

FORM 3

INITIAL STATEMENT OF 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(f) of the Investment Company Act of 1940

1. Name and Address of Reporting Person*

Slone Deck S.

(Last) (First) (Middle)
CityPlace One, Suite 300

(Street)
St. Louis Missouri 63141

(City) (State) (Zip)

2. Date of Event Requiring Statement (Month/Day/Year)

04/26/01

3. IRS Identification Number of Reporting Person, if an Entity (Voluntary)

4. Issuer Name and Ticker or Trading Symbol

Arch Coal, Inc. (ACI)

5. Relationship of Reporting Person to Issuer
(Check all applicable)

- Director 10% Owner
 Officer (give title below) Other (specify below)

Vice President - Investor and Public Relations

6. If Amendment, Date of Original (Month/Day/Year)

7. Individual or Joint/Group Filing (Check applicable line)

- Form Filed by One Reporting Person
 Form Filed by More than One Reporting Person

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Table I -- Non-Derivative Securities Beneficially Owned
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1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 4)
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* If the Form is filed by more than one Reporting Person, see Instruction 5(b)(v).

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

(Print of Type Responses)

(Over)

FORM 3 (continued)

Table II -- Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Employee Stock Option (Right to buy)	7/23/00	7/22/07	Common Stock	500	27.8750	D	
Employee Stock Option (Right to buy)	7/22/01	7/21/08	Common Stock	750	22.8750	D	
Employee Stock Option (Right to buy)	2/25/00(1)	2/24/09	Common Stock	3,000	10.6875	D	
Employee Stock Option (Right to buy)	2/22/02(1)	2/21/11	Common Stock	2,900	21.9500	D	

Explanation of Responses:

(1) One-third of the shares are exercisable on such date with the rest becoming exercisable (a) one-half one year later and (b) one-half the following year.

/S/ Janet L. Horgan

May 10, 2001

**Signature of Reporting Person
(by Janet L. Horgan, Assistant Secretary
attorney-in-fact for Deck S. Slone)

Date

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations.

See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this form, one of which must be manually signed.
If space provided is insufficient, see Instruction 6 for procedure.

(Print of Type Responses)