

JONES ROBERT G
 Form 4
 October 29, 2007

FORM 4

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

OMB APPROVAL

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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)
10/25/2007

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 Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
| | | | Code | V Amount (A) or (D) Price | | | |
| Common stock ⁽¹⁾ | 10/25/2007 | | M | 2,400 A \$ 11.4375 | 11,705 | D | |
| Common stock ⁽¹⁾ | 10/25/2007 | | S | 2,400 D \$ 37.49 | 9,305 | D | |
| Common stock | | | | | 4,418 | I | By 401(k) Plan |

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

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number.

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 and Amount of Underlying Securities (Instr. 3 and 4) | 8. Amount or Number of Shares |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|-------------------------------|
| Employee stock options (right to buy) | \$ 11.4375 | 10/25/2007 | | M | 2,400 | <u>(2)</u> 07/22/2008 | Common stock | 2,400 |

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,
Attorney-in-fact
Date: 10/29/2007

**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 exercise of employee stock options and sale of underlying shares of common stock by the executive officer reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan.
 - (2) The reporting person received 2,400 stock options on July 22, 1998. The stock options vested ratably over a three year period as follows: 800 stock options vested on July 22, 1999; 800 stock options vested on July 22, 2000; and 800 stock options vested on July 22, 2001.

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.