SPIRE CORP Form 4 May 21, 2010

FORM 4

OMB APPROVAL

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

OMB 3235-0287 Number:

Check this box if no longer subject to Section 16.

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

January 31, Expires: 2005 Estimated average

0.5

Form 4 or Form 5 obligations may continue.

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

SECURITIES

burden hours per response...

See Instruction 1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person *

2. Issuer Name and Ticker or Trading

5. Relationship of Reporting Person(s) to Issuer

MAYER GUY L

Symbol SPIRE CORP [SPIR]

(Check all applicable)

(Last)

(Middle)

3. Date of Earliest Transaction

X_ Director 10% Owner Other (specify

C/O SPIRE CORPORATION, ONE

(First)

05/20/2010

(Month/Day/Year)

Officer (give title below)

PATRIOTS PARK

6. Individual or Joint/Group Filing(Check

(Street) 4. If Amendment, Date Original

Applicable Line)

Filed(Month/Day/Year)

X Form filed by One Reporting Person Form filed by More than One Reporting

BEDFORD, MA 01730-2396

(City) (State) (Zip)

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

1.Title of Security (Instr. 3)

2. Transaction Date 2A. Deemed (Month/Day/Year)

Execution Date, if

(Month/Day/Year)

3. 4. Securities TransactionAcquired (A) or Code Disposed of (D)

(Instr. 3, 4 and 5)

Code V Amount (D) Price

(A)

or

5. Amount of Securities Beneficially Owned

6. Ownership 7. Nature of Form: Direct Indirect (D) or Indirect Beneficial (I) Ownership

(Instr. 8)

Following Reported Transaction(s) (Instr. 3 and 4) (Instr. 4) (Instr. 4)

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

Persons who respond to the collection of SEC 1474 information contained in this form are not (9-02)required to respond unless the form displays a currently valid OMB control number.

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

1. Title of Derivative Security

2. Conversion or Exercise

3. Transaction Date 3A. Deemed

(Month/Day/Year) Execution Date, if any

5. Number Transaction Derivative Code Securities

Date Exercisable and **Expiration Date** (Month/Day/Year)

7. Title and Amour Underlying Securit (Instr. 3 and 4)

Edgar Filing: SPIRE CORP - Form 4

(Instr. 3) Price of (Month/Day/Year) (Instr. 8) Acquired Derivative (A) or Security Disposed of (D) (Instr. 3, 4, and 5) Code V (A) (D) Date Expiration Title Amo Exercisable Date or Num of Shar

Non-Qualified

Common 05/20/2010 05/20/2010 05/20/2020 **Stock Option** \$ 3.49 A 2,000 Stock (right to buy)

2,0

Reporting Owners

Relationships Reporting Owner Name / Address 10% Owner Officer Director Other

X

MAYER GUY L C/O SPIRE CORPORATION ONE PATRIOTS PARK BEDFORD, MA 01730-2396

Signatures

Guy L. Mayer 05/20/2010 **Signature of Date Reporting Person

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).

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.

Reporting Owners 2