SPIRE CORP Form DEF 14A April 14, 2006

SCHEDULE 14A

(RULE 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the

Securities Exchange Act of 1934

(Amendment No.)

Filed by the Registrant "

Filed by a Party other than the Registrant "

Check the appropriate box:

" Preliminary Proxy Statement

x Definitive Proxy Statement

" Definitive Additional Materials

" Soliciting Material Under Rule 14a-12

" Confidential, For Use of the Commission Only

(as permitted by Rule 14a-6(e)(2))

SPIRE CORPORATION

(Name of Registrant as Specified in Its Charter)

SPIRE CORPORATION

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- " 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:
- 5. Total fee paid:
- " 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.
 - 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

2006 ANNUAL MEETING OF STOCKHOLDERS

Notice is hereby given that the Special Meeting in Lieu of 2006 Annual Meeting of Stockholders (Meeting) of Spire Corporation (Company) will be held at Spire Corporation, One Patriots Park, Bedford, Massachusetts, on Thursday, May 18, 2006, at 10:00 a.m., to consider and act upon the following:

1. To fix the number of directors at eight and to elect seven directors to serve for one year, leaving one vacancy; and

2. To transact such other business as may properly come before the Meeting. Stockholders owning Company shares at the close of business on March 31, 2006, 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 14, 2006

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

2006 Annual Meeting of Stockholders

May 18, 2006

The Board of Directors of Spire Corporation is soliciting proxies for the Special Meeting in Lieu of 2006 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 Thursday, May 18, 2006. This Proxy Statement, proxy card and the 2005 Annual Report and Form 10-KSB are being mailed to the stockholders on or about April 14, 2006.

PROPOSAL NUMBER 1

ELECTION OF DIRECTORS

Spire Corporation s By-Laws provide for a minimum of three directors with the exact number to be voted on by the stockholders at the Meeting. The Board of Directors has recommended for this Meeting that the number of directors be fixed at eight and has nominated seven 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.

Unless otherwise instructed, the persons named in the proxy will vote to fix the number of directors at eight and to elect the seven 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 of the nominees are currently directors. Set forth below is information about each nominee:

Name	Age	Position with Company	Director Since
Udo Henseler	66	Director and Chairman, Audit Committee	1992
David R. Lipinski	54	Director and Member, Compensation Committee	2001
Mark C. Little	44	Director and Chief Executive Officer, Spire Biomedical	2004
Roger G. Little	65	Chairman of the Board, Chief Executive Officer and	1969
		President	
Michael J. Magliochetti	42	Director and Member, Audit Committee	2002
Guy L. Mayer	54	Director and Chairman, Compensation Committee and	2001
		Member, Audit Committee	
Roger W. Redmond	52	Director and Member, Compensation Committee	1991

Udo Henseler, Ph.D., is currently the principal/owner of MSI Management Services International (a privately owned business initiated in 1994). MSI provides services related to contract CEO, CFO and business

development engagements for emerging biotechnology firms in domestic and international settings. From 2002 to July 2005, Dr. Henseler was the CEO and Chairman and until February 2006 a Director of eGene, Inc., a publicly traded biotechnology company in the genotyping market. From 1999 to June 2002, Dr. Henseler was a director and from June 2001 to March 2002, he was the Executive Vice President and CFO of ChemoKine Therapeutics Corporation, a biopharmaceutical company with products for use in patients with cancer and multiple sclerosis. From 2000 to June 2001, he was Senior Vice President and CFO of Isotag Technology, Inc., a biotechnology identification products and services company. From 1996 to 2000, he was Vice President and CFO of Qualicon Inc., a DuPont company. Qualicon is a developer of analytical instruments for testing of biologically derived products. Dr. Henseler currently serves as chairman of the Audit Committee of another company and serves on the Board of Directors of Tutogen Medical, Inc. Dr. Henseler earned a B.A. from the Academy of Commerce and Administration, Cologne, Germany, and Master s and Ph.D. degrees from the Claremont Graduate University in Claremont, California. Dr. Henseler is also a Certified Public Accountant.

David R. Lipinski is currently an independent consultant in corporate finance and strategic business development. From September 2004 to October 2005, he was Assistant Vice President, Business Development Group of Fifth Third Bank. Previously from August 2003 to May 2004, Mr. Lipinski was Vice President of Corporate Development of Spire Corporation and from August 2003 until November 2003, he was Chief Financial Officer. Previously, from 2002 to August 2003, he was an independent consultant in corporate finance and strategic business development. 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. Prior to the initial public offering carve-out of Stratos Lightwave from Methode Electronics in 2000, he was from 1996 to 2000 Executive Director for Corporate Development for Methode Electronics, a manufacturer of optical and electronic interconnection components, switches and controls used in communications, data networking, consumer electronics and automotive applications. Mr. Lipinski is a director of Optelecom, Inc., a manufacturer of voice, video and data communications modules. He is a registered Professional Engineer licensed in Illinois and a Chartered Financial Analyst. He holds a B.S. in Physics from the United States Naval Academy and an M.B.A. from the University of New Haven. Mr. Lipinski is a retired Captain of the U.S. Naval Reserve.

Mark C. Little joined the Company in 1994 as a Medical Device Engineer. He was named Assistant General Manager, Biomedical, in March 1999; General Manager, Spire Biomedical, in January 2000; Vice President and General Manager, Spire Biomedical in November 2000; and Chief Executive Officer, Spire Biomedical in June 2001. He holds a B.A. from Flagler College. Mark Little is the son of Roger G. Little.

Roger G. Little was the founder of Spire Corporation in 1969, and has been Chairman of the Board of Directors, Chief Executive Officer and President of the Company. He has 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.Sc. in Physics from the Massachusetts Institute of Technology. Roger Little is the father of Mark C. Little.

Michael J. Magliochetti, Ph.D., is currently an Entrepreneur-in-Residence at Oxford Bioscience Partners, a premier life science venture capital firm, focused on medical device technologies. Dr. Magliochetti was previously CEO and Director of Rehab Medical Holdings, Inc., a company focused in orthopedics and related businesses. Previously, from 2000 to 2003, he was President, CEO, and Director of Hema Metrics Corporation, a private medical technology company specializing in blood monitoring and diagnostic products for dialysis. From 1994 to 2000, Dr. Magliochetti was Chief Operating and Technical Officer, then President, CEO and Director of UroSurge Corporation, a company specializing in products for the urology market. He 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.

Guy L. Mayer is currently CEO and Director of Tutogen Medical, Inc., a leading manufacturer of sterile biological implant products made from human (allograft) and animal (xenograft) tissue. From 2001 to

November 2004, Mr. Mayer served as Chairman and CEO of VisEn Medical, Inc., a private biotechnology company focused on molecular imaging technologies. Prior to VisEn, he was from 1998 to 2001 President and CEO of ETEX Corporation, a private biomedical company based in Cambridge, Massachusetts and from 1984 to 1998 he was with Zimmer Inc. a leader in orthopedic implants where he last served as president Global Products Group. Mr. Mayer is a 1974 graduate of the University of Ottawa.

Roger W. Redmond is currently Partner, Chief Investment Officer of Stillwater Investment Management, LLC, an independent, registered investment advisory firm. Previously from January 2002 to July 2004, Mr. Redmond was Senior Vice President of Windsor Financial Group, LLC, an investment advisor firm. From June 1999 to December 2001, Mr. Redmond was a managing director of Goldsmith, Agio, Helms and Company, a private investment banking firm specializing in representing sellers of private, public and closely held companies. 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.

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

MEETINGS AND COMMITTEES OF THE BOARD

The Board of Directors of the Company held four meetings during 2005. Each director then serving 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 table below describes the Board s committees.

Committee Name Audit	Members U. Henseler	Number of Meetings in 2005 5	Principal Functions Oversee the Company s auditing, accounting and financial reporting
			processes.
Committee	M. Magliochetti		Appoint companyate evaluate and where enpropriate replace
	G. Mayer		Appoint, compensate, evaluate and, where appropriate, replace independent accountants.
			Oversee the Company s compliance with tax, legal and regulatory requirements.
Compensation	D. Lipinski	3	Oversee and evaluate the Company s compensation programs and compensation of its executives.
Committee	G. Mayer		
	R. Redmond		Annually determine Chief Executive Officer s base salary and payments under the annual incentive bonus program and long-term deferred compensation plan.
			Recommend or approve other executive officers compensation, including annual performance objectives.
			Recommend to the full Board of Directors compensation of Directors

Directors.

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. Henseler, Chairman 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 on Page 1 of this Proxy Statement.

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 input 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. The Board of Directors has determined that Drs. Henseler and Magliochetti and Messrs. Mayer and Redmond are independent, as independence is defined in the listing standards for the Nasdaq Stock Market. 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.
- 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.

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 14.

COMPENSATION COMMITTEE

The Compensation Committee of the Board of Directors is composed of three members, including two independent directors (Messrs. Mayer and Redmond), as defined under the rules of the Nasdaq Stock Market, and operates under a written charter. For 2005, the Committee was composed of Messrs. Mayer, *chairman*, Lipinski and Redmond. Mr. Lipinski is not independent under the rules of the Nasdaq Stock Market because within the past three years he was an employee and Chief Financial Officer of the Company. However, the Board of Directors has determined that his membership on the Committee is required by the best interests of the Company and its shareholders due to his experience with compensation issues, and complies with the other requirements of the Committee s charter.

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, by the following means:

Mail: Spire Corporation One Patriots Park Bedford, MA 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 SEC 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 2005, all filing requirements applicable to its officers, directors and greater than 10% beneficial owners were complied with.

OWNERSHIP OF SECURITIES

The following table below shows how the Company s common stock is owned by the directors and 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 1, 2006. Each person or entity, except Leviticus Partners, L.P., maintains a mailing address c/o Spire Corporation, One Patriots Park, Bedford, Massachusetts 01730-2396.

Amount and Nature of Beneficial Ownership

	Number		Percent of
	of Shares	Right to	Common
Name	Owned (1)	Acquire (2)	Stock (3)(4)
Udo Henseler		939	*
Stephen J. Hogan	30,000	25,000	*
Rodger W. LaFavre		24,500	*
David R. Lipinski	1,200	1,252	*
Mark C. Little	92,620	26,750	1.6%
Roger G. Little (5)	2,230,945		30.8%
Michael J. Magliochetti		1,252	*
Guy L. Mayer		1,252	*
James F. Parslow		15,000	*
Roger W. Redmond		8,752	*
Leviticus Partners, L.P. Chrysler Building			
405 Lexington Avenue			
45th Floor			
New York, NY 10174 (6)	525,000	N/A	7.2%
Spire Corporation 401(k) Profit Sharing Plan (7)	199,535	N/A	2.8%
Directors and officers as a group (10 persons on March 1, 2006 including those named above)	2,354,765	104,697	33.9%

* Less than 1%

(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.

Excludes shares that may be acquired through stock option exercises.

- (2) Shares that can be acquired through stock option exercises through April 30, 2006.
- (3) Based on 7,247,987 shares of common stock outstanding as of March 1, 2006. Shares of common stock which an individual or group has a right to acquire within 60 days 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) Beneficial stock ownership shown for employees excludes in all cases shares of common stock that may be held by the Spire Corporation 401(k) Profit Sharing Plan on behalf of such employees.
- (5) Includes 2,202,045 shares of common stock held in a Trust of which Mr. Little is the primary beneficiary. Mr. Little is the Chairman of the Board, Chief Executive Officer and President of the Company.
- (6) All information relating to beneficial ownership of common stock was obtained from the Schedule 13G/A, Amendment No. 2 dated December 29, 2005, filed with the Securities and Exchange Commission, jointly filed by Leviticus Partners, L.P., a Delaware limited partnership, AMH Equity, LLC, a New York limited liability company and Parameter Partners, LLC, a Delaware limited liability company. AMH Equity, LLC is the general partner of both Leviticus Partners, L.P. and Parameter Partners, LLC. These shares were purchased for investment purposes.
- (7) The Plan was established in 1985. On November 21, 2005, Spire Corporation appointed Wachovia Bank, National Association, as Trustee to hold and administer the Plan assets as a directed Trustee pursuant to the terms of the Trust Agreement between Spire Corporation and Wachovia Bank, National Association, as Trustee. Wachovia Bank, National Association, disclaims beneficial ownership of shares held by the Plan.

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	54	Executive Vice President and General Manager, Spire Solar			
Rodger W. LaFavre	56	Chief Operating Officer			
Mark C. Little	44	Chief Executive Officer, Spire Biomedical			
Roger G. Little	65	Chairman of the Board, Chief Executive Officer and President			
James F. Parslow	41	Chief Financial Officer and Treasurer			
Stephen J. Hogan joined the Company in 1984 as Manager, Process Development. He was named Sales Manager, Photovoltaic Equipment, in					
1988: Manager, Engineering and Manufacturing in 1990: Director	of Photovc	Itaic Business Development in March 1007. Vice President and			

1988; Manager, 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. He was named Vice President and Chief Financial Officer of Spire Solar in June 2002, and Chief Operating Officer of Spire Solar in November 2002 and Chief Operating Officer of Spire Corporation on

February 11, 2005. Prior to joining Spire, 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 Asia subsidiary.

Mark C. Little is Chief Executive Officer, Spire Biomedical. His business experience is summarized on Page 2.

Roger G. Little has a five-year employment contract with the Company effective as of January 1, 2002. See Compensation of Officers and Directors Employment Contracts, Termination of Employment and Change-in-Control Arrangements. His business experience is summarized on Page 2.

James F. Parslow was appointed Chief Financial Officer effective April 1, 2004 and as of November 17, 2005, Mr. Parslow was also appointed as Treasurer. Prior to joining Spire, Mr. Parslow was an independent financial consultant. During 2002, Mr. Parslow served as Controller of Fairmarket, Inc. (now Dynabazaar, Inc.), an Internet-based auction services and loyalty marketing public company. From 1998 to 2002, he was Vice President, Finance and Administration of Thermo Power Corporation, a multi-national, public subsidiary of Thermo Electron Corporation that manufactured, marketed and serviced intelligent traffic-control systems, industrial refrigeration equipment and cogeneration systems. Mr. Parslow is a Certified Public Accountant.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company subleased 77,000 square-feet in a building leased by Mykrolis Corporation, who in turn leased the building from SPI-Trust, a Trust of which Roger Little, Chairman of the Board, Chief Executive Officer and President of the Company, is the sole trustee and principal beneficiary. The 1985 sublease originally was for a period of ten years, was extended for a five-year period expiring on November 30, 2000 and was further extended for a five-year period expiring on November 30, 2005. The sublease agreement provided for minimum rental payments plus annual increases linked to the consumer price index. Rent expense under this sublease for the year ended December 31, 2005 and 2004 was \$1,093,000 and \$1,151,000, respectively. In connection with this sublease, the Company was invoiced and paid certain SPI-Trust related expenses, including building maintenance and insurance. The Company invoiced SPI-Trust on a monthly basis and SPI-Trust reimbursed the Company for all such costs.

On November 11, 2005, the Company entered into an Extension of Lease Agreement (the Lease Extension) directly with SPI-Trust the term of which commenced on December 1, 2005. The Lease Extension is for a period of two years and maintains the rental payments at the now current rental rate over the two (2) year period. All other terms of the Lease Extension are substantially the same as were in effect under the former lease and sublease agreements. The Company assumed certain responsibilities of Mykrolis, the tenant under the former lease, as a result of the Lease Extension including payment of all building and real estate related expenses associated with the ongoing operations of the property. The Company will allocate a portion of these expenses to SPI-Trust based on pre-established formulas utilizing square footage and actual usage where applicable. These allocated expenses will be invoiced monthly and be paid utilizing a SPI-Trust escrow account of which the Company has sole withdrawal authority. SPI-Trust is required to maintain three (3) months of its anticipated operating costs within this escrow account. The Company believes that the terms of the Lease Extension are commercially reasonable. Rent expense under the Lease Extension for the year ended December 31, 2005 was approximately \$103,000. Approximately \$9,000 was due from SPI-Trust as of December 31, 2005 for building related costs.

In conjunction with the May 2003 acquisition of Bandwidth Semiconductor, LLC (Bandwidth) by the Company, SPI-Trust, a Trust of which Roger G. Little, Chairman of the Board, Chief Executive Officer and President of the Company, is sole trustee and principal beneficiary, purchased from Stratos Lightwave, Inc. (Bandwidth s former owner) the building that Bandwidth occupies in Hudson, New Hampshire for \$3.7 million. Subsequently, the Company entered into a lease for the building (90,000 square feet) with SPI-Trust whereby the

Company will pay \$4.1 million to the SPI-Trust over an initial five-year term expiring in 2008 with a Company option to extend for five years. In addition to the rent payments, the lease obligates the Company to keep on deposit with SPI-Trust the equivalent of three months rent (\$191,250 as of December 31, 2005.) The lease agreement does not provide for a transfer of ownership at any point. Interest costs were assumed at 7%. For the year ended December 31, 2005, interest expense was approximately \$179,000.

Edward D. Gagnon, General Manager of the Company s subsidiary, Bandwidth, is a son-in-law of Roger G. Little, Chairman of the Board, Chief Executive Officer and President of the Company. For the year ended December 31, 2005, Mr. Gagnon had compensation awarded of \$145,251, incentive stock options for 5,000 shares of Spire common stock at an exercise price of \$4.33 per share, and had value realized of \$21,498 from the sale of Spire common stock acquired through the exercise of incentive stock options.

COMPENSATION OF OFFICERS AND DIRECTORS

This table describes the compensation awarded to all the executive officers of the Company who were serving as executive officers on December 31, 2005 and whose total annual compensation exceeded \$100,000 for the year ended December 31, 2005:

Summary Compensation Table

Long Term

		Annual Compensation Other Annual		Compensation	A	ll Other	
Name &		Salary	Bonus	Compensation	Securities	Con	npensation
Principal Position	Year	(\$)	(\$)(1)	(\$)(2)	Underlying Options (#)		(\$)(3)
Stephen J. Hogan	2005	\$ 140,526	\$ 4,000		8,000	\$	1,705
	2004	\$ 137,154	\$ 2,673			\$	1,242
Exec. VP & GM, Spire Solar	2003	\$ 135,000	\$ 2,596			\$	1,242
Rodger W. LaFavre	2005	\$ 139,989	\$ 5,000		12,000	\$	2,580
	2004	\$ 132,100	\$ 2,060			\$	2,322
COO	2003	\$ 130,115	\$ 1,500			\$	823
Mark C. Little	2005	\$ 141,185	\$ 4,000		10,000	\$	1,069
	2004	\$ 137,181	\$ 2,674			\$	540
CEO, Spire Biomedical	2003	\$ 133,462	\$ 42,596			\$	540
Roger G. Little	2005	\$ 230,000	\$	\$ 250,000		\$	7,620
	2004	\$ 216,300	\$ 14,660	\$ 250,000		\$	3,564
Chairman of the Board, CEO & President	2003	\$ 210,000	\$ 65,538	\$ 250,000		\$	3,564
James F. Parslow (4)	2005	\$ 112,921	\$ 2,000		5,000	\$	540
	2004	\$ 82,077	\$ 250		30,000	\$	243
Chief Financial Officer and Treasurer							

(1) In 2003, Mr. Mark Little received a \$40,000 bonus for efforts in closing a significant transaction. In 2006, Mr. Roger Little received a bonus of \$46,000 as a percentage of his annual incentive bonus program for the year ended December 31, 2005. In 2004, Mr. Roger Little received a bonus of \$10,500, as a percentage of his annual incentive bonus program for the year ended December 31, 2003.

(2) Includes payments of \$250,000 under a long-term deferred compensation plan paid on behalf of Mr. Little in each of the years 2005, 2004 and 2003.

(3) Includes compensation for premiums paid by the Company on term life insurance policies provided to all executive officers.

(4) In April 2004, Mr. Parslow was hired to serve as the Company s Chief Financial Officer.

Stock Options

This table describes stock options granted during 2005 to the executive officers of the Company who were shown on the Summary Compensation Table (no options were granted to Roger Little):

2005 Individual Grants

			Exercise or	
	Number of Securities Underlying Options	% of Total Options Granted To Employees	Base Price	Expiration
Name	Granted (#)(1)	in Fiscal Year	(\$/Share)	Date
Stephen J. Hogan	8,000	12.7%	\$ 4.33	5/17/15
Rodger W. LaFavre	12,000	19.0%	\$ 4.33	5/17/15
Mark C. Little	10,000	15.9%	\$ 4.33	5/17/15
James F. Parslow	5,000	7.9%	\$ 4.33	5/17/15

(1) The options granted to Messrs. Hogan, LaFavre, Parslow and Mark Little and were granted in May 2005 under the Company s 1996 Equity Incentive Plan and expire ten years from the date of grant. Mr. Hogan s option vests with respect to 2,000 shares in each of 2006, 2007, 2008 and 2009; Mr. LaFavre s option vests with respect to 3,000 shares in each of 2006, 2007, 2008 and 2009; Mr. Mark Little s option vests with respect to 2,500 shares in each of 2006, 2007, 2008 and 2009; and Mr. Parslow s option vests with respect to 1,250 shares in each of 2006, 2007, 2008 and 2009.

The following table provides information about option exercises in 2005 by Messrs. Hogan, LaFavre and Mark Little, and the value of unexercised options held as of December 31, 2005 by Messrs. Hogan, LaFavre, Parslow and Mark Little (no options were held by Roger Little):

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year End Option Values

				V	alue of Unexercised
	Number of		Number of Securities Underlying Unexercised	In-t	he-Money Options at
	Shares	Value	Options at Fiscal Year End (#)		Fiscal Year End
	Acquired on			_	
Name	Exercise	Realized	Exercisable/Unexercisable	Exe	rcisable/Unexercisable
Stephen J. Hogan	30,000	\$ 207,050	40,000 / 13,000	\$	163,250 / \$42,710
Rodger W. LaFavre	23,000	\$132,810	24,500 / 14,500	\$	84,765 / \$46,315
Mark C. Little	20,000	\$ 164,530	26,750 / 20,000	\$	94,963 / \$66,700
James F. Parslow			7,500 / 27,500	\$	10,125 / \$45,975

The table below describes the securities authorized for issuance under the Company s 1996 Equity Incentive Plan (the Incentive Plan) as of December 31, 2005:

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	E Price of	ted-Average xercise Outstanding rrants and Rights	Number of Securities Remaining Available for Future Issuance
Equity compensation plans approved by		-	-	
security holders	406,314	\$	4.38	997,963
Equity compensation plans not approved by security holders				
Total	406,314	\$	4.38	997,963

Directors Compensation

Spire Corporation does not pay its directors who are also officers of the Company any additional compensation for services as directors. In 2005, the compensation for non-employee directors included the following:

cash Board meeting attendance fee of \$1,000 per meeting attended either in person or by telephone;

non-incentive stock options under the Incentive Plan for 1,250 shares, vesting at the rate of 25% per year, for each Board meeting attended either in person or by telephone, with the awards being for one meeting per quarter and four quarterly meetings per year;

cash meeting attendance fee of \$500 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;

\$6,000 annual retainer for all directors, payable quarterly;

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

\$1,000 annual retainer for members of the Audit and Compensation Committees, payable quarterly; and

expense reimbursement for all reasonable expenses incurred in attending meetings and tending to Spire business. The following table describes stock options granted during 2005 to non-employee directors of the Company.

2005 Individual Non-Employee Director Grants

Name	Number of Securities Underlying Options Granted (#)(1)	Base Price	Expiration Date	
Udo Henseler	1,250	\$ 4.90	3/31/15	
	1,250	\$ 6.36	6/30/15	
	1,250	\$ 10.74	9/30/15	
	1,250	\$ 7.45	12/30/15	
David R. Lipinski	1,250	\$ 4.90	3/31/15	
	1,250	\$ 6.36	6/30/15	
	1,250	\$ 10.74	9/30/15	
	1,250	\$ 7.45	12/30/15	
Michael J. Magliochetti	1,250	\$ 4.90	3/31/15	
	1,250	\$ 6.36	6/30/15	
	1,250	\$ 10.74	9/30/15	
	1,250	\$ 7.45	12/30/15	
Guy L. Mayer	1,250	\$ 4.90	3/31/15	
	1,250	\$ 6.36	6/30/15	
	1,250	\$ 10.74	9/30/15	
	1,250	\$ 7.45	12/30/15	
Roger W. Redmond	1,250	\$ 4.90	3/31/15	
	1,250	\$ 6.36	6/30/15	
	1,250	\$ 10.74	9/30/15	
	1,250	\$ 7.45	12/30/15	

⁽¹⁾ The option is exercisable in annual increments of 25% of the options shares, with the first quarter increment becoming exercisable one year after date of grant.

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

The Company has entered into a five-year employment agreement, effective as of January 1, 2002, with Roger G. Little, Chairman of the Board, Chief Executive Officer and President. For 2005 he received the following pursuant to the agreement: a base salary of \$230,000, payment in 2005 under an annual incentive bonus program of up to 50% of base salary (depending on attainment of specified performance goals), which amounted to \$46,000 in 2005, and payment under a long-term deferred compensation plan in the amount of

\$250,000. For subsequent years, base salary will be no less than \$205,000; and payments under the annual incentive bonus program and long-term deferred compensation plan will be determined annually. The agreement also provides for a Company vehicle for Mr. Little and for life insurance for which he may designate a beneficiary in the face amount of \$500,000. Further, the agreement provides for the payment of 12 months base salary in the event he is terminated without cause or if he terminates the agreement for good reason. The agreement also precludes Mr. Little from competing with the Company during his employment and for a period of one year thereafter, and from disclosing confidential information. On November 18, 2004, Amendment No. One to the Employment Agreement was executed entitling Mr. Little to paid vacations in accordance with the amended regular policy of the Company for the executive officers.

If Mr. Little s employment is terminated by the Company without cause or by Mr. Little for good reason within six months prior to a change-of-control or within one year thereafter, then in lieu of payment of 12 months base salary, the Company shall pay Mr. Little in 24 monthly installments a cash severance amount equal to three times his average annual compensation, including base salary and bonuses.

Beginning on January 1, 2006 and continuing on each anniversary of the agreement, the agreement will be automatically extended for an additional year unless the parties have renegotiated the agreement or one of the parties has given the other party notice of non-renewal.

AUDIT COMMITTEE REPORT

Composition

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. In November 2002, the Audit Committee adopted an amended Audit Committee Charter, a copy of which is attached as Appendix A to this Proxy Statement. For 2005, the Committee was composed of Drs. Henseler, *chairman*, and Magliochetti, and Mr. Mayer.

Responsibilities

The responsibilities of the Audit Committee include engaging an accounting firm to serve as Spire s independent registered public accounting firm. Management is responsible for Spire s internal controls and financial reporting process. The independent registered public accounting firm are 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 Accountants

In this context, the Audit Committee has met and held discussions with management and the 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 discussed with the independent registered public accounting firm. The Audit Committee discussed with the independent registered public accounting firm. The Audit Committee discussed with the independent registered public accounting firm matters required to be discussed by Statement on Auditing Standards No. 61 (as modified or supplemented).

Spire s independent registered public accounting firm also provided to the Audit Committee the written disclosures and the letter required by Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees, and the Audit Committee discussed with the independent registered public accounting firm, Vitale, Caturano & Company, Ltd. (VCC), 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-KSB for the year ended December 31, 2005, as filed with the Securities and Exchange Commission.

This report is submitted by the Audit Committee.

Udo Henseler, Chairman

Michael J. Magliochetti

Guy L. Mayer

DISCLOSURE OF PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents aggregate fees billed to the Company for professional services rendered by Vitale, Caturano & Company, Ltd. for each of the last two fiscal years.

	2005 Fees	2004 Fees
Audit Fees	\$ 190,234	\$ 192,784
Audit-Related Fees		
Tax Fees	23,000	25,000
All Other Fees	9,250	
Total Fees	\$ 222,484	\$ 217,784

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-QSB and services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements.

Audit-Related Fees were for assurance and related services that are reasonably related to the performance of the audit or review of the Company s financial statements and are not reported under Audit Fees.

Tax Fees were for professional services rendered for federal, state and international tax compliance, tax advice and tax planning.

All Other Fees were for services other than the services reported above and include agreed-upon procedures in 2005.

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 engaged Vitale, Caturano & Company, Ltd. as the Company s independent registered public accountants for the current fiscal year. They have served as accountants for the Company since January 7, 2004.

As the Company s independent registered public accountants, VCC was engaged to conduct quarterly reviews of the Company; to conduct an audit of the consolidated financial statements of the Company for the full year 2005; and to prepare the federal and state tax returns of the Company for the year ended December 31, 2005. Representatives of VCC are expected to attend the Meeting in order to respond to questions from stockholders and will have the opportunity to make a statement.

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 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 seven nominees for election as directors at the Meeting who receive the greatest number of votes properly cast for the election of directors shall be elected the directors of the Company. Broker non-votes are counted for purposes of determining the presence of a quorum and, therefore, have the effect of a vote against a proposal (by raising the number of affirmative votes required to constitute a majority of the quorum).

The Board has fixed March 31, 2006, as the record date for determining the stockholders entitled to vote at the Meeting. On that date there were 7,248,487 shares of common stock issued, outstanding, and entitled to vote.

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

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 2005 Annual Meeting of Stockholders.

STOCKHOLDER PROPOSALS 2007 ANNUAL MEETING

In order to be included in the proxy statement and form of proxy for the 2007 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 15, 2006 (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 SEC if such proposals are to be included in the proxy statement and form of proxy. Stockholder proposals to be presented at the 2007 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 2007 Annual Meeting, must be received in writing at the Company s corporate offices no later than February 28, 2007 (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 2007 Annual Meeting if the Secretary receives notice by December 15, 2006, 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. You may also nominate an individual for election as a director at the 2007 Annual Meeting.

In either event, 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 14, 2006

APPENDIX A

AUDIT COMMITTEE CHARTER

FOR

SPIRE CORPORATION

Purpose

The purpose of the Audit Committee (the Committee) shall be as follows:

- 1. To oversee the accounting and financial reporting processes of Spire Corporation (the Company) and audits of the financial statements of the Company.
- 2. To provide assistance to the Board of Directors with respect to its oversight of:
 - a. The integrity of the Company s financial statements;
 - b. The Company s compliance with legal and regulatory requirements;
 - c. The independent auditors qualifications and independence; and
 - d. The performance of the Company s independent auditors.

3. To prepare the report that SEC rules require be included in the Company s annual proxy statement.

Composition

The Committee shall consist of three or more members of the Board of Directors, each of whom is determined by the Board of Directors to be independent under the rules of the Nasdaq Stock Market and the Sarbanes-Oxley Act.

Qualifications

All members of the Committee shall be able to read and understand fundamental financial statements (or be able to do so within a reasonable period of time after his or her appointment) and at least one member must be a financial expert under the requirements of the Sarbanes-Oxley Act. Committee members may enhance their familiarity with finance and accounting by participating in educational programs conducted by the Company or by an outside consultant.

Under exceptional and limited circumstances, however, one director who is not independent as defined in the rules and regulations of the Nasdaq Stock Market and who is not a current employee or an immediate family member of an employee of the Company may serve as a member of the Committee, provided that:

1. The Board determines that membership by the individual on the Committee is required by the best interests of the Company and its shareholders;

- 2. The Company complies with all other requirements of the rules and regulations of the Nasdaq Stock Market with respect to non-independent members of the Committee, as such rules and regulations may be amended or supplemented from time to time;
- 3. No such person may serve as the Chairman of the Committee; and
- 4. No such person may serve on the Committee for more than two years.

Compensation

No member of the Committee shall receive compensation other than: (a) director s fees for service as a director of the Company, including reasonable compensation for serving on the Committee and regular benefits that other directors receive; and (b) a pension or similar compensation for past performance, provided that such compensation is not conditioned on continued or future service to the Company.

Appointment and Removal

The members of the Committee shall be appointed by the Board of Directors and shall serve until such member s successor is duly elected and qualified or until such member s earlier resignation or removal. The members of the Committee may be removed, with or without cause, by a majority vote of the Board of Directors.

Chairman

Unless a Chairman is elected by the full Board of Directors, the members of the Committee shall designate a Chairman by the majority vote of the full Committee membership. The Chairman will chair all regular sessions of the Committee and set the agendas for Committee meetings.

Delegation to Subcommittees

In fulfilling its responsibilities, the Committee shall be entitled to delegate any or all of its responsibilities to a subcommittee of the Committee.

Meetings

The Committee shall meet as frequently as circumstances dictate. As part of its goal to foster open communication, the Committee shall periodically meet separately with each of management and the independent auditors to discuss any matters that the Committee or management or the auditors believe would be appropriate to discuss privately. In addition, the Committee should meet with the independent auditors and management periodically to review the Company s financial statements in a manner consistent with that outlined in this Charter. The Chairman of the Board or any member of the Committee may call meetings of the Committee. All meetings of the Committee may be held telephonically.

All non-management directors who are not members of the Committee may attend meetings of the Committee, but may not vote. In addition, the Committee may invite to its meetings any director, member of management of the Company, and such other persons as it deems appropriate in order to carry out its responsibilities. The Committee may also exclude from its meetings any persons it deems appropriate in order to carry out its responsibilities.

Duties and Responsibilities

The Committee shall carry out the duties and responsibilities set forth below. These functions should serve as a guide with the understanding that the Committee may determine to carry out additional functions and adopt additional policies and procedures as may be appropriate in light of changing business, legislative, regulatory, legal, or other conditions. The Committee shall also carry out any other duties and responsibilities delegated to it by the Board of Directors from time to time related to the purposes of the Committee outlined in this Charter. The Committee may perform any functions it deems appropriate under applicable law, rules, or regulations, the Company s By-laws, and the resolutions or other directives of the Board, including review of any certification required to be reviewed in accordance with applicable law or regulations of the SEC.

In discharging its oversight role, the Committee is empowered to study or investigate any matter of interest or concern that the Committee deems appropriate. In this regard, the Committee shall have the authority to retain, without seeking Board approval, outside legal, accounting, or other advisors for this purpose, including the authority to approve the fees payable to such advisors and any other terms of retention.

The Committee shall be given full access to the Company s Board of Directors, corporate executives, and independent accountants as necessary to carry out these responsibilities. While acting within the scope of its stated purpose, the Committee shall have all the authority of the Board of Directors, except as otherwise limited by applicable law.

Notwithstanding the foregoing, the Committee is not responsible for certifying the Company s financial statements or guaranteeing the auditors report. The fundamental responsibility for the Company s financial statements and disclosures rests with management and the independent auditors. It also is the job of the chief executive officer and senior management rather than that of the Committee to assess and manage the Company s exposure to risk.

Documents/Reports Review

1. Discuss with management and the independent auditors prior to public dissemination the Company s annual audited financial statements and quarterly financial statements, including the Company s disclosures under Management s Discussion and Analysis of Financial Condition and Results of Operations and discuss with the independent auditors the matters required to be discussed by Statement of Auditing Standards No. 61.

2. Discuss with management and the independent auditors prior to the Company s filing of any quarterly or annual report: (a) whether any significant deficiencies in the design or operation of internal controls exist that could adversely affect the Company s ability to record, process, summarize, and report financial data; (b) the existence of any material weaknesses in the Company s internal controls; and (c) the existence of any fraud, whether or not material, that involves management or other employees who have a significant role in the Company s internal controls.

3. Discuss with management and the independent auditors the Company s earnings press releases (paying particular attention to the use of any proforma or adjusted non-GAAP information), as well as financial information and earnings guidance provided to analysts and rating agencies. The Committee s discussion in this regard may be general in nature (*i.g.*, discussion of the types of information to be disclosed and the type of presentation to be made) and need not take place in advance of each earnings release or each instance in which the Company may provide earnings guidance.

4. Discuss 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.

Independent Auditors

5. Retain and terminate independent auditors and have the sole authority to approve all audit engagement fees and terms as well as all non-audit engagements with the independent auditors.

6. Inform each public accounting firm performing work for the Company that such firm shall report directly to the Committee.

7. Oversee the work of any public accounting firm employed by the Company, including the resolution of any disagreement between management and the auditor regarding financial reporting, for the purpose of preparing or issuing an audit report or related work.

8. Approve in advance any significant audit or non-audit engagement or relationship between the Company and the independent auditors, other than prohibited non-auditing services, as may be specified in the Sarbanes-Oxley Act of 2002 or applicable laws or regulations.

9. Review, at least annually, the qualifications, performance, and independence of the independent auditors. In conducting its review and evaluation, the Committee should:

a. At least annually obtain and review a report by the Company s independent auditors describing: (i) the auditing firm s internal quality-control procedures; (ii) any material issues raised by the most recent internal quality-control review, or peer review, of the auditing firm, or by any inquiry or investigation by

governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the auditing firm, and any steps taken to deal with any such issues; and (iii) to assess the auditors independence, all relationships between the independent auditors and the Company;

b. Ensure the rotation of the lead audit partner at least every five years, and consider whether there should be regular rotation of the audit firm itself;

c. Confirm with any independent auditors retained to provide audit services for any fiscal year that the lead (or coordinating) audit partner (having primary responsibility for the audit), or the audit partner responsible for reviewing the audit, has not performed audit services for the Company in each of the five previous fiscal years of the Company; and

d. Take into account the opinions of management and the Company s internal auditors (or other personnel responsible for the internal audit function).

Financial Reporting Process

10. In consultation with the independent auditors, management, and the internal auditors, review the integrity of the Company s financial reporting processes, both internal and external. In that connection, the Committee should obtain and discuss with management and the independent auditors reports from management and the independent auditors regarding: (a) all critical accounting policies and practices to be used by the Company and the related disclosure of those critical accounting policies under Management s Discussion and Analysis of Financial Condition and Results of Operations ; (b) analyses prepared by management and/or the independent auditors setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including all alternative treatments of financial information within generally accepted accounting principles that have been discussed with the Company s management, the ramifications of the use of the alternative disclosures, and treatments, including any significant changes in the Company s selection or application of accounting principles; (d) major issues as to the adequacy of the Company s internal controls and any specific audit steps adopted in light of material control deficiencies; (e) issues with respect to the design and effectiveness of the Company s disclosure controls and procedures, management s evaluation of those controls and procedures, and any issues relating to such controls and procedures during the most recent reporting period; (f) the effect of regulatory and accounting initiatives as well as off-balance sheet structures on the financial statements of the Company; and (g) any other material written communications between the independent auditor and the Company s management.

11. Review periodically the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements of the Company.

12. Review with the independent auditors any audit problems or difficulties encountered and management s response thereto. In this regard, the Committee must regularly review with the independent auditors: (a) any audit problems or other difficulties encountered by the auditors in the course of the audit work, including any restrictions on the scope of the independent auditors activities or on access to requested information, and any significant disagreements with management; and (b) management s responses to such matters. Without excluding other possibilities, the Committee may wish to review with the independent auditors (i) any accounting adjustments that were noted or proposed by the auditors but were passed (as immaterial or otherwise), (ii) any communications between the audit team and the audit firm s national office respecting auditing or accounting issues presented by the engagement, and (iii) any management or internal control letter issued, or proposed to be issued, by the independent auditors to the Company.

13. Review and discuss with the independent auditors the responsibilities, budget, and staffing of the Company s internal audit function.

Legal Compliance/General

14. Review periodically, with the Company s counsel, any legal matter that could have a significant impact on the Company s financial statements.

15. Discuss with management and the independent auditors the Company s guidelines and policies with respect to risk assessment and risk management. The Committee should discuss the Company s major financial risk exposures and the steps management has taken to monitor and control such exposures.

16. Set clear hiring policies for employees or former employees of the independent auditors. At a minimum, these policies should provide that any public accounting firm may not provide audit services to the Company if the chief executive officer, controller, chief financial officer, chief accounting officer, or any person serving in an equivalent position for the Company was employed by the public accounting firm and participated in any capacity in the audit of the Company within one year of the initiation of the current audit.

17. Establish procedures for (a) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

Reports

18. Prepare all reports required to be included in the Company s proxy statement, pursuant to and in accordance with applicable rules and regulations of the SEC.

19. Report regularly to the full Board of Directors. In this regard, the Committee should review with the full board any issues that arise with respect to the quality or integrity of the Company s financial statements, the Company s compliance with legal or regulatory requirements, and the performance and independence of the Company s independent auditors.

20. The Committee shall provide such recommendations as the Committee may deem appropriate. The report to the Board of Directors may take the form of an oral report by the Chairman or any other member of the Committee designated by the Committee to make such report.

21. Maintain minutes or other records of meetings and activities of the Committee.

Limitation of Audit Committee s Role

With respect to the foregoing responsibilities and processes, the Committee recognizes that the Company s financial management, as well as the independent auditors has more time, knowledge, and detailed information regarding the Company than do Committee members. Consequently, in discharging its oversight responsibilities, the Committee will not provide or be deemed to provide any expertise or special assurance as to the Company s financial statements or any professional certification as to the independent auditors work.

While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company s financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles and applicable rules and regulations. These are the responsibilities of management and the independent auditors. It also is not the duty of the Committee to conduct investigations or to assure compliance with laws and regulations and the Company s internal policies and procedures.

SPIRE CORPORATION

Proxy for Special Meeting in Lieu of 2006 Annual Meeting of Stockholders

May 18, 2006

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS.

The undersigned hereby appoints Roger G. Little and Michael W. O Dougherty, and either one of them, proxies of the undersigned, with power of substitution, to act for and to vote all shares of Spire Corporation common stock owned by the undersigned, upon the matters set forth in the Notice of Meeting and related Proxy Statement at the Special Meeting in Lieu of 2006 Annual Meeting of Stockholders of Spire Corporation, to be held at Spire Corporation, One Patriots Park, Bedford, Massachusetts at 10:00 a.m. on Thursday, May 18, 2006, and any adjournments thereof. The proxies, and either one of them, are further authorized to vote, in their discretion, upon such other business as may properly come before the Meeting, or adjournments thereof.

(Continued and to be signed on reverse side.)

YOUR SHARES WILL BE VOTED FOR THE FOLLOWING PROPOSAL UNLESS OTHERWISE INDICATED.

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE.

PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE: x

- 1. ELECTION OF DIRECTORS. To fix the number of directors at eight and to elect seven directors, leaving one vacancy, to serve for one year:
 - " FOR ALL NOMINEES
 - " WITHHOLD AUTHORITY FOR ALL NOMINEES
 - " FOR ALL EXCEPT (See instruction below)

NOMINEES:

- o Udo Henseler
- o David R. Lipinski
- o Mark C. Little
- o Roger G. Little
- o Michael J. Magliochetti
- o Guy L. Mayer
- o Roger W. Redmond

<u>INSTRUCTION</u>: To withhold authority to vote for any individual nominee(s), mark FOR ALL EXCEPT and fill in the circle next to each nominee you wish to withhold, as shown here: •

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

Signature of Stockholder Date _____

 Signature of Stockholder
 Date

 NOTE: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as

executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign name by authorized person.