

ARCH COAL INC  
Form 4  
February 11, 2008

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
JONES ROBERT G

(Last) (First) (Middle)  
ONE CITYPLACE DRIVE  
(Street)

ST. LOUIS, MO 63141

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
ARCH COAL INC [ACI]

3. Date of Earliest Transaction  
(Month/Day/Year)  
02/07/2008

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

\_\_\_\_ Director \_\_\_\_\_ 10% Owner  
 Officer (give title below) \_\_\_\_\_ Other (specify below)  
VP-Law, Gen. Counsel & Secy

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price
Common stock <sup>(1)</sup>	02/07/2008		M		5,450	A	14,755
Common stock						I	4,426
							By 401(k) plan

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title Underlying (Instr. 3)
Performance-contingent phantom stock	(2)	02/07/2008		M	10,900	(3) 12/31/2008	Common stock

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
JONES ROBERT G ONE CITYPLACE DRIVE ST. LOUIS, MO 63141			VP-Law, Gen. Counsel & Secy	

## Signatures

/s/ Gregory A. Billhartz, 02/11/2008  
Attorney-in-Fact

\*\*Signature of Reporting Person Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) The reporting person received 21,800 performance-contingent phantom shares on July 28, 2005. One-half of the performance contingent phantom shares vest if the average closing price of Arch Coal, Inc.'s common stock for a period of 20 consecutive trading days meets or exceeds \$40.00, subject to the achievement of certain financial performance targets. Upon vesting of 10,900 performance contingent phantom shares on February 7, 2008, the reporting person received 5,450 shares of common stock and \$267,650 in cash.

(2) Each performance-contingent phantom share represents a right to receive one share of common or the cash value thereof, unless otherwise deferred at the reporting person's election, pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.

(3) The reporting person received 21,800 performance-contingent phantom shares on July 28, 2005. One-half of the performance-contingent phantom shares vest if the average closing price of Arch Coal's common stock for a period of 20 consecutive trading days meets or exceeds \$35.00 and the other half of the performance shares vest if the average closing price of Arch Coal's common stock for a period of 20 consecutive trading days meets or exceeds \$40.00, subject, in each case to the achievement of certain financial performance targets. On February 7, 2008, 10,900 performance-contingent phantom shares vested.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.