create opportunities for reducing carbon intensity as well



Source: NMA, EPA

NOx (Nitrogen Oxide), SO2 (Sulfur Dioxide), PM10 (Particulate Matter)

Developed nations must adopt climate solutions and export them to developing nations



- China surpassed the U.S. in GHG emissions in 2007
- The growth rate of GHG emissions in developing nations

 Rest of OECD is likely to significantly exceed that of developed nations
 - Developed nations must invest in more clean coal technology research & development



Source: IEA World Energy Outlook 2006, Guardian

Explosive growth in international coal markets underscores the shortage of energy around the globe

Americas

Americas expected to almost double net coal exports in 2008

 Driven by increase in exports from USA

Americas imports expected to decline from 2007 levels

 Driven by lower import levels into USA

Europe/Africa

Europe/Africa should increase its net imports in 2008

- Significant export declines from South Africa
- Large switch from domestic to imported coal in Europe
- Coal production declines in Europe

Asia/Pacific

Asia's net exports projected to decline significantly in 2008

- Driven by strong economic growth in developing nations
- Severe supply constraints in traditional coal export nations

Global coal supply and demand flows suggest that the world is **short of coal** by 25 million to 35 million metric tons in 2008, with continued significant supply deficits in 2009 and beyond



Source: ACI Slide 11

In the United States, Arch expects growth in coal demand to accelerate over the next three years

(in million tons)	2008	2009	2010
Growth at Existing Coal Plants	+11	+11	+11
New Coal Plant Demand 1/	4	22	19
Increase in Gross Exports	20	10	10
Decline in Imports	8	1	
Incremental Demand Growth	+43	+44	+40
Cumulative		+87	+127

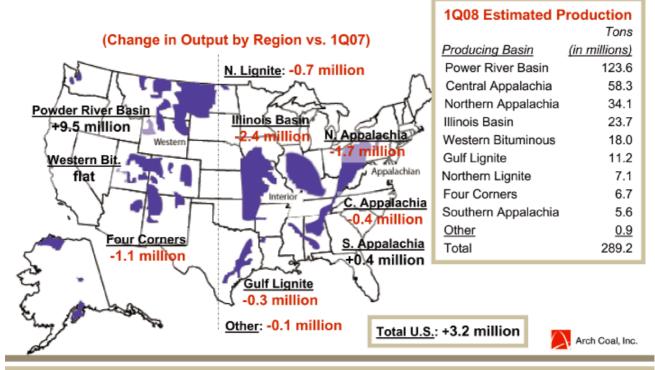
^{1/} Net of coal plant retirements.

- U.S. coal demand to grow by more than 3% annually through 2010
 - U.S. coal generation fleet has increased average utilization by 1 percent annually over the past 10 years
 - New coal plant build-out will expand coal consumption meaningfully
 - U.S. is expected to become a more significant net exporter given shortage of coal supply worldwide and available port capacity

 Arch Coal, Inc.

Source: ACI and Platts Slide 12

U.S. coal supply growth is not keeping pace with projected U.S. coal demand so far in 2008



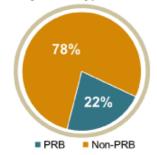
Source: MSHA and ACI

Note: Figures may not tie due to rounding

PRB coal has gained market share in border states just east of the Mississippi River

Border States East of MS

Burn by Coal Type circa 1990

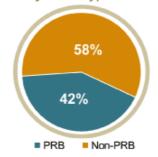


Eastern border state power plants in Wisconsin, Illinois, Tennessee and Mississippi historically

Illinois, Tennessee and Mississippi historically burned a small mix of PRB coal

Border States East of MS

Burn by Coal Type circa 1995

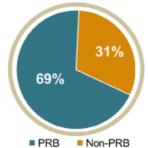


By 1995, power plants in these four states increased their mix of PRB coal from 22

PRB coal from 22 percent to 42 percent in just five years

Border States East of MS

Burn by Coal Type circa 2007



 Current 69 percent mix of PRB coal has been achieved with relatively modest capital investment

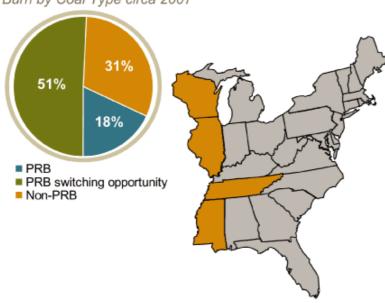
Source: ACI and Energy Velocity

*Border states represent WS, IL, TN and MS

We foresee increased PRB market expansion opportunities further east of the Mississippi River

Non-Border States East of MS

Burn by Coal Type circa 2007



- Eastern power plants in non-border states are generally comparable in design to plants in the border states
- Consequently, these nonborder state plants should be able to increase their PRB coal use significantly with minimal investment
- Based on historical switching in the border states and the lower heat content of PRB coal, the theoretical PRB switching opportunity in the East exceeds 300 million tons

Source: ACI and Energy Velocity

Arch Coal is positioned for the future





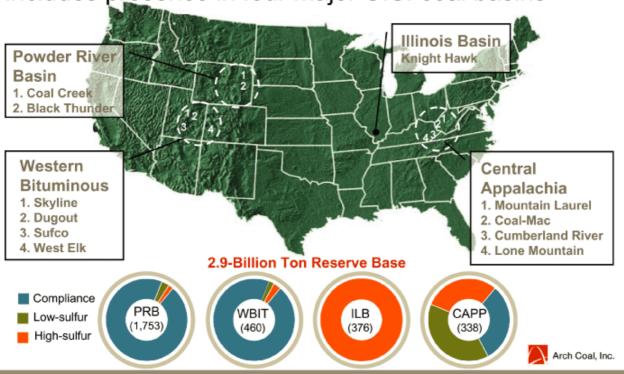


- One of the largest coal producers in the U.S.
- Core business is providing U.S. power generators with cleaner-burning, low-sulfur coal for electric generation
 - Supplies roughly 12% of U.S. coal needs
 - Provides source fuel for roughly 6% of U.S. electricity
- Talented workforce operates large, modern mines
- Industry leader in mine safety, productivity and reclamation



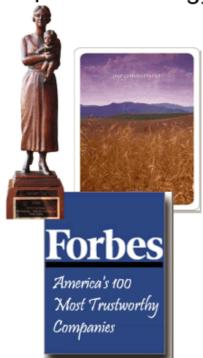
Source: ACI Slide 16

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



Source: ACI at 12/31/07 Slide 17

Arch is continuing to enhance reputation as a responsible energy company

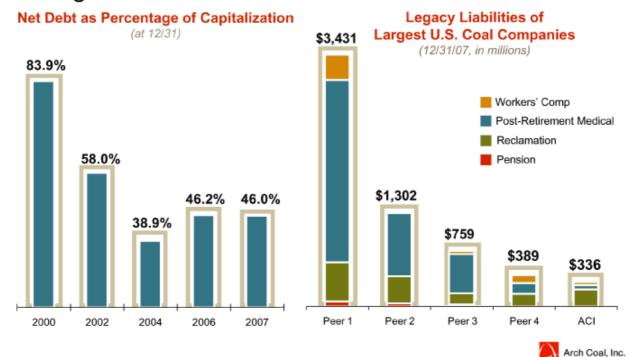


- Operating the world's safest coal mines
 - Awarded MSHA's Sentinels of Safety honor for operating the nation's safest underground coal mines in 2006 and 2007
 - Ranked first among coal industry peers for safety performance last year
- Acting as responsible citizens and good environmental stewards
 - Inaugural 2007 social responsibility report elevates awareness of Arch's environmental programs
 - Earned 3 National Good Neighbor Awards in 4 years
- Achieving superior financial performance
 - Forbes recognized Arch as one of the 100 most trustworthy U.S. companies of 2008
 - Expect 2008 to be a record earnings year for Arch



Source: ACI, Forbes Slide 18

Arch has one of the industry's strongest and cleanest balance sheets



Source: SEC filings compiled by ACI

Arch's mines are strategically positioned to respond to dynamic trends in coal markets

Central Appalachia



- Customers span five continents
- Expect to ship 4.5
 million tons into global
 and domestic met
 markets in 2008;
 5-6 million in 2009
- Pursuing incremental margin opportunities

Western Bituminous



- Export growth and supply pressures in eastern U.S. are boosting demand
- Arch benefits as largest producer
- Have signed significant export business

Powder River Basin



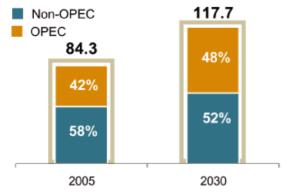
- Supply constraints in other regions and sufficient PRB rail capacity should pull coal east
- Arch will benefit from rising domestic prices
- In discussions to export PRB coal

Source: ACI Slide 20

Arch is advancing clean-coal technology development via a proposed coal-to-liquids plant in Wyoming

World Total Liquids Production

(in million barrels per day, per EIA)



- World oil consumption needs are growing, and increasingly will be supplied by OPEC
- CTL can have a positive impact on the U.S. economy, security and environment

Mine-Mouth CTL Plant



Transportation Fuel



Chemical Feedstock



- Arch owns an equity interest in **DKRW Advanced Fuels**
- Proposed plant would capture CO₂ to enhance recovery in domestic oil fields



Source: EIA and ACI Slide 21

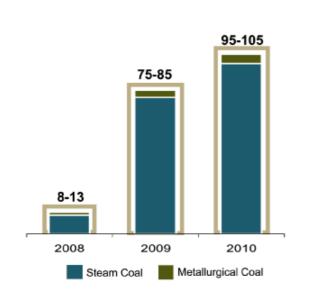
Arch's selective approach to signing new contracts retains future upside potential

Arch Unpriced Volume

(in millions of tons at 3/31/08)

Benchmark Steam Coal Index Prices

(\$/short ton for 2009 delivery as of 5/23/08; 52-week % price change)





Source: ACI, Argus Coal Daily

Arch continuously evaluates all avenues for value creation

Organic Growth

Invest in core businesses to enhance profit growth and return on capital, evaluate opportunities to further upgrade and expand reserve base

Strategic Growth

Consider acquisitions or other investments that strategically fit and create value

Shareholder Returns

Market Expansion

Consider investments to expand market for coal (and improve coal's value proposition) through Btu-conversion and other advanced coal technologies

Capital Structure Enhancement

Maintain strong balance sheet, and consider other vehicles for value creation, such as share repurchases or dividend increases, when advantageous



Source: ACI Slide 23











JP Morgan 3rd Annual Basics and Industrials Conference

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