

SPIRE Corp
Form DEF 14A
April 17, 2014

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

SCHEDULE 14A

(RULE 14a-101)
(Amendment No.)

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant x
Filed by a Party other than the Registrant o

Check the appropriate box:

- o Preliminary Proxy Statement
- o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- x Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material Pursuant to §240.14a-12

SPIRE CORPORATION

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

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- o Fee paid previously with preliminary materials.
Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- o

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Spire Corporation
One Patriots Park
Bedford, Massachusetts 01730-2396

**NOTICE OF SPECIAL MEETING IN LIEU OF
2014 ANNUAL MEETING OF STOCKHOLDERS**

Notice is hereby given that the Special Meeting in Lieu of 2014 Annual Meeting of Stockholders ("Meeting") of Spire Corporation ("Company") will be held at Spire Corporation, One Patriots Park, Bedford, Massachusetts, on Tuesday, May 20, 2014, at 10:00 a.m., local time, to consider and act upon the following:

1. To fix the number of directors at seven and to elect six directors to serve for one year, leaving one vacancy.
2. To ratify the selection of McGladrey LLP, as the Company's independent registered public accountants for the fiscal year ending December 31, 2014.
3. To transact such other business as may properly come before the Meeting.

Stockholders owning Company shares at the close of business on April 2, 2014 (the "record date") are entitled to receive notice of and to vote at the Meeting.

All stockholders are cordially invited to attend the Meeting.

By Order of the Board of Directors,

Michael W. O'Dougherty
Secretary

Bedford, Massachusetts
April 17, 2014

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS
FOR THE MEETING OF STOCKHOLDERS TO BE HELD ON MAY 20, 2014:**

**THE PROXY STATEMENT AND THE 2013 ANNUAL REPORT TO STOCKHOLDERS
ARE AVAILABLE ON THE INVESTORS PAGE OF OUR WEBSITE AT WWW.SPIRECORP.COM**

**WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING AND IN ORDER
TO ASSURE THAT YOUR SHARES ARE REPRESENTED AT THE MEETING,
PLEASE SIGN AND RETURN THE ENCLOSED PROXY CARD
AS PROMPTLY AS POSSIBLE IN THE ENCLOSED POSTAGE-PREPAID ENVELOPE.**

Spire Corporation
 One Patriots Park
 Bedford, Massachusetts 01730-2396

PROXY STATEMENT

Special Meeting in Lieu of
 2014 Annual Meeting of Stockholders

May 20, 2014

The Board of Directors of Spire Corporation is soliciting proxies for the Special Meeting in Lieu of 2014 Annual Meeting of Stockholders (“Meeting”). This Proxy Statement contains important information for you to consider when deciding how to vote on the matters brought before the Meeting. The Meeting will be held on Tuesday, May 20, 2014. This Proxy Statement, proxy card and the 2013 Annual Report on Form 10-K are being mailed to the stockholders on or about April 17, 2014.

PROPOSAL NUMBER ONE

ELECTION OF DIRECTORS

The Company's bylaws provide for the Board of Directors to consist of a minimum of three directors with the exact number to be voted on by the Company's stockholders at the Meeting. The Board of Directors has recommended for this Meeting that the number of directors be fixed at seven and has nominated six persons for election as directors as noted below, leaving one vacancy. Each director will hold office until the next Annual Meeting of Stockholders (or Special Meeting in Lieu of Annual Meeting of Stockholders) and until his successor is duly elected by the stockholders. For information regarding the independence of the Company's directors, see “Corporate Governance Matters” below.

Unless otherwise instructed, the persons named in the proxy will vote to fix the number of directors at seven and to elect the six nominees named below as directors, leaving one vacancy. Although the Board does not contemplate that any of the nominees will be unavailable to serve as a director, should any unexpected vacancies occur, the enclosed proxy will be voted for such substituted nominees, if any, as may be designated by the Board. In no event will the proxy be voted for more than seven directors.

All nominees currently serve as directors and have been recommended for re-election. Set forth below is information about each nominee:

| Name | Age | Position with Company | Director Since |
|-------------------------|-----|--|----------------|
| Udo Henseler | 74 | Director, Member of Audit Committee and Member of Compensation Committee | 1992 |
| David R. Lipinski | 62 | Director and Chairman of Audit Committee | 2001 |
| Mark C. Little | 52 | Director | 2004 |
| Roger G. Little | 73 | Chairman of the Board | 1969 |
| Michael J. Magliochetti | 50 | Director and Chairman of Compensation Committee | 2002 |
| Roger W. Redmond | 60 | Director, Member of Audit Committee and Member of Compensation Committee | 1991 |

Udo Henseler, Ph.D., is currently the President and proprietor of Management Services International (“MSI”), a private business initiated in 1994. MSI provides business development services for biotechnology, life sciences and other

industrial firms at various stages of their corporate evolution. Dr. Henseler has over forty years of combined global public and private company financial and operations leadership experiences mainly in the biopharmaceutical and life sciences sectors. His responsibilities encompassed positions as Director, Board Chairman, Chief Executive Officer, Chief Financial Officer, Executive Vice President, and memberships and/or Chairman of Audit, Compensation and Governance Board committees. He also taught at the now Peter F. Drucker and Masatoshi Ito Graduate School of Management, Claremont Graduate University. Dr. Henseler earned a B.A. in Germany, an M.B.A. from Fairleigh Dickinson University in New Jersey, and Masters and Ph.D. degrees from the Claremont Graduate University in Claremont, California. He also holds professional designations, in good standing, of Certified Public Accountant, Certified Management Accountant and Chartered Global Management Accountant. He served as Director and member of the Audit Committee of RTI Biologics, Inc. (formerly Regeneration Technologies, Inc.) through May 2011. Prior to it being acquired by RTI Biologics, Inc. in February 2008, Dr. Henseler served as a Director and Chairman of the Audit Committee of Tutogen Medical, Inc.

Dr. Henseler brings broad and key financial, operations, strategic planning, business development, merger and acquisition and international experiences to the Company. His prior career responsibilities, across a range of public and private companies, as director; chairman of board of directors; audit, compensation and governance committee memberships and/or chairman; chief executive officer, chief financial officer and executive vice president, impart essential expertise to the Board of Directors of the Company.

David R. Lipinski is currently a consulting engineer with Scientech, a business unit of Curtiss-Wright, a provider of highly engineered, technologically advanced products and services, practicing in electric power production, power plant license renewal and power plant life-cycle management. Previously from 2010 to 2013, Mr. Lipinski was the Executive Vice President and Chief Financial Officer of KMS Solutions, LLC, a defense professional services enterprise focused on Intelligence, Surveillance & Reconnaissance, a position he held since that company's inception. From 2006 to June 2010, Mr. Lipinski was a consulting engineer with WorleyParsons Limited, a provider of professional services to the energy and resource industries, practicing in fields relating to electric power production and power facility life-cycle management. Since 2002, he served as an independent consultant in management and finance. From September 2004 to October 2005, he was Assistant Vice President, Business Development Group of Fifth Third Bank. Mr. Lipinski has also served in certain capacities with the Company. From August 2003 to May 2004, Mr. Lipinski served as the Company's Vice President of Corporate Development and from August 2003 until November 2003, he served as the Company's Chief Financial Officer. From 2000 to 2002, he was the Vice President for Corporate Development of Stratos Lightwave, Inc., a manufacturer of optoelectronic components and interconnection products used in optical communications and data networking. From 2000 until the adoption of a merger in January 2011, Mr. Lipinski was a director of Optelecom-NKF, Inc., a manufacturer of voice, video and data communications modules where he chaired the Compensation Committee and served on the Audit Committee and the Governance Committee. He holds a B.S. in Physics from the United States Naval Academy, an M.B.A. from the University of New Haven, and a Master of Engineering from the University of Illinois. He is a registered Professional Engineer and a retired Captain of the United States Naval Reserve.

Mr. Lipinski brings extensive knowledge of complex financial, technical and operational issues facing the Company's solar energy business. He also brings transactional expertise including mergers and acquisitions, equity offerings and bank financings.

Mark C. Little is currently the President and Chief Executive Officer of N2 Biomedical, LLC, a company that provides advanced medical device surface treatment processes. He also serves on the board of directors of N2 Biomedical, LLC. The Company and its subsidiary, Spire Biomedical, Inc., sold all of the assets of the Company's biomedical business to N2 Biomedical, LLC in September 2013. Prior to September 2013, Mr. Little served in various positions of increasing responsibility with the Company, including as the Company's Medical Device Engineer; Assistant General Manager, Biomedical; General Manager, Spire Biomedical; Vice President and General Manager, Spire Biomedical; and most recently as Chief Executive Officer, Spire Biomedical. He holds a B.A. from Flagler College. Mr. Little is the son of Roger G. Little, Chairman of the Company's Board of Directors.

Mr. Little has extensive operational, strategic and senior management experience in the biomedical industry, including prior experience at the Company.

Roger G. Little was the founder of the Company in 1969. He served as Chief Executive Officer and President of the Company from the Company's formation until his retirement on December 31, 2013. Mr. Little continues to serve as Chairman of the Board of Directors, a position he has held since 1969. During his career, he served on many committees and advisory boards related to small business innovative research, the transfer and commercialization of technology, the worldwide growth of the photovoltaics industry, and the development of sound renewable energy policies. Mr. Little holds a B.A. in Physics from Colgate University and a M.S. in Physics from the Massachusetts Institute of Technology. Mr. Little is also a member of the Board of Directors of N2 Biomedical, LLC. Mr. Little is

the father of Mark C. Little, President and Chief Executive Officer of N2 Biomedical, LLC.

As the original founder and the Company's largest shareholder, Mr. Little leads the Board with his own history of innovation and strategic vision for the Company. Mr. Little brings extensive business knowledge of the Company, its business and the photovoltaics industry to the Board.

Michael J. Magliochetti, Ph.D., is currently serving as an Operating Partner with Riverside Partners, LLC, a private equity firm focused on investing in middle market healthcare and technology companies. From 2012 to 2011, he served as Chief Executive Officer of OPKO Diagnostics, LLC, a point-of-care in-vitro diagnostics firm and wholly owned subsidiary of OPKO Health, Inc. Dr. Magliochetti executed the sales transaction of Claros Diagnostics, where he was serving as Chief Executive Officer, to OPKO in 2011. He previously served as Entrepreneur-in-Residence with Oxford Bioscience Partners LP, a life science venture capital

firm. Dr. Magliochetti previously served as Chief Executive Officer of Rehab Medical Holdings, Inc., an orthopedics company, which was acquired; Chief Executive Officer of HemaMetrics Corporation, a dialysis blood monitoring/diagnostic technology company; and UroSurge Corporation, a company specializing in products for the urology market of which a sale transaction was executed. He has held senior positions with the medical device company Haemonetics Corporation; the polymer products company Delta Surprenant; and an assignment with the U.S. Army Research Command. Dr. Magliochetti has served as Advisory Board Chairman for the Sophia Gordon Cancer Center and Robert E. Wise Science Foundation at Lahey Clinic. He has served on the Pediatric Angels Advisory Group at Boston Children's Hospital, The Institute for Pediatric Innovation, and as an Adjunct Professor of Biomedical Engineering at the University of Iowa. Dr. Magliochetti holds B.S. and Ph.D. degrees in Chemical Engineering from Northeastern University and the University of Massachusetts at Amherst, respectively, and a High Technology M.B.A. from Northeastern University.

Dr. Magliochetti has been selected to serve as a director of the Company because he has substantial experience working in chief executive officer and director roles in the biomedical industry. Along with his academic knowledge, Dr. Magliochetti brings his valuable experience in operations management, strategic development, mergers and acquisitions and governance matters to the Board.

Roger W. Redmond is currently Vice President and Senior Portfolio Manager of US Bank, a financial services firm. Previously from 2011 to 2013, Mr. Redmond was Senior Vice President for Marquette Asset Management, Inc., an investment management and trust services firm. From 2006 to June 2011, Mr. Redmond was Vice President and Senior Investment Manager for Wells Fargo & Company, a financial services firm. Previously from July 2004 to July 2006, Mr. Redmond was a Partner, Chief Investment Officer of Stillwater Investment Management, LLC, an independent, registered investment advisory firm. He was designated a Chartered Financial Analyst in 1988. Mr. Redmond holds a B.S. in Chemistry from the University of Arizona and an M.B.A. in Finance from the University of Minnesota.

Mr. Redmond has extensive knowledge of capital markets, investment banking and risk analysis from his 25 years of experience in the financial services industry. Given his strong financial expertise, he is invaluable to the Board's discussions of the Company's capital and liquidity needs.

The Board of Directors recommends a vote "FOR" fixing the number of directors at seven and for electing the six nominees listed above, leaving one vacancy.

PROPOSAL NUMBER TWO

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

The Audit Committee annually considers and selects the Company's independent registered public accountants. On March 20, 2014, the Audit Committee selected McGladrey LLP to act as the Company's independent registered public accountants for the fiscal year ending December 31, 2014.

The persons named in the enclosed proxy will vote to ratify the selection of McGladrey LLP as the Company's independent registered public accountants for the fiscal year ending December 31, 2014 unless otherwise directed by the stockholders. Stockholder ratification of McGladrey LLP as the Company's independent registered public accountants is not required by the Company's bylaws or otherwise. However, the Company is submitting the selection of McGladrey LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders do not ratify the selection of McGladrey LLP as the Company's independent registered public accountants, the Audit Committee will reconsider the selection of such independent registered public accountants. Even if the selection is ratified, the Audit Committee may, in its discretion, direct the appointment of a different independent registered public

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accountant at any time during the year if it determines that such a change would be in the best interest of the Company and its stockholders.

The Board of Directors recommends a vote “FOR” the ratification of the selection of McGladrey LLP as the Company's independent registered public accountants for the fiscal year ending December 31, 2014.

3

CORPORATE GOVERNANCE MATTERS

The Board of Directors

The Board of Directors of the Company held four meetings during 2013. Each incumbent director attended 75% or more of the aggregate of: (1) the total number of Board meetings; and (2) the total number of meetings of the committee(s) of which he is a member, if any. The Company does not have a written policy on board attendance at annual meetings of stockholders; however, it does schedule a board meeting immediately after the annual meeting (or special meeting in lieu thereof) for which members attending receive compensation. In 2013, all Board members were present during the Special Meeting held in Lieu of the 2013 Annual Meeting of Stockholders. The table below describes the Board's committees.

| Committee Name | Members | Number of Meetings in 2013 | Principal Functions |
|------------------------|--|----------------------------|--|
| Audit Committee | U. Henseler D. Lipinski R. Redmond | 7 | <ul style="list-style-type: none"> - Oversee the Company's auditing, accounting and financial reporting processes. - Appoint, compensate, evaluate and, where appropriate, replace independent accountants. - Oversee the Company's compliance with tax, legal and regulatory requirements. |
| Compensation Committee | U. Henseler M. Magliochetti R. Redmond | 2 | <ul style="list-style-type: none"> - Oversee and evaluate the Company's compensation programs and compensation of its executives. - Annually determine Chief Executive Officer's base salary and payments under the Company's annual incentive bonus program and long-term deferred compensation plan. - Recommend or approve other executive officers' compensation, including annual performance objectives. - Recommend compensation of Directors to the full Board of Directors. |

Director Independence

The Board of Directors has determined that Drs. Henseler and Magliochetti and Messrs. Lipinski and Redmond are "independent," as independence is defined in the listing standards for the Nasdaq Stock Market. Accordingly, four of the six director nominees are independent.

Board Leadership Structure

The Company currently has separate individuals serving as Chairman of the Board of Directors and its principal executive officer. Roger G. Little served as the Company's Chief Executive Officer and President since founding the Company in 1969 until his retirement on December 31, 2013. He continues to serve as Chairman of the Board of Directors, a position he has held since the Company's formation. Mr. LaFavre was appointed the Company's President and Chief Executive Officer on January 1, 2014. Mr. LaFavre, as the Company's Chief Executive Officer, manages the business, while Mr. Little, as the Company's Chairman, leads the Board in overseeing management.

The Board believes that the separation of these positions is currently serving the Company well, and intends to maintain this separation where appropriate and practicable in the future. However, the Board does not believe that it is appropriate to prohibit one person from serving as both Chairman and Chief Executive Officer and, for a company of

its size, that there is a uniform solution for a board leadership structure. In the past, the Company has combined the positions of Chairman and Chief Executive Officer. The Board believes that the right structure should be informed by the needs and circumstances of the Company, the Board and its stockholders, and it may return to its prior leadership structure if the separation of these positions is no longer practicable.

As described above, four of the Company's six director nominees are independent. In addition, all of the directors on each of the Audit Committee and Compensation Committee are independent directors and each of these committees is led by a committee chair. The committee chairs set the agendas for their committees and report to the full Board on their work. Furthermore, nominees for director are recommended for the Board's selection by a majority of the independent directors. The Company does not have a lead director, but the Company's independent directors meet in executive session without management present as frequently as they deem appropriate, typically at the time of each regular Board meeting. All of the Company's independent directors are highly accomplished and experienced business people in their respective fields, who have demonstrated leadership in significant enterprises and are familiar with board processes. The Company's independent directors bring experience, oversight and expertise from outside the Company and industry, while Roger G. Little, the Company's Chairman and former Chief Executive

Officer; and Mark C. Little, the former Chief Executive Officer of its Spire Biomedical division, bring company-specific experience and expertise.

Risk Oversight

While the Board of Directors is responsible for overseeing the Company's risk management, the Board has delegated many of these functions to the Audit Committee. Under its charter, the Audit Committee is responsible for discussing with management and the independent auditors the Company's major financial risk exposures, the guidelines and policies by which risk assessment and management is undertaken, and the steps management has taken to monitor and control risk exposure. In addition to the Audit Committee's work in overseeing risk management, the full Board regularly engages in discussions of the most significant risks that the Company is facing and how those risks are being managed, and the Board receives reports on risk management from senior officers of the Company and from the chair of the Audit Committee. In addition, the Chairman's extensive knowledge of the Company uniquely qualifies him to lead the Board in assessing risks. The Board of Directors believes that the work undertaken by the Audit Committee, together with the work of the full Board along with the Chairman and Chief Executive Officer, enables the Board to effectively oversee the Company's risk management function.

The Audit Committee

The Board of Directors has determined that all members of the Audit Committee are "independent," as independence for the Audit Committee members is defined in the listing standards for the Nasdaq Stock Market. The Company's Board of Directors has determined that Dr. Udo Henseler, member of the Audit Committee, is an "audit committee financial expert" within the meaning of applicable regulations of the Securities and Exchange Commission, based on Dr. Henseler's business experience, as described in his biography. For further information regarding the Audit Committee, see the "Audit Committee Report" beginning on Page 14 of this Proxy Statement.

The Nomination Process

The Company does not currently have a standing nominating committee or a charter for the nomination process. The Company does not have a nominating committee because it believes that obtaining opinions and advice from all directors in connection with Board nominations enhances the nomination process. Nominees for directors are recommended for the Board's selection by a majority of the independent directors. In March 2005, the Company adopted a Board resolution addressing the nominations process, which provides substantially as follows:

1. A majority of the independent directors (the "Majority") shall identify individuals believed to be qualified as candidates to serve on the Board and shall recommend that the Board select the candidates for all directorships to be filled by the Board or by the shareholders at an annual or special meeting. In identifying candidates for membership on the Board, the Majority shall take into account all factors it considers appropriate, which may include strength of character, mature judgment, relevant skills and the extent to which the candidate would fill a present need on the Board.

2. The Majority shall conduct all necessary and appropriate inquiries into the backgrounds and qualifications of possible candidates and, in that connection, shall have sole authority to retain any search firm to be used to assist it in identifying candidates to serve as directors.

3. The Majority shall review and make recommendations, as it deems appropriate, regarding the size and composition of the Board in order to ensure that the Board has the requisite expertise and that its membership consists of persons with sufficiently diverse backgrounds. The Majority is aware that one member of the Board should meet the criteria for an "audit committee financial expert" as defined by Securities and Exchange Commission rules, and that a

majority of the members of the Board must be comprised of “independent directors” as defined in the rules of the Nasdaq Stock Market. The Majority also believes it is appropriate for certain members of the Company's management to participate as members of the Board.

4. The Majority will consider candidates for director recommended by stockholders of the Company. There are no differences in the manner in which the Majority evaluates director nominees recommended by stockholders. Stockholders who wish to recommend director candidates should communicate names of such candidates, with relevant information on their qualifications, to the Secretary, at the address on the first page of this Proxy Statement. The Secretary will forward copies of such stockholder recommendations to the independent directors for their consideration.

5

While the Company does not have a formal diversity policy for Board membership, as noted above, the Board does seek to ensure that its membership consists of sufficiently diverse backgrounds, meaning a mix of backgrounds and experiences that will enhance the quality of the Board's deliberations and decisions. In considering candidates for the Board, the independent directors consider, among other factors, diversity with respect to viewpoint, skills and experience.

As indicated above, the independent directors will consider candidates for director recommended by stockholders of the Company. The procedures for submitting stockholder recommendations are explained below under "Stockholder Proposals" beginning on Page 16.

The Compensation Committee

The Compensation Committee of the Board of Directors is composed of three members, all of whom satisfy the independence standards for Compensation Committee members under the rules of the Nasdaq Stock Market, and operates under a written charter. A copy of the Compensation Committee Charter is available to stockholders on the Investors - Corporate Governance page of the Company's website at www.spirecorp.com. In 2013, the Compensation Committee was composed of Dr. Magliochetti (chairman), Dr. Henseler and Mr. Redmond.

STOCKHOLDER COMMUNICATIONS TO THE BOARD

Stockholders may contact an individual director, the Board as a group, or a specified Board committee or group, including the non-employee directors as a group, in writing and mailed to:

Spire Corporation
One Patriots Park
Bedford, Massachusetts 01730-2396
Attn: Board of Directors

Each communication should specify the applicable addressee or addressees to be contacted as well as the general topic of the communication. The Company will initially receive and process communications before forwarding them to the addressee. The Company generally will not forward to the directors a stockholder communication that it determines to be primarily commercial in nature or relates to an improper or irrelevant topic, or that requests general information about the Company.

COMPLIANCE WITH SECTION 16(a) OF THE SECURITIES EXCHANGE ACT OF 1934

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's directors and executive officers, and persons who own more than 10% of a registered class of the Company's equity securities, to file with the Securities and Exchange Commission reports of ownership and changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than 10% shareholders are required by Securities and Exchange Commission regulations to furnish the Company with copies of all Section 16(a) forms they file.

Based solely on review of the copies of such reports furnished to the Company or written or oral representations that no other reports were required, the Company believes that during 2013, all filing requirements applicable to its officers, directors and greater than 10% beneficial owners were complied with.

OWNERSHIP OF SECURITIES

The following table shows how the Company's common stock is owned by the Company's directors and the executive officers named in the Summary Compensation Table under "Compensation of Officers and Directors" and by owners of more than 5% of the Company's outstanding common stock as of March 3, 2014. Each person or entity, except Royce & Associates, LLC, maintains a mailing address c/o Spire Corporation, One Patriots Park, Bedford, Massachusetts 01730-2396.

Security Ownership of Certain Beneficial Owners and Management

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership (1) (2) | Percent of Common Stock (3) |
|---|---|-----------------------------|
| Directors and Named Executive Officers: | | |
| Udo Henseler (4) | 82,292 | * |
| Rodger W. LaFavre (5) | 75,750 | * |
| Robert S. Lieberman (6) | 22,500 | * |
| David R. Lipinski (7) | 69,700 | * |
| Mark C. Little (8) | 110,675 | 1.20% |
| Roger G. Little (9) | 2,140,205 | 23.24% |
| Michael J. Magliochetti (10) | 65,374 | * |
| Roger W. Redmond (11) | 75,228 | * |
| All directors and executive officers as a group (9 persons) | 2,689,474 (12) | 29.21% |
| 5% Stockholders: | | |
| Royce & Associates, LLC | | |
| 745 Fifth Avenue | 753,720 | 8.19% |
| New York, New York 10151 (13) | | |

* Less than 1% of the outstanding common stock.

(1) Includes shares for which the named person:

has sole voting and investment power, or has shared voting and investment power with his spouse, unless otherwise indicated in the footnotes.

(2) Includes shares that can be acquired through stock option exercises through May 2, 2014.

(3) Based on 9,207,874 shares of common stock outstanding as of March 3, 2014. Shares of common stock which an individual or group has a right to acquire through May 2, 2014 (60 days of March 3, 2014) are deemed to be outstanding for purposes of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for purposes of computing the percentage ownership of any other person shown on the table.

(4) Includes 62,872 shares that can be acquired through stock option exercises through May 2, 2014.

(5) Includes 75,750 shares that can be acquired through stock option exercises through May 2, 2014. Amount does not include 7,694 shares indirectly held by the Spire Corporation 401(k) Profit Sharing Plan.

(6) Includes 22,500 shares that can be acquired through stock option exercises through May 2, 2014.

(7) Includes 68,500 shares that can be acquired through stock option exercises through May 2, 2014.

Includes 4,000 shares that can be acquired through stock option exercises through May 2, 2014. Also includes
(8) 6,315 shares that are held by his spouse, with respect to which Mr. Little disclaims beneficial ownership, and
5,390 shares held by Mr. Little as custodian for his minor son. Amount does not include 9,384 shares indirectly
held by the Spire Corporation 401(k) Profit Sharing Plan.

7

Includes 2,000 shares that can be acquired through stock option exercises through May 2, 2014. Also includes (9) 2,109,305 shares of common stock held in a Trust of which Mr. Little is the primary beneficiary. Amount does not include 18,914 shares indirectly held by the Spire Corporation 401(k) Profit Sharing Plan and 5,069 shares held by his spouse indirectly by the Spire Corporation 401(k) Profit Sharing Plan.

Amount does not include 845,241 shares issued pursuant to the Non-Qualified Deferred Compensation Plan for Roger Little. The Trustee of the Deferred Compensation Plan Trust is required to hold those shares in the trust until such time as such shares are to be distributed to Mr. Little in accordance with the terms of the Deferred Compensation Plan and is required to vote the shares as directed by the Compensation Committee. See “Non-Qualified Deferred Compensation Plan” below.

(10) Includes 65,374 shares that can be acquired through stock option exercises through May 2, 2014.

(11) Includes 68,500 shares that can be acquired through stock option exercises through May 2, 2014.

(12) Includes an aggregate of 369,496 shares that can be acquired through stock option exercises through May 2, 2014.

All information relating to beneficial ownership of common stock was obtained from the Schedule 13G/A filed on (13) January 14, 2014 with the Securities and Exchange Commission. Royce & Associates, LLC is an investment adviser with sole power to vote and dispose of these shares.

EXECUTIVE OFFICERS

The following table provides information on the executive officers of the Company. All the executive officers have been elected to serve until the Board meeting following the next annual meeting of stockholders (or Special Meeting in Lieu thereof) and until their successors have been elected and qualified.

| Name | Age | Position |
|---------------------|-----|---|
| Stephen J. Hogan | 62 | Executive Vice President and General Manager, Spire Solar |
| Rodger W. LaFavre | 64 | President and Chief Executive Officer |
| Robert S. Lieberman | 62 | Chief Financial Officer and Treasurer |

Stephen J. Hogan joined the Company in 1984 as Manager, Process Development and has served in various positions of increasing responsibility since that time. He was named Sales Manager, Photovoltaic Equipment, in 1988; Manager of Engineering and Manufacturing in 1990; Director of Photovoltaic Business Development in March 1997; Vice President and General Manager, Photovoltaics, in November 1997; and Executive Vice President and General Manager, Spire Solar in November 2000.

Rodger W. LaFavre joined the Company in 2000 as Vice President, Utility Marketing of Spire Solar Operations and has held positions of increasing responsibility since that time. He was named Vice President and Chief Financial Officer of Spire Solar in June 2002, Chief Operating Officer of Spire Solar in November 2002, Chief Operating Officer of the Company in February 2005, and was appointed the Company's President and Chief Executive Officer on January 1, 2014. Prior to joining the Company, Mr. LaFavre was Vice President of Stone & Webster Engineering Corporation, a worldwide engineering and construction company, where he was responsible for business development, corporate planning and the entity's Asia subsidiary.

Robert S. Lieberman, CPA, joined the Company in April 2009 as the Corporate Controller. He was named Chief Accounting Officer in December 2009 and Chief Financial Officer and Treasurer in April 2010, a position which he holds today. Prior to joining the Company, from May 2004 to January 2008, Mr. Lieberman was Senior Vice President and Chief Financial Officer for Millbrook Distribution Services, Inc., a division of United Natural Foods.

Previously, from April 1999 to December 2003, he was Chief Financial Officer and Treasurer for Saleslink Corporation, a global supply chain management and eCommerce subsidiary of CMGI.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Bedford Lease

On November 30, 2007, the Company entered into a new Lease Agreement (the “Bedford Lease”) with SPI-Trust, a Trust of which Roger G. Little, Chairman of the Board of the Company, is the sole trustee and principal beneficiary, with respect to 144,230 square feet of space comprising the entire building in which the Company has occupied since December 1, 1985. The term of the Bedford Lease commenced on December 1, 2007 and was originally set to expire on November 30, 2012. The annual

rental rate for the first year of the Bedford Lease was \$12.50 per square foot on a triple net basis, whereby the tenant is responsible for operating expenses, taxes and maintenance of the building. The annual rental rate increased on each anniversary by \$0.75 per square foot.

On September 17, 2010, the Company entered into the First Amendment to Lease Agreement with SPI-Trust to amend the Bedford Lease. The term of the Bedford Lease was extended for an additional five years and will expire on November 30, 2017. The annual rental rate for the first year of the extended term (December 1, 2012 through November 30, 2013) was \$16.00 per square foot on a triple net basis, whereby the tenant is responsible for operating expenses, taxes and maintenance of the building. After the first year of the extended term of the Bedford Lease, the annual rental rate increases on each anniversary by \$0.50 per square foot. The Company has the right to further extend the term of the Bedford Lease for an additional five year period. If the Company exercises its right to further extend the term of the Bedford Lease, the annual rental rate for the first year of the further extended term will be the greater of: (a) the rental rate in effect immediately preceding the commencement of the extended term; or (b) the market rate at such time, and on each anniversary of the commencement of the extended term the rental rate will increase by \$0.50 per square foot. Additionally, SPI-Trust agreed to reimburse the Company up to \$50,000 for all costs incurred by the Company in connection with any alterations or improvements to the premises, or repairs or replacements to the heating and air conditioning systems.

On September 18, 2013, the Company entered into the Second Amendment to Lease Agreement with SPI-Trust to amend the Bedford Lease. The leased portion of the premises and annual base rent in Bedford, Massachusetts was reduced by approximately 19%. All other material terms and conditions related to the Bedford Lease remain unchanged as of such date. The Company believes that the terms of the Bedford Lease, as amended, are commercially reasonable. Rent expense from continuing operations under the Bedford Lease was \$2.2 million for the year ended December 31, 2013.

N2 Biomedical, LLC

On September 18, 2013, the Company and its subsidiary, Spire Biomedical, Inc. entered into an Asset Purchase Agreement (the "Purchase Agreement") with N2 Biomedical, LLC ("N2") pursuant to which N2 agreed to (i) acquire substantially all of the assets of the Company's biomedical business (the "Business") and (ii) assume and pay certain liabilities related to the purchased assets as set forth in the Purchase Agreement (collectively, the "Transaction"). The Transaction closed on September 18, 2013.

At the time of the Transaction, Mark C. Little was the Chief Executive Officer of the Subsidiary and is the current President and Chief Executive Officer of N2. He was also a director of the Company at the time of the Transaction, and continues to serve as a director of the Company. Mark C. Little is the son of Roger G. Little, the Company's Chief Executive Officer at the time of the Transaction and the Company's current Chairman of the Board. The Company's Board of Directors, including all of the disinterested directors, unanimously approved the Transaction after full disclosure of all material facts of the Transaction and each director's interest in the Transaction.

The purchase price for the Business was \$10.5 million plus the assumption of liabilities of approximately \$0.1 million, with \$6.0 million paid in cash at closing, a \$2.4 million subordinated convertible promissory note, and 310,549 Series A Preferred Units of N2 valued at approximately \$2.1 million (\$6.72 per share). The parties determined the purchase price through negotiation, as well as the parties' determination of fair market value of, and solicitation of third party bids on, the Business. The subordinated promissory note (i) bears interest at 9% per annum until paid in full, (ii) is convertible, at the Company's option, into common units of N2 at a conversion price of \$6.72 per share, (iii) has a seven year term, (iv) is unsecured and (v) is subordinate in right of payment to all senior bank indebtedness of N2.

The Series A Preferred Units (i) represent an equity ownership interest of 19.9% in N2, (ii) are governed by the terms of the Amended and Restated Limited Liability Company Agreement of N2 dated September 18, 2013, (iii) rank senior to the common units on liquidation, dissolution and winding up, and (iv) vote together with the common units on an as-converted basis. The Company has the right to appoint one director to the N2 Board of Directors. N2 is subject to certain affirmative and negative operating covenants in favor of the holder of N2 Series A Preferred Units.

On September 18, 2013, the Company and N2 also entered into a Shared Services Agreement whereby the Company will provide N2 certain services (the “Shared Services”) for a period of three years. It is the intent of the parties that the aggregate fees for the Shared Services shall equal approximately \$500,000 during the first year. Following the first anniversary, N2 may terminate any specific Shared Service with 20 days’ written notice to the Company.

On September 18, 2013, N2 entered into a Lease Agreement (the “N2 Bio Bedford Lease”) with SPI-Trust with respect to 27,000 square feet of space in the Company’s premises in Bedford, Massachusetts under the Bedford Lease. The term of the

N2 Bio Bedford Lease commenced on September 18, 2013 and is set to expire on November 30, 2020. The annual rental rate prorated for September 18, 2013 to November 20, 2013 was \$16.00 per square foot on a triple net basis, whereby N2 was responsible for operating expenses, taxes and maintenance of the building. The annual rental rate increased on December 1, 2013 and will increase each anniversary thereafter by \$0.50 per square foot. The Company believes that the terms of the N2 Bio Bedford Lease are commercially reasonable and reflective of market rates. Rent expense under the N2 Bio Bedford Lease, which is paid by N2 and not by the Company, was \$137,000 for the year ended December 31, 2013.

Hudson Lease

On August 29, 2008, the Company entered into a new Lease Agreement (the “Hudson Lease”) with SPI-Trust, with respect to 90,000 square feet of space, comprising the entire building in which Spire Semiconductor division occupied space beginning June 1, 2003. The term of the Hudson Lease commenced on September 1, 2008, and was to continue for seven years until August 31, 2015. The annual rental rate for the first year of the Hudson Lease was \$12.50 per square foot on a triple-net basis, whereby the tenant was responsible for operating expenses, taxes and maintenance of the building. The annual rental rate increases on each anniversary by \$0.75 per square foot. In addition, the Company was required to deposit with SPI-Trust \$300,000 as security for performance by the Company for its covenants and obligations under the Hudson Lease. SPI-Trust was responsible, at its sole expense, to make certain defined tenant improvements to the building. Rent expense from continuing operations under the Hudson Lease for the year ended December 31, 2013 was zero. Rent expense from discontinued operations under the Hudson Lease was zero for the year ended December 31, 2013. In connection with the sale of the Company's semiconductor business unit, the lease was terminated on March 9, 2012 and the Company was released from all future obligations under the lease as of such date. The security deposit of \$300,000 was used to off-set rent payments in the first quarter of 2012.

COMPENSATION OF OFFICERS AND DIRECTORS

The following table describes the compensation awarded to the Chief Executive Officer and the Company's two most highly compensated executive officers of the Company (other than the Chief Executive Officer) who were serving as executive officers at December 31, 2013 (the “named executive officers”):

Summary Compensation Table

| Name & Principal Position | Year | Annual Compensation | | | All Other Compensation (\$) | Total (\$) |
|--|------|---------------------|---------------|--|-----------------------------------|------------|
| | | Salary (\$) | Bonus (\$) | Non-Equity Incentive Plan Compensation (\$) | | |
| Roger G. Little (1) Chairman of the Board and former CEO | 2013 | \$473,020 | \$ 2,681 | \$92,925 | \$23,093 (2) | \$591,719 |
| | 2012 | \$486,869 | \$ 2,688 | — | \$17,908 (3) | \$507,465 |
| Rodger W. LaFavre President and CEO and former COO (4) | 2013 | \$195,777 | \$22,110 | — | \$13,831 (5) | \$231,718 |
| | 2012 | \$186,583 | \$26,921 | — | \$12,707 (6) | \$226,211 |
| Robert S. Lieberman CFO & Treasurer | 2013 | \$192,001 | \$16,599 | — | \$ 9,999 (7) | \$218,599 |
| | 2012 | \$178,762 | \$24,735 | — | \$11,225 (8) | \$214,722 |

(1) Roger G. Little served as Chief Executive Officer and President of the Company until his retirement on December 31, 2013. Mr. Little continues to serve as Chairman of the Board of Directors. Mr. Little's salary included a payment of \$250,000 under a non-qualified deferred compensation plan paid on behalf of Mr. Little for 2013 and 2012. As of December 31, 2013, the Company funded \$125,000 of its aggregate deferred compensation obligations

for 2012 through the issuance of 204,216 shares of common stock to the deferred compensation plan trust. The remaining balance of the unfunded obligation for 2012 totaling \$125,000 will be funded by cash. See the section titled "Non Qualified Deferred Compensation Plan" below for further information.

In 2014, Mr. Little received a bonus of \$92,925 under his annual incentive bonus program for the year ended December 31, 2013. Mr. Little did not receive any bonus under his annual incentive bonus program for the year ended December 31, 2012.

(2) Represents (i) 401(k) matching contributions of approximately \$7,900; and (ii) \$8,597 for personal use of a Company vehicle.

(3) Represents (i) 401(k) matching contributions of approximately \$7,187; and (ii) \$10,032 for personal use of a Company vehicle.

- (4) Rodger W. LaFavre was appointed the Company's President and Chief Executive Officer on January 1, 2014. Prior to then, he served as the Company's Chief Operating Officer.
- (5) Represents 401(k) matching contributions of approximately \$7,626.
- (6) Represents 401(k) matching contributions of approximately \$6,405.
- (7) Represents 401(k) matching contributions of approximately \$7,301.
- (8) Represents 401(k) matching contributions of approximately \$6,105.

Non-Qualified Deferred Compensation Plan

Effective January 1, 2002, the Company adopted the Spire Corporation Non-Qualified Deferred Compensation Plan (the "Deferred Compensation Plan") for Roger G. Little, who was then the Company's Chief Executive Officer and President. Mr. Little served as Chief Executive Officer and President until his retirement on December 31, 2013. Under the Deferred Compensation Plan, the Company made equal monthly contributions to the Spire Corporation Non-Qualified Deferred Compensation Trust (the "Trust") up to the annually required amount of \$250,000. The Company recorded these contributions as selling, general and administrative expense when made. The trustee made all investment decisions for the Trust on behalf of Mr. Little. The Company did not guarantee a return on investment for Mr. Little. All earnings and losses on the Deferred Compensation Plan assets were borne by Mr. Little. All contributions and earnings were fully vested to Mr. Little when made but are subject to the Company's creditors in the event of bankruptcy. The Company made contributions only if it had "available cash" to meet its operational needs as determined by the Compensation Committee. If the Compensation Committee determines that there was not enough "available cash" then it could defer funding for a particular plan year only until cash becomes available.

On November 17, 2011, the Compensation Committee of the Board of Directors of the Company approved an amendment to the Deferred Compensation Plan for Mr. Little to permit him to elect, subject to Compensation Committee approval, to receive all or any part of the deferred portion of his compensation under the Deferred Compensation Plan in shares of the Company's common stock in lieu of cash. The number of shares to be issued in lieu of such deferred compensation shall be equal to the dollar amount that would otherwise be credited to the Deferred Compensation Plan divided by the closing sale price per share of common stock on the date on which the Compensation Committee approves Mr. Little's election. The shares shall be issued under, and be subject to the terms, conditions and limitations of, the Company's 2007 Stock Equity Plan (the "2007 Plan"). The Deferred Compensation Plan permitted one election to be made with respect to accumulated deferred compensation for 2010 and 2011 and, commencing in 2012, elections are made on a quarterly basis. All such elections shall be subject to and be contingent upon approval of the Compensation Committee. On November 17, 2011, Mr. Little elected to receive aggregate accumulated deferred compensation of \$500,000 for 2010 and 2011 in shares of common stock (and the Compensation Committee approved such election), which, based on the closing sale price of the Company's common stock on such date (\$0.78), is equal to approximately 641,025 shares. On June 21, 2012, Mr. Little elected to receive aggregate accumulated deferred compensation of \$62,500 for the third quarter of 2012 in shares of common stock (and the Compensation Committee approved such election), which, based on the closing sale price of the Company's common stock on such date (\$0.69), is equal to approximately 90,580 shares. On August 16, 2012, Mr. Little elected to receive aggregate accumulated deferred compensation of \$62,500 for the fourth quarter of 2012 in shares of common stock (and the Compensation Committee approved such election), which, based on the closing sale price of the Company's common stock on such date (\$0.55), is equal to approximately 113,636 shares. Because of limitation on awards under the Company's 2007 Stock Equity Plan, the Deferred Compensation Plan trust was issued 500,000 of such shares, valued at approximately \$384,000, and issued 145,241 of such shares, valued at approximately \$84,000, in 2012 and 2013, respectively. Compensation expense from continuing operations was approximately \$250,000 and

\$250,000 in the years ended December 31, 2013 and 2012, respectively. Accrued compensation expense related to the Deferred Compensation Plan was \$375,000 and \$209,000 at December 31, 2013 and 2012, respectively. Mr. Little retired as Chief Executive Officer and President of the Company on December 31, 2013. Mr. Little received a partial deferred compensation payment of approximately \$1.2 million in January 2014 and has the ability to receive the remaining deferred compensation balance on July 1, 2014.

Employment Contracts, Termination of Employment and Change-in-Control Arrangements

On January 1, 2002, the Company entered into an employment agreement with Roger G. Little, the Company's then Chief Executive Officer and President. The agreement was for a five-year term, subject to extension as provided thereunder. Under the terms and conditions of the employment agreement, Mr. Little received a base salary of \$278,775 and an annual payment under the Deferred Compensation Plan in the amount of \$250,000. He was also entitled to a payment under the Company's annual incentive program of up to 50% of base salary (depending on the attainment of specified performance goals as set by the

Compensation Committee). In 2013, the Compensation Committee made the determination to award Mr. Little \$92,925 under the Company's 2013 annual incentive plan. The employment agreement also provided for a Company vehicle for Mr. Little and for life insurance for which he was able to designate a beneficiary in the face amount of \$500,000. The agreement also precluded Mr. Little from competing with the Company during his employment and for a period of one year thereafter, and from disclosing confidential information. The agreement also entitled Mr. Little to paid vacations in accordance with the regular policy of the Company for the executive officers. Effective December 31, 2013, Mr. Little retired from his position as Chief Executive Officer and President of the Company.

Stock Options

During 2013, there were no stock options granted to or exercised by the named executive officers.

The following table provides information about outstanding equity awards held by the named executive officers at the end of fiscal 2013:

Outstanding Equity Awards at Fiscal Year End

| Name | Option Awards | | Equity Incentive | Option Exercise Price (\$) | Option Expiration Date (2) |
|---------------------|---|---|---|----------------------------|----------------------------|
| | Number of Securities Underlying Unexercised Options Exercisable (#) (1) | Number of Securities Underlying Unexercised Options Unexercisable (#) (1) | Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) | | |
| Roger G. Little | — | — | — | — | — |
| | 12,000 | — | — | \$4.33 | 5/17/15 |
| | 10,000 | — | — | \$8.32 | 11/16/16 |
| Rodger W. LaFavre | 5,000 | — | — | \$9.60 | 5/17/17 |
| | 5,000 | — | — | \$9.15 | 8/16/17 |
| | 25,000 | — | — | \$6.24 | 5/21/19 |
| | 18,750 | 6,250 | — | \$4.18 | 8/6/20 |
| Robert S. Lieberman | 15,000 | — | — | \$6.24 | 5/21/19 |
| | 5,000 | — | — | \$4.80 | 3/15/20 |
| | 3,750 | 1,250 | — | \$4.18 | 8/6/20 |

(1) Options become exercisable in four equal annual installments beginning on the first anniversary of the date of grant.

(2) The expiration date of each option occurs ten years after the date of grant of such option.

The table below describes the securities authorized for issuance under the Company's equity compensation plans as of December 31, 2013:

Equity Compensation Plan Information

| Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights | Number of Securities Remaining Available for Future Issuance under Equity |
|---|---|---|
|---|---|---|

| | | | Compensation (1) (2) |
|--|---------|--------|----------------------|
| Equity compensation plans approved by security holders | 527,246 | \$5.88 | 478,759 |
| Equity compensation plans not approved by security holders | — | — | — |
| Total | 527,246 | \$5.88 | 478,759 |

(1) Consists of shares that may be granted under the Company's 2007 Stock Equity Plan (the "2007 Plan"), the Company's only active equity compensation plan.

In addition to being available for future issuances upon exercise of options that may be granted after December 31, (2)2013, a maximum of 1,000,000 shares under the 2007 Plan may instead be issued in the form of restricted stock, deferred stock, performance awards or other stock-based awards.

Directors' Compensation

The Company does not pay its directors who are also officers of the Company any additional compensation for services as directors. The compensation package for non-employee directors includes the following:

Cash Board meeting attendance fee of \$1,000 per meeting attended in person and \$500 for each meeting by telephone;

Non-incentive stock options awarded under the 2007 Plan in the amount of 2,000 shares for each Board meeting attended either in person or by telephone, with the awards granted for one meeting per quarter and four quarterly meetings per year, up to a maximum of 8,000 shares per annum. These options vest immediately and are considered long term incentive compensation;

Cash meeting attendance fee of \$1,000 for each formal meeting of the Audit Committee and of the Compensation Committee attended either in person or by telephone, with the payments subject to an annual maximum of \$5,000 per member of each such committee;

No additional compensation when committee meeting is held in conjunction with a Board meeting;

\$12,000 annual retainer for all directors, payable quarterly;

\$5,000 annual retainer for the Chairman of the Audit Committee, payable quarterly;

\$4,000 annual retainer for the Chairman of the Compensation Committee, payable quarterly;

\$2,000 annual retainer for other members of the Audit and Compensation Committees, payable quarterly; and

Expense reimbursement for all reasonable expenses incurred in attending meetings and tending to Company business.

The following table shows non-employee director compensation in 2013:

| Name (1) | Fees Earned or Paid in Cash (\$) | Options Awards (\$) (2) | Total (\$) |
|-------------------------|-------------------------------------|----------------------------|------------|
| Udo Henseler | \$30,000 | \$3,329 | \$33,329 |
| David R. Lipinski | \$30,000 | \$3,329 | \$33,329 |
| Mark C. Little (3) | \$ 4,500 | \$ 871 | \$ 5,371 |
| Michael J. Magliochetti | \$23,500 | \$3,329 | \$26,829 |
| Guy L. Mayer (4) | \$11,500 | \$ 923 | \$12,423 |
| Roger W. Redmond | \$29,500 | \$3,329 | \$32,829 |

(1) Roger G. Little is not included in this table as he was an officer of the Company during 2013 and, accordingly, received no compensation for his service as a director.

The amounts in this column reflect the aggregate grant date fair value, computed in accordance with FASB ASC Topic 718, for awards granted during 2013. Assumptions used in the calculation of these amounts are included in Note 9 in the notes to the Company's audited consolidated financial statements for the fiscal year ended (2)December 31, 2013 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2014. As of December 31, 2013, each non--employee director had the following number of options outstanding: Udo Henseler: 60,872; David R. Lipinski: 66,500; Mark C. Little: 2,000; Michael J. Magliochetti: 63,374; and Roger W. Redmond: 66,500.

Until September 18, 2013, Mark C. Little served as Chief Executive Officer of the Company's subsidiary, Spire Biomedical, Inc. As an employee of the Company's subsidiary, he did not receive compensation for his service as a director prior to September 18, 2013. On September 18, 2013, N2 Biomedical, LLC acquired all of the assets of (3) Spire Biomedical, Inc. Mark C. Little is the current Chief Executive Officer of N2 Biomedical, LLC and no longer holds an employee position with the Company. Accordingly, since September 18, 2013, Mr. Little is considered a non-employee director of the Company.

(4) Mr. Mayer resigned as a member of the Company's Board of Directors, effective August 15, 2013.

AUDIT COMMITTEE REPORT

This Audit Committee Report shall not be deemed to be “soliciting material” or to be filed with the Securities and Exchange Commission or subject to Regulation 14A or 14C under the Exchange Act, or to the liabilities of Section 18 of the Exchange Act. Notwithstanding anything to the contrary set forth in any of the Company's previous filings under the Securities Act of 1933 or the Exchange Act that might incorporate future filings, including this Proxy Statement, in whole or in part, this report shall not be incorporated by reference into any such filings.

Composition and Charter

The Audit Committee of the Board of Directors is currently composed of three directors, all of whom satisfy the independence standards for Audit Committee members under the rules of the Nasdaq Stock Market, and operates under a written charter. A copy of the Audit Committee Charter is available to stockholders on the Investors - Corporate Governance page of the Company's website at www.spirecorp.com. For 2013, the Committee was composed of Mr. Lipinski (chairman), Dr. Henseler and Mr. Redmond.

Responsibilities

The responsibilities of the Audit Committee include engaging an accounting firm to serve as the Company's independent registered public accounting firm. Management is responsible for Spire's internal controls and financial reporting process. The independent registered public accounting firm is responsible for performing an independent audit of Spire's consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board ("PCAOB") and for issuing an opinion thereon. The Audit Committee's responsibility is to oversee these processes and Spire's internal controls. The Audit Committee does not prepare or audit the Company's financial statements or certify their accuracy.

Review with Management and Independent Registered Public Accountants

In this context, the Audit Committee has met and held discussions with management and the Company's independent registered public accounting firm. Management represented to the Audit Committee that Spire's consolidated financial statements were prepared in accordance with generally accepted accounting principles, and the Audit Committee has reviewed and discussed the audited consolidated financial statements with management and the independent registered public accounting firm. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by the statement on Auditing Standards No. 61, as amended, as adopted by the PCAOB in Rule 3200T.

Spire's independent registered public accounting firm also provided to the Audit Committee the written disclosures and the letter required by applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence, and the Audit Committee discussed with the independent registered public accounting firm, McGladrey LLP, the firm's independence.

Summary

Based upon the Audit Committee's discussions with management and the independent registered public accounting firm and the Audit Committee's review of Spire's audited consolidated financial statements and the representations of management, and the report of the independent registered public accounting firm to the Audit Committee, the Audit Committee recommended that the Board of Directors include the audited consolidated financial statements in Spire's Annual Report on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission on March 31, 2014.

This report is submitted by the Audit Committee.

David R. Lipinski, Chairman
Udo Henseler
Roger W. Redmond

DISCLOSURE OF PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents aggregate fees billed to the Company for professional services rendered by McGladrey LLP, the Company's independent registered public accountants, for each of the last two fiscal years.

| | 2013 Fees | 2012 Fees |
|--------------------|-----------|-----------|
| Audit Fees | \$243,150 | \$264,872 |
| Audit-Related Fees | — | — |
| Tax Fees | — | — |
| All Other Fees | — | — |
| Total Fees | \$243,150 | \$264,872 |

Audit Fees were for professional services rendered for the audit of the Company's annual consolidated financial statements and review of consolidated financial statements included in the Company's Quarterly Reports on Form 10-Q and services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements. This amount includes reimbursement of out of pocket costs in fiscal 2013 and fiscal 2012 of \$3,150 and \$3,122, respectively.

Audit-Related Fees. The Company did not incur any “audit-related” fees for professional services rendered by the Company’s principal accountant during fiscal 2013 or fiscal 2012.

Tax Fees. There were no tax fees incurred or billed for professional services rendered by the Company’s principal accountant for tax compliance, tax advice and tax planning during fiscal 2013 or fiscal 2012.

All Other Fees. The Company did not have any other services provided or billed by the Company’s principal accountant during fiscal 2013 or fiscal 2012.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors

The Audit Committee pre-approves all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services. Pre-approval is generally provided for up to one year, and any pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent registered public accounting firm and management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with the pre-approval, and the fees for the services performed to date. The Audit Committee may also pre-approve particular services on a case-by-case basis.

INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

The Audit Committee of the Board of Directors of Spire Corporation has selected McGladrey LLP to act as the Company's independent registered public accountants for the current fiscal year. Pursuant to Proposal Two, the stockholders of the Company are being asked to ratify the selection of McGladrey LLP to act as the Company's independent registered public accountants for the current fiscal year.

As the Company's independent registered public accountants, McGladrey LLP was engaged to conduct quarterly reviews of the Company and to conduct an audit of the consolidated financial statements of the Company for the full year 2013. Representatives of McGladrey LLP are expected to attend the Meeting in order to respond to appropriate questions from stockholders and will have the opportunity to make a statement, if they desire to do so.

PROXIES AND VOTING AT THE MEETING

Each signed and returned proxy will be voted in accordance with any instructions of the stockholder(s) executing the proxy. A proxy signed without instructions will be voted in accordance with the Board's recommendations. If a stockholder attends the Meeting and votes in person, his or her earlier submitted proxy will not be counted. A signed proxy may be revoked at any time before it is exercised, either in person or by giving written notice of revocation to the Secretary of the Company at the address on the first page of this Proxy Statement.

Each share of common stock is entitled to one vote on all matters submitted to the stockholders for approval. No vote may be taken unless a quorum (i.e., a majority of the common stock issued, outstanding and entitled to vote) is present at the Meeting in person or by proxy. The approval of all matters as may properly come before the meeting requires the affirmative vote of a majority in interest of the stock represented and entitled to vote at the meeting. Broker non-votes are counted for purposes of determining the presence of a quorum, but are not counted for purposes of determining the result of any vote for such matters. Abstentions are counted in determining the presence of a quorum and have the effect of a vote against a proposal.

The Board has fixed April 2, 2014, as the record date for determining the stockholders entitled to vote at the Meeting. On that date, there were 9,207,874 shares of common stock of the Company issued, outstanding, and entitled to vote.

HOUSEHOLDING INFORMATION

The Securities and Exchange Commission has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially provides extra convenience for stockholders and cost savings for us. Under this procedure, multiple stockholders who share the same last name and address will receive only one copy of the annual proxy materials, unless they notify us that they wish to continue receiving multiple copies. We have undertaken householding to reduce our printing costs and postage fees.

If you wish to opt-out of householding and continue to receive multiple copies of the proxy materials at the same address, you may do so at any time prior to thirty days before the mailing of proxy materials, which will typically be mailed in April of each year, by notifying us in writing at: Secretary, Spire Corporation, One Patriots Park, Bedford, Massachusetts 01730 or by contacting us at 781-275-6000. You also may request additional copies of the proxy materials by notifying us in writing at the same address or contacting us at 781-275-6000, and we will undertake to deliver such additional copies promptly. If you share an address with another stockholder and currently are receiving multiple copies of the proxy materials, you may request householding by notifying us at the above referenced address or telephone number.

OTHER MATTERS

The Board knows of no other matters that may come before the Meeting. If any other matters should properly come before the Meeting, it is the intention of the persons named in the accompanying proxy to vote in accordance with their judgment on such matters. Such discretionary authority is conferred by the proxy.

All costs of this solicitation, which is being made principally by mail, but which may be supplemented by telephone or personal contacts by the Company's directors, officers, and employees without additional compensation, will be borne by the Company. Brokers will be requested to forward proxy soliciting material to the beneficial owners of the stock held in such brokers' names, and the Company will reimburse them for their expenses incurred in complying with the Company's request.

In the Company's filings with the Securities and Exchange Commission, information is sometimes “incorporated by reference.” This means that the Company is referring you to information that has previously been filed with the Securities and Exchange Commission, so the information should be considered as part of the filing you are reading. Based on the Securities and Exchange Commission regulations, the Audit Committee Report specifically is not incorporated by reference into any other filings with the Securities and Exchange Commission.

The Company's policy is to encourage its Board members to attend the Annual Meeting of Stockholders, and all of the members standing for re-election attended the Special Meeting in Lieu of the 2013 Annual Meeting of Stockholders.

STOCKHOLDER PROPOSALS - 2015 ANNUAL MEETING

In order to be included in the proxy statement and form of proxy for the 2015 Annual Meeting of Stockholders pursuant to Exchange Act Rule 14a-8, stockholder proposals must be received by the Company at its corporate offices in Bedford, Massachusetts, no later than December 18, 2014 (120 days before the anniversary of the date this Proxy Statement is being mailed to the Company's stockholders). Such proposals must also comply with the requirements as to form and substance established by the Securities and Exchange Commission if such proposals are to be included in the proxy statement and form of proxy. Stockholder proposals to be presented at the 2015 Annual Meeting, other than stockholder proposals submitted pursuant to Exchange Act Rule 14a-8 for inclusion in the proxy statement and form of proxy for the 2015 Annual Meeting, must be received in writing at the Company's corporate offices no later than March 3, 2015 (45 days before the anniversary of the date this Proxy Statement is being mailed to the Company's stockholders).

Independent directors will consider any director nominees you recommend in writing for the 2015 Annual Meeting if the Secretary receives notice by December 18, 2014, and you are a stockholder of record on the day you provide notice of your recommendation or nomination to the Company and on the record date for determining stockholders entitled to notice of the meeting and to vote.

Your notice must include the following information for each person you are recommending or nominating for election as a director:

The name, age, business address and residence address of the person;

The principal occupation or employment of the person;

The number of shares of Spire common stock which the person owns beneficially or of record; and

Any other information relating to the person that must be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors under Section 14 of the Exchange Act and its rules and regulations.

In addition, your notice must include the following information about you:

Your name and record address;

The number of shares of Spire common stock that you own beneficially or of record;

A description of all arrangements or understandings between you and each proposed nominee and any other person or persons, including their names, pursuant to which the nomination is to be made;

A representation that you intend to appear in person or by proxy at the meeting to nominate the person or persons named in your notice; and

Any other information about you that must be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors under Section 14 of the Exchange Act and its rules and regulations.

The notice must include written consent by each proposed nominee to being named as a nominee and to serve as a director if elected. No person will be eligible for election as a director of Spire unless recommended by a majority of independent directors and nominated by the Board or nominated in accordance with the procedures set forth above.

By Order of the Board of Directors

Michael W. O'Dougherty
Secretary

April 17, 2014

