### 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): March 23, 2009 (March 23, 2009)

#### 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:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- 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 March 23, 2009, John Eaves, President and Chief Operating Officer of Arch Coal, Inc., will deliver a presentation at the Howard Weil 37th 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  $\underline{\text{http://investor.archcoal.com/events.cfm}} \text{ for 30 days.}$ 

#### Item 9.01 Financial Statements and Exhibits.

#### (d) Exhibits

The following exhibit is attached hereto and furnished herewith.

Exhibit No. 99.1		Description
99.1	Slides from the Howard Weil 37th 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: March 23, 2009 Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones Senior Vice President—Law, General Counsel and Secretary

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#### **Exhibit Index**

Exhibit No. 99.1 Description

Slides from the Howard Weil 37th Annual Energy Conference.











### Howard Weil 37<sup>th</sup> Annual Energy Conference

John Eaves, President & COO Arch Coal, Inc.

New Orleans March 23, 2009

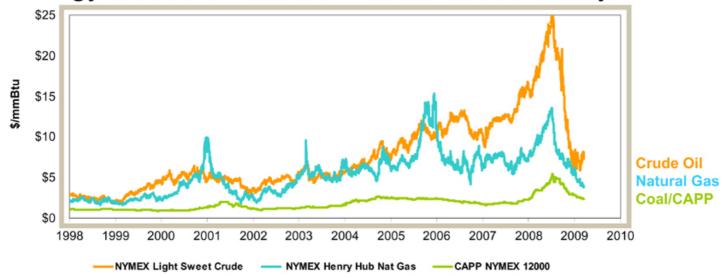
### Forward-Looking Information

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.

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.



# After an exceptionally strong first half of 2008, energy markets have weakened considerably



- Global economic recession has led to a contraction in energy demand
  - Electricity use and steel production have slowed
- Weak market trends also are spurring swift supply rationalization
  - Expansion projects are being delayed and production is being trimmed
  - Under investment in supply will set the stage for next market up-cycle

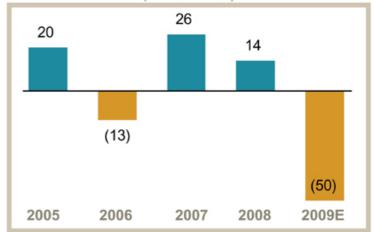
Source: ACI, NYMEX, Argus Coal Daily

## Power generation and coal consumption are likely to be down in 2009, but so will supply

- Global economic slowdown is putting pressure on coal markets in near term
  - Expect demand contraction of 50 million tons in 2009, driven by reduced power and export demand as well as the potential for natural gas displacement
- Supply rationalization is underway, and will help to rebalance markets
  - Announced domestic coal supply cuts total nearly 35 million tons
  - Lack of access to capital is causing financial distress among smaller or leveraged companies

#### Change in Consumption of U.S. Coal

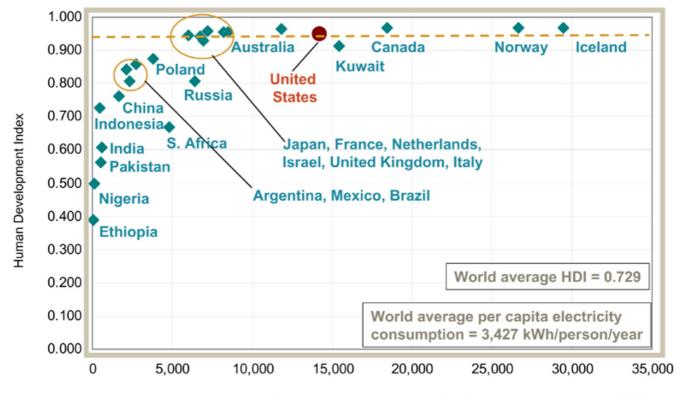
(in million tons)





Source: EEI, EIA, MSHA and ACI Slide 4

### Prosperity is linked to electricity use

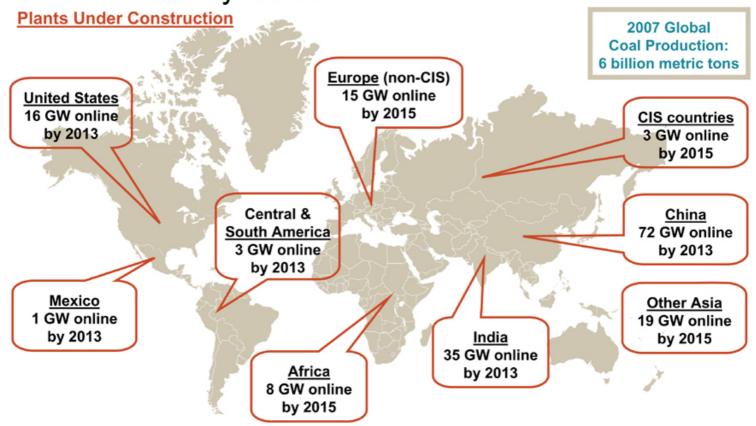


Electricity consumption per capita (in kWh)



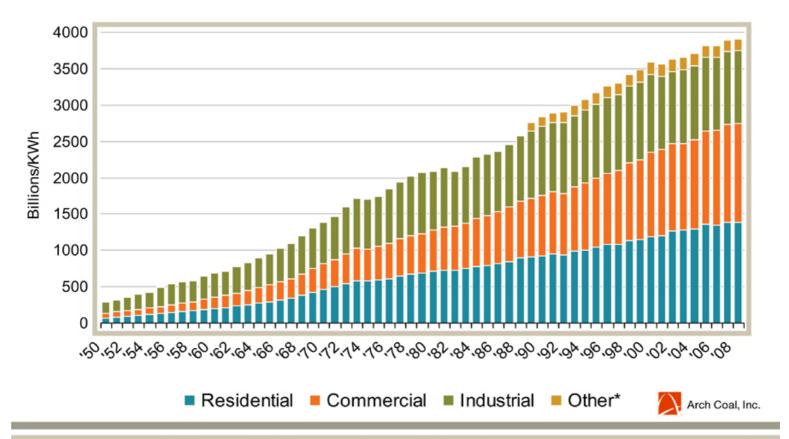
Source: United Nations Human Development Report 2007/2008

## Around the world, countries are building coal plants to fuel electricity needs



Source: ACI and Platts International

# In the United States, electricity demand has steadily climbed since 1950



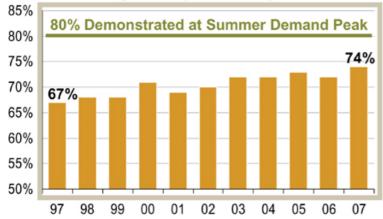
Source: EIA

\*Includes power sold directly to transportation sector and self-generating power

# U.S. coal consumption growth will be driven by increasing capacity utilization and new plant start-ups

#### Average Capacity Factors at Existing U.S. Coal-Fueled Power Plants

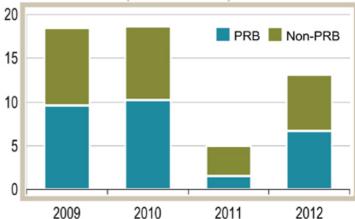
(percent of plant utilization)



- Average utilization for the U.S. coal generation fleet continues to climb
- Plants have demonstrated the ability to operate at an 80% level in summer
  - Achieving 80% utilization equates to an incremental 80 million tons annually

### Anticipated Annual Supply Needs for U.S. Coal Plants Under Construction

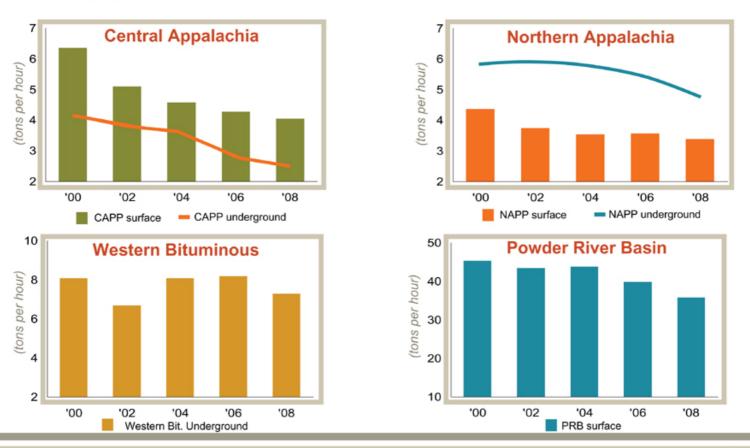




- Build-out of 16 GW through 2012 equates to 55 million tons of new annual coal demand
- PRB will likely service roughly half of this demand

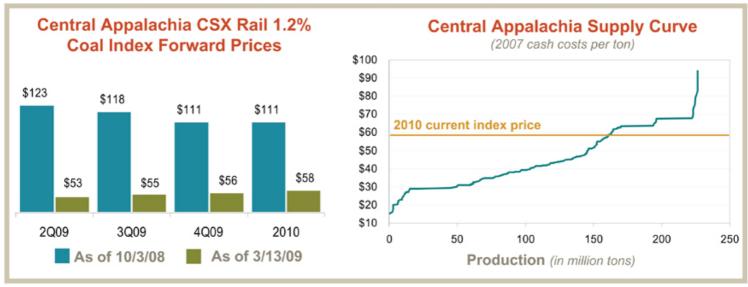
Source: Platts, EIA and ACI Slide 8

# U.S. coal mining productivity has been on the decline since the start of this decade



Source: ACI, Energy Velocity
Slide 9

# CAPP index coal prices have fallen considerably; some high-cost supply likely to disappear

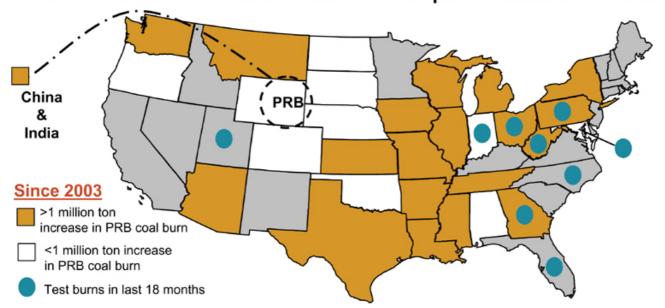


- CAPP index forward prices have fallen by 50% since last fall
- Current prices are likely below the marginal cash cost of some producers



Source: ACI and Argus Coal Daily

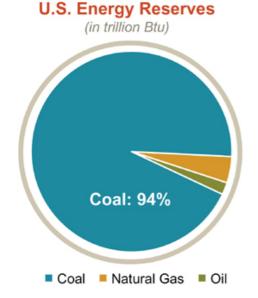
### Powder River Basin market expansion is underway

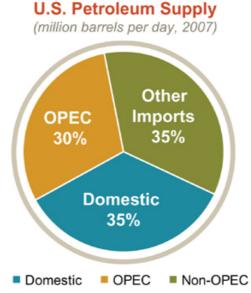


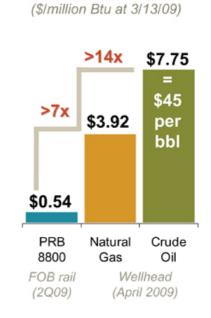
- PRB demand has grown by more than 80 million tons in past 5 years, increasing penetration of existing markets and expanding reach into new markets
- Arch has signed agreements with traditional and non-traditional PRB customers to test – as well as increase burn of – PRB coal
- This trend should help to further unlock the value of reserves in the region over time

Source: ACI Slide 11

### Coal is an affordable and secure energy choice for America





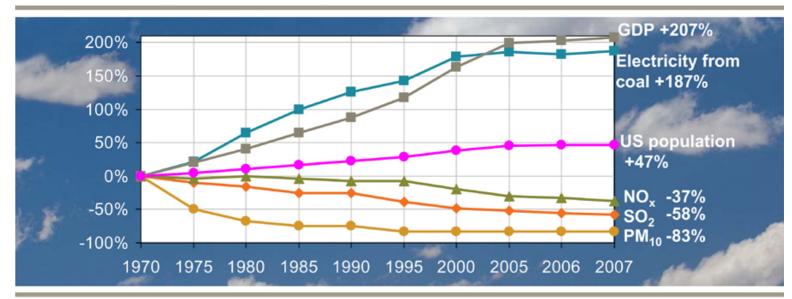


U.S. Fuel Prices



Source: EIA, BP Statistical Review of World Energy 2008, Argus Coal Daily and NYMEX

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



Higher efficiency rates and carbon capture technologies create opportunities for reducing carbon intensity as well



Source: NMA, EPA

NO<sub>x</sub> (Nitrogen Oxide), SO<sub>2</sub> (Sulfur Dioxide), PM10 (Particulate Matter)

## President Obama recognizes need for low-cost and secure energy; supports clean coal technologies



"To the extent ... that we can sequester carbon, capture greenhouse gases before they're emitted into the atmosphere, that's going to be good for everybody. Because if we don't, then we're going to have a ceiling at some point in terms of our ability to expand our economies and maintain the standard of living ..."

U.S. President Obama (2/18/09)



- Obama has announced plans to develop five "first-of-a-kind" commercial scale coal-fueled plants with carbon capture and sequestration (CCS) technology
- New stimulus bill includes \$3.4 billion to advance clean coal technologies, including CCS development

Source: ACI Slide 14

# Arch is funding university research projects dedicated to advancing clean coal technologies

The goal of the Consortium for Clean Coal Utilization at Washington University in St. Louis is to bring university researchers, industries, foundations and government organizations together to research clean coal technology.



### Washington University in St. Louis



The Clean Coal Technology Center at the University of Wyoming's School of Energy Resources is dedicated to advancing coal utilization research as well as school programs geared towards energy-related careers.





Source: ACI, university websites

### Arch Coal is well-positioned for the future

LONG-TERM FAVORABLE ENERGY TRENDS





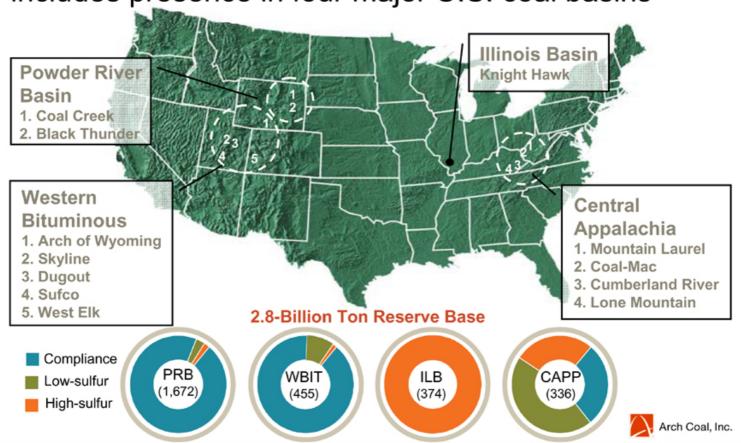


- One of the largest coal producers in the United States
- We supply roughly 12 percent of the U.S. coal supply
  - Provide cleaner-burning, low-sulfur coal to domestic power producers to fuel 6 percent of the nation's electricity
  - Ship coal to domestic and international steel manufacturers as well as international power producers
- Our talented workforce operates large, modern and efficient mines
- Industry leader in mine safety and environmental commitment



Slide 16 Source: ACI

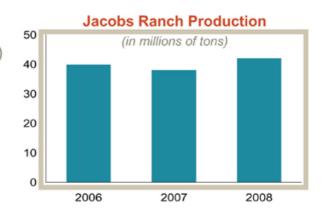
# Arch's national scope of operations and reserve base includes presence in four major U.S. coal basins



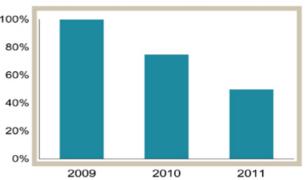
Source: ACI assigned reserves at 12/31/08

### Arch has recently announced plans to acquire the Jacobs Ranch mine in the Powder River Basin

- Purchase price of \$761 million
- 381 million tons of low-cost reserves (at 12/31/08) that are contiguous to Black Thunder
- Jacobs Ranch produced 42 million tons in 2008
  - Average quality over 8,800 Btu per pound
  - Sulfur-dioxide content < 1 lb per million Btu</li>
- Purchase includes major mining equipment:
  - Large class dragline
     Train load out
  - 8 electric shovels
     43 large haul trucks
  - Near-pit crusher and overland conveyor
- Workforce of 600 at Jacobs Ranch
- Jacobs Ranch would have contributed incremental EBITDA\* of \$145 million to \$165 million for Arch in 2009, assuming a closing date of Dec. 31, 2008



#### **Jacobs Ranch Sales Commitments**

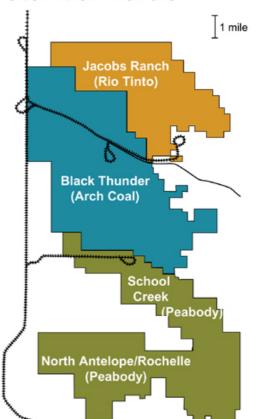


Source: ACI

\*Assumes acquisition closing date of 12/31/08; reconciliation is at end of presentation

## The integration of Jacobs Ranch into Arch's flagship Black Thunder mine will create substantial value

- · Jacobs Ranch offers compelling strategic rationale
  - Shares a 6-mile property line with Black Thunder
  - High-quality reserves with competitive mining costs
  - Jacobs Ranch is served by the joint rail line
- Integration will create one of the world's largest and most efficient mining complexes
  - Optimization of combined equipment fleet
  - Increased utilization of expanded coal handling system and state-of-the-art rail loadout
  - Greater flexibility in product blending and quality control
  - More efficient inventory management
  - Reduced net capital expenditures
  - Purchasing efficiencies
- Combined mine will have three loadouts and 22 train landing spots



Source: ACI Slide 19

# Arch's safety and environmental performance is the best among the largest public coal companies

#### **Lost-Time Safety Incident Rate**

(per 200,000 employee-hours worked)



- Arch's safety record is the best in the U.S. coal industry
  - Awarded MSHA's Sentinels of Safety honor for operating the nation's safest underground coal mines in 2006 and 2007
- Arch's environmental performance ranks first among major coal industry peers
  - Earned 5 National Good
     Neighbor Awards since 2003

Sources: ACI, MSHA Slide 20

### Arch's market-driven strategy underpins future value creation

- Reduce production targets during weak market cycles
  - Preserves future value of reserve base
- Lower capital spending levels
  - Match spending with our expectations of market demand and reduced production targets
- Diligently manage controllable costs
  - Maintain operational flexibility at our operations
- Remain patient in sales contracting
  - Layer in sales as market rebounds
  - Use of trading to optimize asset base



Source: ACI Slide 21

### Arch's future growth avenues are compelling

#### **Strategic Growth**

Consider acquisitions or other investments that strategically fit and create value

#### **Organic Growth**

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

#### 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 22

#### **EBITDA Reconciliation Chart**

Included in the accompanying presentation, we have presented certain non-GAAP measures as defined by Regulation G. The following reconciles these items to net income as reported under GAAP.

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.

Reconciliation of pro forma Adjusted EBITDA to Income from operations for Jacobs Ranch for the 12 months ended December 31, 2009

Year Ended December 31, 2009 Low High (Unaudited) 60.000 70,000 \$ Depreciation, depletion and amortization 85,000 95,000 145,000 \$ 165,000

Targeted Results

Source: ACI

Income from operations

Adjusted EBITDA











### Howard Weil 37<sup>th</sup> Annual Energy Conference

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New Orleans March 23, 2009