

SPIRE CORP  
Form SC 13G/A  
February 14, 2006

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934  
Information statement pursuant to Rule 13d-1 and 13d-2

(AMENDMENT NO. 7) \*

Spire Corporation

-----  
(Name of Issuer)

Common Stock, 0.01 par value per share

-----  
(Title of Class of Securities)

848565 10 7

-----  
(CUSIP Number)

December 31, 2005

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Date of Event Which Requires Filing of this Statement

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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(continued on the following pages)

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1 NAMES OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Roger G. Little  
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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a)   
(b)

3 SEC USE ONLY  
-----

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States  
-----

5 SOLE VOTING POWER

2,230,945  
-----

NUMBER OF  
SHARES 6 SHARED VOTING POWER

0  
-----

BENEFICIALLY  
OWNED BY

EACH 7 SOLE DISPOSITIVE POWER

REPORTING  
PERSON 2,230,945  
WITH  
-----

8 SHARED DISPOSITIVE POWER

0  
-----

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,230,945  
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10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  
(SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

30.9%  
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12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN  
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- ITEM 1. (a) Name of Issuer  
Spire Corporation
- (b) Address of Issuer's Principal Executive Offices  
One Patriots Park  
Bedford, Massachusetts 01730-2396
- ITEM 2. (a) Name of Person Filing  
Roger G. Little
- (b) Address of Principal Business Office, or, if None, Residence  
One Patriots Park, Bedford, Massachusetts 01730-2396
- (c) Citizenship  
United States
- (d) Title of Class of Securities  
Common Stock, \$0.01 par value per share
- (e) CUSIP Number  
848565 10 7
- ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B) OR 13D-2(B),  
CHECK WHETHER THE PERSON FILING IS A:
- (a)  Broker or dealer registered under Section 15 of the Act.
- (b)  Bank as defined in Section 3(a)(6) of the Act. (c)   
Insurance company as defined in Section 3(a)(19) of the Act.
- (d)  Investment company registered under Section 8 of the Investment  
Company Act of 1940.
- (e)  An investment advisor registered under Section 203 of the  
Investment Advisors Act of 1940.
- (f)  An employee benefit plan, pension fund which is subject to the  
provisions of the Employee Retirement Income Security Act of  
1974 or endowment fund; see Rule 13d-1(b)(1)(ii)(F).
- (g)  A parent holding company or control person in accordance with  
Rule 13d-1(b)(ii)(G); see Item 7.
- (h)  A savings associations as defined in Section 3(b) of the  
Federal Deposit Insurance Act.
- (i)  A church plan that is excluded from the definition of an  
investment company under Section 3(c)(14) of the Investment  
Company Act of 1940.
- (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(H).

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ITEM 4. OWNERSHIP

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: See Item 9 of Cover Page
- (b) Percent of class: See Item 11 of Cover Page
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or to direct the vote: See Item 5 of Cover Page.
  - (ii) Shared power to vote or to direct the vote: See Item 6 of Cover Page.
  - (iii) Sole power to dispose or to direct the disposition of: See Item 7 of Cover Page.
  - (iv) Shared power to dispose or to direct the disposition of: See Item 8 of Cover Page.

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ].

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

Not applicable to reporting person.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON

Not applicable to reporting person.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

Not applicable to reporting person.

ITEM 9. NOTICE OF DISSOLUTION OF THE GROUP

Not applicable to reporting person.

ITEM 10. CERTIFICATION

Not applicable to reporting person.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2006  
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Signature: /s/ Roger G. Little  
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Name: Roger G. Little  
Title: President & CEO