SPIRE CORP
Form 10QSB
May 15, 2006

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

FORM 10-QSB

|X| Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the quarterly period ended March 31, 2006; or

|_| Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from ____________ to ____________

Commission file number: 0-12742

SPIRE CORPORATION
(Name of small business issuer as specified in its charter)

MASSACHUSETTS	04-2457335
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

ONE PATRIOTS PARK
BEDFORD, MASSACHUSETTS 01730-2396
(Address of principal executive offices)

781-275-6000
(Issuer's telephone number)

Securities registered under Section 12(g) of the Act:

COMMON STOCK, $0.01 PAR VALUE; REGISTERED ON THE NASDAQ STOCK MARKET
(Title of class)

Check whether the issuer: (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days.

Yes |X| No |_|

Indicate by check mark whether the registrant is a shell company (as

defined in Rule 12b-2 of the Exchange Act). Yes |_| No |X|

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date: There were 8,189,663 outstanding shares of the issuer's only class of common equity, Common Stock, $0.01 par value, on May 1, 2006.

Transitional Small Business Disclosure Format (check one): Yes |_| No |X|

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PART I
FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SPIRE CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEET

(UNAUDITED)

	MARCH 31, 2006
ASSETS	
Current assets	
Cash and cash equivalents	$ 2,805,247
Restricted cash	407,520
	3,212,767
Accounts receivable - trade, net	3,053,484
Inventories, net	1,856,923
Prepaid expenses and other current assets	518,440
Total current assets	8,641,614
Net property and equipment	4,109,689
Intangible and other assets (less accumulated amortization of $716,198)	725,105
Available-for-sale investments at quoted market value (cost of $1,082,422)	1,163,147
Restricted cash - long-term	121,000
Deposit - related party	191,250
Total assets	$ 14,951,805
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current liabilities	
Current portion of capital lease obligation	$ 341,806
Current portion of capital lease obligation - related party	792,566
Accounts payable	1,163,595
Accrued liabilities	1,668,797
Advances on contracts in progress	1,044,719
Total current liabilities	5,011,483
Long-term portion of capital lease obligation - related party	1,302,618
Deferred compensation	1,163,147
Total long-term liabilities	2,465,765
Total liabilities	7,477,248
Commitments and Contingencies:	
Stockholders' equity	
Common stock, $0.01 par value; 20,000,000 shares authorized; 7,248,487 shares issued and outstanding	72,485
Additional paid-in capital	10,963,196
Accumulated deficit	(3,609,559)
Accumulated other comprehensive income	48,435
Total stockholders' equity	7,474,557
Total liabilities and stockholders' equity	$ 14,951,805

See accompanying notes to unaudited condensed
consolidated financial statements.

SPIRE CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

	THREE MONTHS ENDED MARCH 31,	
	2006	2005
Net sales and revenues		
Contract research, service and license revenues	$ 2,509,516	$ 2,732,014
Sales of goods	2,863,927	1,447,501
Total net sales and revenues	5,373,443	4,179,515
Costs and expenses		
Cost of contract research, services and licenses	2,244,797	2,117,805
Cost of goods sold	2,353,698	1,418,760
Selling, general and administrative expenses	2,593,675	1,829,579
Internal research and development expenses	158,050	317,196
Total costs and expenses	7,350,220	5,683,340
Loss from operations	(1,976,777)	(1,503,825)
Other expense, net	(27,614)	(76,617)
Loss before income taxes	(2,004,391)	(1,580,442)
Income tax benefit (expense)	--	--
Net loss	$(2,004,391)	$(1,580,442)
Loss per share of common stock - basic and diluted	$ (0.28)	$ (0.23)
Weighted average number of common and common equivalent shares outstanding - basic and diluted	7,236,019	6,854,931

See accompanying notes to unaudited condensed
consolidated financial statements.

SPIRE CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(UNAUDITED)

	THREE MONTHS E
	2006
Cash flows from operating activities:	
Net loss	$(2,004,391)
Adjustments to reconcile net loss to net cash used in operating activities:	
Depreciation and amortization	527,347
Deferred compensation	23,949
Unearned purchase discount	--
Stock-based compensation	59,435
Changes in assets and liabilities:	
Restricted cash	397,025
Accounts receivable, net	642,927
Inventories	803,566
Prepaid expenses and other current assets	88,413
Accounts payable, accrued liabilities and other liabilities	(356,736)
Advances on contracts in progress	(713,760)
Net cash used in operating activities	(532,225)
Cash flows from investing activities:	
Additions to property and equipment	(99,793)
Increase in intangible and other assets	(75,952)
Net cash used in investing activities	(175,745)
Cash flows from financing activities:	
Principal payment on capital lease obligations	(104,878)
Principal payment on capital lease obligations - related parties	(152,798)
Proceeds from exercise of stock options	140,730
Net cash used in financing activities	(116,946)
Net decrease in cash and cash equivalents	(824,916)
Cash and cash equivalents, beginning of period	3,630,163
Cash and cash equivalents, end of period	$ 2,805,247
Supplemental disclosures of cash flow information: Cash paid (received) during the period for:	
Interest	$ (8,863)
Interest - related party	$ 38,452
Income taxes	$ --

See accompanying notes to unaudited condensed consolidated financial statements.

SPIRE CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

MARCH 31, 2006

1. DESCRIPTION OF THE BUSINESS

Spire Corporation (the "Company") develops, manufactures and markets highly-engineered products and services in four principal business areas: solar equipment, solar systems, biomedical and optoelectronics bringing to bear expertise in materials technologies across all four business areas.

In the solar equipment area, the Company develops, manufactures and markets specialized equipment for the production of terrestrial photovoltaic modules from solar cells. The Company's equipment has been installed in approximately 170 factories in 43 countries.

In the solar systems area, the Company provides custom and building integrated photovoltaic modules, stand-alone emergency power backup and electric power grid-connected distributed power generation systems employing photovoltaic technology developed by the Company.

In the biomedical area, the Company provides value-added surface treatments to manufacturers of orthopedic and other medical devices that enhance the durability, antimicrobial characteristics or other material characteristics of their products; develops and markets hemodialysis catheters and related devices for the treatment of chronic kidney disease; and performs sponsored research programs into practical applications of advanced biomedical and biophotonic technologies.

In the optoelectronics area, the Company provides compound semiconductor foundry services on a merchant basis to customers involved in biomedical/biophotonic instruments, telecommunications and defense applications. Services include compound semiconductor wafer growth, other thin film processes and related device processing and fabrication services. The Company also provides materials testing services and performs services in support of sponsored research into practical applications of optoelectronic technologies.

2. INTERIM FINANCIAL STATEMENTS

In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments necessary to fairly present the Company's financial position as of March 31, 2006 and the results of its operations and cash flows for the three months ended March 31, 2006 and 2005. The results of operations for the three months ended March 31, 2006 are not necessarily indicative of the results to be expected for the fiscal year ending December 31, 2006.

The accounting policies followed by the Company are set forth in Footnote 2 to the Company's consolidated financial statements in its annual report on Form 10-KSB for the year ended December 31, 2005. As described in Footnote 10, the Company adopted Financial Accounting Standards Board Statement No. 123(R), Share-Based Payment, on January 1, 2006.

3. ACCOUNTS RECEIVABLE/ADVANCES ON CONTRACTS IN PROGRESS

Net accounts receivable, trade consists of the following:

March 31,

	2006
Amounts billed	$3,001,065
Retainage	31,876
Accrued revenue	219,832
	3,252,773
Less: Allowance for sales returns and doubtful accounts	(199,289)
Net accounts receivable	$3,053,484
Advances on contracts in progress	$1,044,719

SPIRE CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (CONTINUED)
(UNAUDITED)

MARCH 31, 2006

Accrued revenue represents revenue recognized on contracts for which billings have not been presented to customers as of the balance sheet date. These amounts are billed and generally collected within one year.

Retainage represents revenues on certain United States government sponsored research and development contracts. These amounts, which usually represent 15% of the Company's research fee on each applicable contract, are not collectible until a final cost review has been performed by government auditors. Included in retainage are amounts expected to be collected after one year, which totaled approximately $32,000 at March 31, 2006. All other accounts receivable are expected to be collected within one year.

All contracts with United States government agencies have been audited by the government through December 2003. The Company has not incurred significant losses or adjustments as a result of government audits.

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to pay amounts due. The Company actively pursues collection of past due receivables as the circumstances warrant. Customers are contacted to determine the status of payment and senior accounting and operations management are included in these efforts as is deemed necessary. A specific reserve will be established for past due accounts over 60 days and over a specified amount, when it is probable that a loss has been incurred and the Company can reasonably estimate the amount of the loss. The Company does not record an allowance for government receivables and invoices backed by letters of credit as realizeability is reasonably assured. Bad debts are written off against the allowance when identified. There is no dollar threshold for account balance write-offs. While rare, a write-off is only recorded when all efforts to collect the receivable have been exhausted and only in consultation with the appropriate business line manager.

In addition, the Company maintains an allowance for potential future product returns and rebates related to current period revenues. The Company analyzes the rate of historical returns when evaluating the adequacy of the allowance for sales returns and allowances. Returns and rebates are charged against the allowance when incurred.

Advances on contracts in progress represent contracts for which billings have been presented to the customer but revenue has not been recognized.

4. INVENTORIES

Inventories consist of the following:

	March 31, 2006
Raw materials	$1,289,209
Work in process	317,418
Finished goods	250,296
	$1,856,923

5. LOSS PER SHARE

The following table provides a reconciliation of the denominators of the Company's reported basic and diluted loss per share computations for the periods ended:

	Three Months Ended March 31,	
	2006	2005
Weighted average number of common and common equivalent shares outstanding - basic	7,236,019	6,854,931
Add: Net additional common shares upon assumed exercise of common stock options	--	--
Adjusted weighted average number of common and common equivalents shares outstanding - diluted	7,236,019	6,854,931

For the three months ended March 31, 2006 and 2005, 6,250 and 78,250 shares, respectively, of common stock issuable relative to stock options had exercise prices per share that exceeded the average market price of the Company's common stock and were excluded from the calculation of diluted shares since the inclusion of such shares would be anti-dilutive.

In addition, for the three months ended March 31, 2006 and 2005, 201,254 and 193,267 shares, respectively, of common stock related to stock options were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive due to the Company's net loss position.

6. OPERATING SEGMENTS AND RELATED INFORMATION

The following table presents certain operating division information in accordance with the provisions of SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information."

	Solar Equipment	Solar Systems	Biomedical	Optoelect

For the three months ended March 31, 2006				
Net sales and revenues	$2,315,234	$ 222,873	$2,327,956	$507
Loss from operations	(82,621)	(347,480)	(651,491)	(895,
For the three months ended March 31, 2005				
Net sales and revenues	$ 941,993	$ 53,450	$2,493,096	$690
Loss from operations	(390,106)	(395,931)	(137,410)	(580,

The following table shows net sales and revenues by geographic area (based on customer location):

	Three Months Ended March 31,			
	2006	%	2005	%
Foreign	2,492,000	46%	$ 627,000	15%
United States	2,881,000	54%	3,553,000	85%
	5,373,000	100%	$4,180,000	100%

Revenues from contracts with United States government agencies for the three months ended March 31, 2006 and 2005 were approximately $620,000 and $878,000, or 12% and 21% of consolidated net sales and revenues, respectively.

Two customers accounted for approximately 32% and one customer accounted for approximately 12% of the Company's gross sales during the three months ended March 31, 2006 and 2005, respectively. One customer represented 27% of trade account receivables at March 31, 2006.

7. INTANGIBLE AND OTHER ASSETS

Patents amounted to $66,921, net of accumulated amortization of $608,735, at March 31, 2006. Licenses amounted to $167,537, net of accumulated amortization of $107,463 at March 31, 2006. Patent cost is primarily composed of cost associated with securing and registering patents that the Company has been awarded or that have been submitted to, and the Company believes will be approved by, the government. License cost is composed of the cost to acquire rights to the underlying technology or know-how. These costs are capitalized and amortized over their useful lives or terms, ordinarily five years, using the straight-line method. There are no expected residual values related to these patents or licenses. For disclosure purposes, the table below includes future amortization expense for licenses and patents owned by the Company as well as $486,692 of estimated amortization expense on a five-year straight-line basis related to patents that remain pending as of the balance sheet date. Estimated amortization expense for the periods ending December 31, is as follows:

Year	Amortization Expense
2006	$ 143,321
2007	184,124
2008	157,077
2009	114,650
2010 and beyond	121,978
	$ 721,150

Also included in other assets are $3,955 of refundable deposits made by the Company.

8. AVAILABLE-FOR-SALE INVESTMENTS

Available-for-sale securities consist of the following assets held as part of the Spire Corporation Non-Qualified Deferred Compensation Plan:

	March 31, 2006
Equity investments	$ 921,606
Government bonds	165,625
Cash and money market funds	75,916
	$1,163,147

These investments have been classified as long-term available-for-sale investments and are reported at fair value, with unrealized gains and losses included in accumulated other comprehensive loss, net of related tax effect. As of March 31, 2006, the net unrealized gain on these marketable securities was approximately $48,000.

9. NOTES PAYABLE AND CREDIT ARRANGEMENTS

The Company has a $2,000,000 Loan Agreement (the "Agreement") with Citizens Bank of Massachusetts (the "Bank"), which expires on June 27, 2006. The Agreement provides Standby Letter of Credit Guarantees for foreign and domestic customers, which are 100% secured with cash. At March 31, 2006, the Company had approximately $529,000 of restricted cash associated with outstanding Letters of Credit. Standby Letters of Credit under this Agreement bear interest at 1%. The Agreement also provides the Company with the ability to convert to a $2,000,000 revolving line of credit, based upon eligible accounts receivable and certain conversion covenants. Loans under this revolving line of credit bear interest at the Bank's prime rate, as determined, plus 1/2% (8.25% at March 31, 2006.) At March 31, 2006, the Company had not exercised its conversion option and no amounts were outstanding under the revolving line of credit. A commitment fee of ..25% is charged on the unused portion of the borrowing base. The Agreement contains covenants including certain financial reporting requirements. At March 31, 2006, the Company was in compliance with its financial reporting requirements and cash balance covenants.

(UNAUDITED)

MARCH 31, 2006

10. STOCK-BASED COMPENSATION

On January 1, 2006, the Company adopted the fair value recognition provisions of Financial Accounting Standards Board ("FASB") Statement No. 123(R), Share-Based Payment ("Statement 123(R)") using the modified prospective method. In accordance with the modified prospective method, the Company has not restated its consolidated financial statements for prior periods. Under this transition method, stock-based compensation expense for the first quarter of 2006 includes stock-based compensation expense for all of the Company's stock-based compensation awards granted prior to, but not yet vested as of, January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of FASB Statement No. 123, Accounting for Stock-Based Compensation ("Statement 123"). Stock-based compensation expense for all stock-based compensation awards granted on or after January 1, 2006 will be based on the grant-date fair value estimated in accordance with the provisions of Statement 123(R). The impact of Statement 123(R) on the Company's results of operations resulted in recognition of stock option expense of approximately $60,000.

Prior to January 1, 2006, the Company accounted for share-based payments under the recognition and measurement provisions for APB Opinion No. 25, Accounting for Stock Issued to Employees ("APB 25"), and related Interpretations, as permitted by Statement 123. In accordance with APB 25 no compensation cost was required to be recognized for options granted to employees that had an exercise price equal to the market value of the underlying common stock on the date of grant.

The Company uses the Black-Scholes option pricing model as its method for determining fair value of stock option grants, which was also used by the Company for its pro forma information disclosures of stock-based compensation expense prior to the adoption of Statement 123(R). The Company uses the straight-line method of attributing the value of stock-based compensation expense for all stock option grants. Stock compensation expense for all stock-based grants and awards is recognized over the service or vesting period of each grant or award.

Statement 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates in order to derive the Company's best estimate of awards ultimately expected to vest. Forfeitures represent only the unvested portion of a surrendered option and are typically estimated based on historical experience. Based on an analysis of the Company's historical data, the Company applied a 14% forfeiture rate to stock options outstanding in determining its Statement 123(R) stock compensation expense for the quarter ended March 31, 2006, which it believes is a reasonable forfeiture estimate for the period. In the Company's pro forma information required under Statement No. 123 for the periods prior to 2006, the Company accounted for forfeitures as they occurred.

The Company has one employee stock option plan: the 1996 Equity Incentive Plan. This plan was approved by stockholders and provides that the Board of Directors may grant options to purchase the Company's common stock to key employees and directors of the Company. Incentive and non-qualified options must be granted at least at the fair market value of the common stock or, in the case of certain optionees, at 110% of such fair market value at the time of grant. The options may be exercised, subject to certain vesting requirements, for periods up to ten years from the date of issue.

A summary of award activity under this plan as of March 31, 2006 and

changes during the three month period is as follows:

	Number of Shares	Weighted-Average Exercise Price
Options Outstanding at December 31, 2005	406,314	$4.38
Granted	16,250	$8.66
Exercised	(25,500)	$5.52
Cancelled/expired	(1,500)	$5.70
Options Outstanding at March 31, 2006	395,564	$4.48
Options Exercisable at March 31, 2006	157,645	$3.75

SPIRE CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (CONTINUED)
(UNAUDITED)

MARCH 31, 2006

The options outstanding and exercisable at March 31, 2006 were in the following exercise price ranges:

	Options Outstanding				Options Exercisable		
Range of Exercise Price	Number of Shares Outstanding	Weighted -Average Remaining Contractual Life	Weighted- Average Exercise Price	Aggregate Intrinsic Value	Number of Shares Exercisable	Weighted- Average Exercise Price	Aggreg Intrin Valu
$1.78 to $ 3.11	44,374	3.98 years	$2.32	$269,854	40,874	$2.29	$249,
$3.12 to $ 3.90	127,058	5.65 years	$3.89	572,734	73,379	$3.89	331,
$3.91 to $ 4.90	153,195	8.33 years	$4.33	623,095	27,140	$4.18	114,
$4.91 to $ 6.36	42,187	8.19 years	$6.09	97,542	16,252	$6.07	37,
$6.37 to $10.74	28,750	7.70 years	$8.85	5,937	--	$ --	-
	395,564	7.08 years	$4.48	$1,569,162	157,645	$3.75	$733,

The aggregate intrinsic value in the table above represents the total intrinsic value, based on the Company's closing stock price of $8.40 as of March 31, 2006, which would have been received by the option holders had all option holders exercised their options as of that date. The total intrinsic value of options exercised during the quarter ended March 31, 2006 was $123,786.

The following table illustrates the pro forma effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of Statement No. 123 to stock-based employee compensation, for the three month period ended March 31, 2005. Since stock-based compensation expense for the three months ended March 31, 2006, was calculated and recorded under the provisions of Statement 123(R), no pro forma disclosure for that period is presented.

	Three Months Ended March 31, 2005
Net loss, as reported	$(1,580,442)
Less: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(81,776)
Pro forma net loss	$(1,662,218)
Loss per share:	
Basic - as reported	$ (0.23)
Basic - pro forma	$ (0.24)
Diluted - as reported	$ (0.23)
Diluted - pro forma	$ (0.24)

The per-share weighted-average fair value of stock options granted during the quarters ended March 31, 2006 and 2005 was $4.34 and $3.17, respectively, on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

Year	Expected Dividend Yield	Risk-Free Interest Rate	Expected Option Life	Expected Volatility Factor
2006	--	4.69%	7.5 years	48.8%
2005	--	4.50%	5 years	77.3%

For the quarter ended March 31, 2006, 16,250 stock options were granted.

11. COMPREHENSIVE LOSS

Comprehensive loss includes certain changes in equity that are excluded from net loss and consists of the following:

	For the Three Months Ended March 31,	
	2006	2005
Net loss	$(2,004,391)	$(1,580,442)
Other comprehensive income (loss):		
Unrealized gain (loss) on available for		

sale marketable securities, net of tax	23,949	(17,112)
Total comprehensive loss	$(1,980,442)	$(1,597,554)

12. SUBSEQUENT EVENT

Private Placement of Equity

On April 26, 2006, the Company entered into Stock Purchase Agreements with two accredited institutional investors in connection with the private placement of 941,176 shares of the Company's common stock at a purchase price of $8.50 per share. On April 28, 2006, the Company completed the private placement. The net proceeds of the sale were approximately $7.7 million after deducting placement fees and other closing costs.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THIS MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS SECTION AND OTHER PARTS OF THIS REPORT CONTAIN FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED (THE "EXCHANGE ACT"), WHICH STATEMENTS INVOLVE RISKS AND UNCERTAINTIES. THESE STATEMENTS RELATE TO OUR FUTURE PLANS, OBJECTIVES, EXPECTATIONS AND INTENTIONS. THESE STATEMENTS MAY BE IDENTIFIED BY THE USE OF WORDS SUCH AS "MAY", "COULD", "WOULD", "SHOULD", "WILL", "EXPECTS", "ANTICIPATES", "INTENDS", "PLANS", "BELIEVES", "ESTIMATES", AND SIMILAR EXPRESSIONS. THE COMPANY'S ACTUAL RESULTS AND THE TIMING OF CERTAIN EVENTS MAY DIFFER SIGNIFICANTLY FROM THE RESULTS AND TIMING DESCRIBED IN THE FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE, BUT ARE NOT LIMITED TO, THOSE FACTORS DISCUSSED OR REFERRED TO IN THIS REPORT AND IN THE ANNUAL REPORT ON FORM 10-KSB FOR THE YEAR ENDED DECEMBER 31, 2005. THE FOLLOWING DISCUSSION AND ANALYSIS OF THE COMPANY'S FINANCIAL CONDITION AND RESULTS OF OPERATIONS SHOULD BE READ IN LIGHT OF THOSE FACTORS AND IN CONJUNCTION WITH, THE COMPANY'S ACCOMPANYING CONSOLIDATED FINANCIAL STATEMENTS, INCLUDING THE NOTES THERETO.

OVERVIEW

Spire Corporation (the "Company") develops, manufactures and markets highly-engineered products and services in four principal business areas: solar equipment, solar systems, biomedical and optoelectronics bringing to bear expertise in materials technologies across all four business areas, discussed below.

In the solar equipment area, the Company develops, manufactures and markets specialized equipment for the production of terrestrial photovoltaic modules from solar cells. The Company's equipment has been installed in approximately 170 factories in 43 countries.

In the solar systems area, the Company provides custom and building integrated photovoltaic modules, stand-alone emergency power backup and electric power grid-connected distributed power generation systems employing photovoltaic technology developed by the Company.

In the biomedical area, the Company provides value-added surface treatments to manufacturers of orthopedic and other medical devices that enhance the durability, antimicrobial characteristics or other material characteristics of their products; develops and markets hemodialysis catheters and related devices for the treatment of chronic kidney disease; and performs sponsored research programs into practical applications of advanced biomedical and biophotonic technologies.

In the optoelectronics area, the Company provides compound semiconductor foundry services on a merchant basis to customers involved in biomedical/biophotonic instruments, telecommunications and defense applications. Services include compound semiconductor wafer growth, other thin film processes and related device processing and fabrication services. The Company also provides materials testing services and performs services in support of sponsored research into practical applications of optoelectronic technologies.

Operating results will depend upon product mix, as well as the timing of shipments of higher priced products from the Company's solar equipment line and delivery of solar systems. Export sales, which amounted to 46% of net sales and revenues for the three months ended March 31, 2006, continue to constitute a significant portion of the Company's net sales and revenues.

Results of Operations

The following table sets forth certain items as a percentage of net sales and revenues for the periods presented:

	Three Months Ended March 31,	
	2006	2005
Net sales and revenues	100%	100%
Cost of sales and revenues	86	85
Gross profit	14	15
Selling, general and administrative expenses	48	44
Internal research and development expenses	3	7
Loss from operations	(37)	(36)
Other expense, net	--	2
Loss before income taxes	(37)	(38)
Income tax benefit (expense)	--	--
Net loss	(37%)	(38%)

OVERALL

The Company's total net sales and revenues for the three months ended March 31, 2006 ("2006") increased 29% compared to the three months ended March 31,

2005 ("2005"). The increase was primarily attributable to a $1.3 million increase in solar equipment sales.

SOLAR BUSINESS UNIT

Sales in the Company's solar business unit increased 155% during 2006 as compared to 2005 primarily due to the 175% increase in solar equipment sales resulting from the volume and timing of the delivery of equipment.

BIOMEDICAL BUSINESS UNIT

Revenues of the Company's biomedical business unit decreased 7% during 2006 as compared to 2005 as a result of a 32% decrease in revenue from Spire's government funded research and development activities. This decrease was partially offset by an 18% increase in biomedical processing services revenue.

OPTOELECTRONICS BUSINESS UNIT

Sales in the Company's optoelectronics business unit decreased 27% during 2006 primarily due to the timing of contract completion and a decrease in the size and dollar value of customers orders.

Three Months Ended March 31, 2006 Compared to Three Months Ended March 31, 2005

NET SALES AND REVENUES

The following table categorizes the Company's net sales and revenues for the periods presented:

	Three Months Ended March 31,		Increase/(Decrease)	
	2006	2005	$	%
Contract research, services and license revenues	$2,509,000	$2,732,000	$ (223,000)	(8%)
Sales of goods	2,864,000	1,448,000	1,416,000	98%
Net sales and revenues	$5,373,000	$4,180,000	$1,193,000	29%

The 8% decrease in contract research, services and license revenues for the three months ended March 31, 2006 as compared to the three months ended March 31, 2005 is primarily attributable to a decrease in research and development

activities and, to a lesser extent, Bandwidth foundry services. These decreases were partially offset by an increase in biomedical processing services. Revenues from Spire's research and development activities decreased 32% in 2006 as compared to 2005 primarily due to a decrease in the number and value of contracts associated with funded research and development. In addition, Bandwidth foundry service revenue decreased 27% primarily due to the timing of contract completion and a decrease in the size and dollar value of customer orders. Revenue from Spire's biomedical processing services increased 18% in 2006 compared to 2005 as a result of increased demand for Spire's IonGuard(R) implant services among its existing customer base.

The 98% increase in sales of goods for the three months ended March 31, 2006 as compared to the three months ended March 31, 2005 was primarily due to

an increase in solar equipment revenues and, to a lesser extent, an increase in solar systems revenues. Solar equipment sales increased 175% in 2006 as compared to 2005 primarily due to the timing and delivery of customer orders. Solar systems sales increased 317% due to number and volume of customer orders.

COST OF SALES AND REVENUES

The following table categorizes the Company's cost of sales and revenues for the periods presented, stated in dollars and as a percentage of related sales and revenues:

	Three Months Ended March 31,				Increase/(Decrease)	
	2006	%	2005	%	$	%
Cost of contract research, services and licenses	$2,245,000	90%	$2,118,000	78%	$ 127,000	6%
Cost of goods sold	2,354,000	82%	1,419,000	98%	935,000	66%
Net cost of sales and revenues	$4,599,000	86%	$3,537,000	85%	$1,062,000	30%

The $127,000 (6%) increase in cost of contract research and service revenues in 2006 is primarily due to increased costs within the Company's biomedical processing services and Bandwidth units. Bandwidth's costs increased 8% despite a 27% decrease in revenues primarily due to the contract mix. Biomedical processing services' costs increased 23% resulting from its 18% increase in revenues. Partially offsetting these increases was a 23% decrease in costs associated with funded research and development activities resulting from its 32% decrease in revenues. Cost of contract research, services and licenses as a percentage of revenue increased 12% primarily due to the increased costs at Bandwidth.

The $935,000 (66%) increase in cost of goods sold is primarily due to increased costs within Spire's solar equipment and systems product lines. Solar equipment costs increased 86% as a result of its 175% increase in revenues. Solar systems costs increased 137% as a result of its 317% increase in revenues. The decrease in cost of goods sold as a percentage of revenue is the result of improved contribution margins in solar equipment and solar systems product lines.

OPERATING EXPENSES

The following table categorizes the Company's operating expenses for the periods presented, stated in dollars and as a percentage of total sales and revenues:

	Three Months Ended March 31,				Increase/(Decrease)	
	2006	%	2005	%	$	%
Selling, general and administrative	$2,594,000	48%	$1,830,000	44%	$ 764,000	42%
Internal research and development	158,000	3%	317,000	8%	(159,000)	(50%)
Operating expenses	$2,752,000	51%	$2,147,000	51%	$ 605,000	28%

INTERNAL RESEARCH AND DEVELOPMENT

The decrease in research and development costs was primarily a result of a reduction in research and development activities at Bandwidth and, to a lesser extent, reductions in research and development efforts within our biomedical processing services unit and reduced efforts in the "next generation" solar energy module manufacturing equipment. The

decrease in research and development expenses as a percentage of sales and revenues was primarily due to the increase in sales and revenues and, to a lesser extent, the decreased costs described above.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

The increase was due primarily to costs associated with sales and marketing efforts throughout all of our product lines, ongoing litigation matters, and increased facility related costs. The increase in selling, general and administrative expenses as a percentage of sales and revenues was primarily due to the 42% increase in selling, general and administration costs discussed above offset by the 29% increase in sales and revenues.

OTHER EXPENSE, NET

The Company earned approximately $19,000 and $9,000 of interest income for the quarters ended March 31, 2006 and 2005, respectively. The Company incurred interest expense of approximately $48,000 and $86,000 for the quarters ended March 31, 2006 and 2005, respectively. The interest expense is primarily associated with interest incurred on capital leases associated with the semiconductor foundry. In addition, the Company recognized approximately $1,000 of currency transaction income related to the conversion of a Japanese Yen account into U.S. dollars at March 31, 2006.

INCOME TAXES

The Company did not record an income tax benefit for the three months ended March 31, 2006. A valuation allowance has been provided against the current period tax benefit due to uncertainty regarding the realization of the net operating loss in the future.

NET LOSS

The Company reported a net loss for the three months ended March 31, 2006 of approximately $2,004,000, compared to a net loss of $1,580,000 in 2005. The net loss increased approximately $424,000 primarily due to the increase in selling, general and administrative costs outlined above partially offset by the increase in revenues discussed above.

Liquidity and Capital Resources

	March 31, 2006	December 31, 2005	Increase/(Decrease) $	%
Cash and cash equivalents	$2,805,000	$3,630,000	$ (825,000)	(23%)
Working capital	3,630,000	5,270,000	$(1,640,000)	(31%)

Cash and cash equivalents decreased primarily due to cash used in operating

activities and, to a lesser extent, investments in property and equipment and payments on capital leases. These decreases were partially offset by the proceeds from the exercise of stock options.

The Company has historically funded its operating cash requirements using operating cash flow and proceeds from the sale and licensing of technology. The Company's liquidity position benefitted as a result of cash receipts of $3,000,000 in both 2005 and 2004, arising from the sale of a hemodialysis patent license to Bard Access Systems. The Company received its final $3,000,000 payment under this arrangement in June 2005. In addition, the Company received JPY 400,000,000 (approximately $3.7 million) in June 2005 from the sale of a license to the Company's solar technology.

The Company has a $2,000,000 Loan Agreement (the "Agreement") with Citizens Bank of Massachusetts (the "Bank"), which expires on June 27, 2006. The Agreement provides Standby Letter of Credit guarantees for certain foreign and domestic customers, which are 100% secured with cash. At March 31, 2006, the Company had approximately $529,000 of restricted cash associated with outstanding Letters of Credit. Standby Letters of Credit under this Agreement bear interest at 1%. The Agreement also provides the Company with the ability to convert to a $2,000,000 revolving line of credit, based upon eligible accounts receivable and certain conversion covenants. Loans under this revolving line of credit bear interest at the Bank's prime rate as determined plus 1/2% (8.25% at March 31, 2006.) At March 31, 2006, the Company had not exercised its conversion option and no amounts were outstanding under the revolving line of credit. A commitment fee of .25% is charged on the unused portion of the borrowing base. The Agreement contains covenants including certain

financial reporting requirements. At March 31, 2006, the Company was in compliance with its financial reporting requirements and cash balance covenants.

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to pay amounts due. The Company actively pursues collection of past due receivables as the circumstances warrant. Customers are contacted to determine the status of payment and senior accounting and operations management are included in these efforts as is deemed necessary. A specific reserve will be established for past due accounts over 60 days and over a specified amount, when it is probable that a loss has been incurred and the Company can reasonably estimate the amount of the loss. The Company does not record an allowance for government receivables and invoices backed by letters of credit as realizeability is reasonably assured. Bad debts are written off against the allowance when identified. There is no dollar threshold for account balance write-offs. While rare, a write-off is only recorded when all efforts to collect the receivable have been exhausted and only in consultation with the appropriate business line manager.

To date, there are no material commitments by the Company for capital expenditures. At March 31, 2006, the Company's accumulated deficit was approximately $3,610,000, compared to accumulated deficit of approximately $1,605,000 as of December 31, 2005.

On April 26, 2006, the Company entered into Stock Purchase Agreements with two accredited institutional investors in connection with the private placement of 941,176 shares of the Company's common stock at a purchase price of $8.50 per share. On April 28, 2006, the Company completed the private placement. The net proceeds of the sale were approximately $7.7 million after deducting placement fees and other closing costs.

The Company believes it has sufficient resources to finance its current

operations for the foreseeable future from operating cash flow and working capital.

Impact of Inflation and Changing Prices

Historically, the Company's business has not been materially impacted by inflation. Manufacturing equipment and solar systems are generally quoted, manufactured and shipped within a cycle of approximately nine months, allowing for orderly pricing adjustments to the cost of labor and purchased parts. The Company has not experienced any negative effects from the impact of inflation on long-term contracts. The Company's service business is not expected to be seriously affected by inflation because its procurement-production cycle typically ranges from two weeks to several months, and prices generally are not fixed for more than one year. Research and development contracts usually include cost escalation provisions.

Foreign Currency Fluctuation

The Company sells only in U.S. dollars, generally against an irrevocable confirmed letter of credit through a major United States bank. Therefore the Company is not directly affected by foreign exchange fluctuations on its current orders. However, fluctuations in foreign exchange rates do have an effect on the Company's customers' access to U.S. dollars and on the pricing competition on certain pieces of equipment that the Company sells in selected markets. The Company received Japanese yen in exchange for the sale of a license to its solar technology. In addition, purchases made and royalties received under the Company's Consortium Agreement with its Japanese partner will be in Japanese yen. The Company does not believe that foreign exchange fluctuations will materially affect its operations.

Related Party 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. Effective December 1, 2005, the Company entered into a two-year Extension of Lease Agreement (the "Lease Extension") directly with SPI-Trust. 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 quarter ended March 31, 2006 was approximately $310,000. No amounts were due from SPI-Trust as of March 31, 2006 for building related costs.

In conjunction with the acquisition of 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 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 March 31, 2006.) The lease agreement does not provide for a transfer of ownership at any point. Interest costs were assumed at 7%. For the quarter ended March 31, 2006, interest expense was approximately $38,000. This lease has been classified as a related party capital lease and a summary of payments (including interest) is as follows:

Year	Rate Per Square Foot	Annual Rent	Monthly Rent	Security Deposit
June 1, 2003 - May 31, 2004	$6.00	$ 540,000	$45,000	$135,000
June 1, 2004 - May 31, 2005	7.50	675,000	56,250	168,750
June 1, 2005 - May 31, 2006	8.50	765,000	63,750	191,250
June 1, 2006 - May 31, 2007	10.50	945,000	78,750	236,250
June 1, 2007 - May 31, 2008	13.50	1,215,000	101,250	303,750
		$4,140,000		

At March 31, 2006, approximately $793,000 and $1,303,000 are reflected as the current and long-term portions of capital lease obligation - related party, respectively, in the consolidated balance sheet.

Critical Accounting Policies

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Among the significant estimates affecting our consolidated financial statements are those relating to revenue recognition, reserves for doubtful accounts and sales returns and allowances, reserve for excess and obsolete inventory, impairment of long-lived assets, income taxes, and warranty reserves. We regularly evaluate our estimates and assumptions based upon historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. To the extent actual results differ from those estimates, our future results of operations may be affected. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements. Refer to Footnote 2 of our notes to consolidated financial statements in our Annual Report on Form 10-KSB for the year ended December 31, 2005 for a description of our accounting policies.

REVENUE RECOGNITION

The Company derives its revenues from three primary sources: (1) commercial products including, but not limited to, solar energy manufacturing equipment, solar energy systems and hemodialysis catheters; (2) biomedical and semiconductor processing services; and (3) United States government funded research and development contracts.

We generally recognize product revenue upon shipment of products provided there are no uncertainties regarding customer acceptance, persuasive evidence of an arrangement exists, the sales price is fixed or determinable, and collectibility is reasonably assured. These criteria are generally met at the time of shipment when the risk of loss and title passes to the customer or distributor, unless a consignment arrangement exists. Revenue from consignment arrangements is recognized based on product usage indicating sales are complete.

The Company utilizes a distributor network to market and sell its hemodialysis catheters domestically. The Company generally recognizes revenue when the catheters are shipped to its distributors. Gross sales reflect reductions attributable to customer returns and various customer incentive programs including pricing discounts and rebates. Product returns are permitted in certain sales contracts and an allowance is recorded for returns based on the Company's history of actual returns. Certain customer incentive programs require management to estimate the cost of those programs. The allowance for these programs is determined through an analysis of programs offered, historical trends, expectations regarding customer and consumer participation, sales and payment trends, and experience with payment patterns associated with similar programs that had been previously offered. An analysis of the sales return and rebate activity for the three months ended March 31, 2006, is as follows:

	Rebates	Returns	Total
Balance - December 31, 2005	$91,600	$ 19,100	$110,700
Provision	101,512	31,032	132,544
Utilization	(96,955)	(35,736)	(132,691)
Balance - March 31, 2006	$96,157	$ 14,396	$110,553

- Credits for rebates are recorded in the month of the actual sale.
- Credits for returns are processed when the actual merchandise is received by the Company.
- Substantially all rebates and returns are processed no later than three months after original shipment by the Company.

The reserve percentage has been approximately 13% to 15% of inventory held by distributors over the last two years. The Company performs various sensitivity analyses to determine the appropriate reserve percentage to use. To date, actual quarterly reserve utilization has approximated the amount provided. The total inventory held by distributors covered by sales incentive programs was approximately $720,000 at March 31, 2006.

If sufficient history to make reasonable and reliable estimates of returns or rebates does not exist, revenue associated with such practices is deferred until the return period lapses or a reasonable estimate can be made. This deferred revenue will be recognized as revenue when the distributor reports to us that it has either shipped or disposed of the units (indicating that the possibility of return is remote).

The Company's OEM capital equipment solar energy business builds complex

customized machines to order for specific customers. Substantially all of these orders are sold on a FOB Bedford, Massachusetts (or EX-Works Factory) basis. It is the Company's policy to recognize revenues for this equipment as the product is shipped to the customer, as customer acceptance is obtained prior to shipment and the equipment is expected to operate the same in the customer's environment as it does in the Company's environment. When an arrangement with the customer includes future obligations or customer acceptance, revenue is recognized when those obligations are met or customer acceptance has been achieved. The Company's solar energy systems business installs solar energy systems on customer-owned properties on a contractual basis. Generally, revenue is recognized once the systems have been installed and the title is passed to the customer. For arrangements with multiple elements, the Company allocates fair value to each element in the contract and revenue is recognized upon delivery of each element. If the Company is not able to establish fair value of undelivered elements, all revenue is deferred.

The Company recognizes revenues and estimated profits on long-term government contracts on the accrual basis where the circumstances are such that total profit can be estimated with reasonable accuracy and ultimate realization is reasonably assured. The Company accrues revenue and profit utilizing the percentage of completion method using a

cost-to-cost methodology. A percentage of the contract revenues and estimated profits is determined utilizing the ratio of costs incurred to date to total estimated cost to complete on a contract by contract basis. Profit estimates are revised periodically based upon changes and facts, and any losses on contracts are recognized immediately. Some of the contracts include provisions to withhold a portion of the contract value as retainage until such time as the United States government performs an audit of the cost incurred under the contract. The Company's policy is to take into revenue the full value of the contract, including any retainage, as it performs against the contract since the Company has not experienced any substantial losses as a result of audits performed by the United States government.

IMPAIRMENT OF LONG-LIVED ASSETS

Long-lived assets, including fixed assets and intangible assets, are continually monitored and are evaluated at least annually for impairment. The determination of recoverability is based on an estimate of undiscounted cash flows expected to result from the use of an asset and its eventual disposition. The estimate of cash flows is based upon, among other things, certain assumptions about expected future operating performance. Our estimates of undiscounted cash flows may differ from actual cash flows due to, among other things, technological changes, economic conditions, changes to our business model or changes in our operating performance. If the sum of the undiscounted cash flows (excluding interest) is less than the carrying value, we recognize an impairment loss, measured as the amount by which the carrying value exceeds the fair value of the asset.

STOCK-BASED COMPENSATION

On January 1, 2006, the Company adopted the fair value recognition provisions of Financial Accounting Standards Board ("FASB") Statement No. 123(R), Share-Based Payment ("Statement 123(R)") using the modified prospective method. In accordance with the modified prospective method, the Company has not restated its consolidated financial statements for prior periods. Under this transition method, stock-based compensation expense for the first quarter of 2006 includes stock-based compensation expense for all of the Company's stock-based compensation awards granted prior to, but not yet vested as of,

January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of FASB Statement No. 123, Accounting for Stock-Based Compensation ("Statement 123"). Stock-based compensation expense for all stock-based compensation awards granted on or after January 1, 2006 will be based on the grant-date fair value estimated in accordance with the provisions of Statement 123(R). The impact of Statement 123(R) on the Company's results of operations resulted in recognition of stock option expense of approximately $60,000.

Contractual Obligations, Commercial Commitments and Off-Balance Sheet Arrangements

The following table summarizes the Company's gross contractual obligations at March 31, 2006 and the maturity periods and the effect that such obligations are expected to have on its liquidity and cash flows in future periods:

	Payments Due by Period				
Contractual Obligations	Total	Less than 1 Year	2-3 Years	4-5 Years	More Than 5 Years
PURCHASE OBLIGATIONS	$ 261,000	$ 261,000	$ --	$ --	$ --
CAPITAL LEASES:					
Unrelated party capital lease	$ 386,000	$ 386,000	$ --	$ --	$ --
Related party capital lease	2,277,000	915,000	1,362,000	--	--
OPERATING LEASES:					
Unrelated party operating leases	$ 271,000	$ 124,000	$ 131,000	$16,000	$ --
Related party operating lease	2,070,000	1,242,000	828,000	--	--

Purchase obligations include all open purchase orders outstanding regardless of whether they are cancelable or not.

Capital lease obligations outlined above include both the principal and interest components of these contractual obligations.

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At March 31, 2006, the Company maintained a Japanese yen account that held approximately JPY 31,607,000 (approximately $269,000). Total currency translation income for the quarter ended March 31, 2006 of approximately $1,000 is reflected in other expense, net in the accompanying unaudited condensed consolidated statement of operations.

Outstanding letters of credit totaled approximately $529,000 at March 31, 2006. The letters of credit principally secure performance obligations, and allow holders to draw funds up to the face amount of the letter of credit if the Company does not perform as contractually required. These letters of credit expire through 2007 and are 100% secured by cash.

ITEM 3. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15 under the Securities Exchange Act of 1934, as

amended (the "Exchange Act"), the Company carried out an evaluation under the supervision and with the participation of the Company's management, including the Chief Executive Officer and President and the Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures as of March 31, 2006. In designing and evaluating the Company's disclosure controls and procedures, the Company and its management recognize that there are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their desired control objectives. Additionally, in evaluating and implementing possible controls and procedures, the Company's management was required to apply its reasonable judgment. Furthermore, management considered certain matters deemed by the Company's independent auditors to constitute a material weakness in the Company's internal control over financial reporting described below. Based upon the required evaluation, the Chief Executive Officer and President and the Chief Financial Officer concluded that as of March 31, 2006, due to the material weakness in internal control over financial reporting described below, the Company's disclosure controls and procedures were not effective to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

On March 21, 2006, the Company's independent auditor, Vitale, Caturano & Company, Ltd. ("VCC") issued a letter advising management and the Audit Committee, that, in connection with its audit of the Company's consolidated financial statements for the year ended December 31, 2005, it noted certain matters involving internal control and its operation that it considered to be a material weakness under standards of the Public Company Accounting Oversight Board. VCC noted that, since its March 2005 letter, in which VCC noted material weaknesses in the Company's internal controls in connection with its audit of the Company's 2004 financial statements, the Company has made significant strides over the past year to improve its internal control structure. These include:

- An improved reconciliation process;
- A disciplined and timely monthly close process; and
- Detailed reviews of monthly close packages by the appropriate levels of management.

However, VCC also noted that improvements still need to be made in the reconciliation and documentation and information flow processes. In particular, the Company lost several key individuals who were integral to the accounting department in general and the closing process specifically. While the finance group was able to close the books and analyze the accounts on a timely basis, the staff was resource constrained and the established controls, policies and procedures could not be fully implemented during the year end close. The Company supplemented the staff with outside assistance and the Chief Financial Officer assumed responsibility of the reconciliations of certain accounts and various review roles. However, VCC noted that the finance department will not be alleviated and control structure improved until such time as the full finance team is assembled.

In addition, VCC noted that the Company does not have sufficient internal knowledge and expertise of its enterprise reporting system, Solomon, including technical knowledge. The Company utilizes external consultants to help them develop reports and troubleshoot the system; however without a fully dedicated resource, the risk of errors being generated in or by the system is significant. VCC noted that the Company should develop a comprehensive training program

associated with the system so that employees are aware of the system and all of its capabilities in order to obtain the efficiencies the system

can provide. The full utilization and knowledge of the ERP system is critical to the Company's internal control over financial reporting. The Company should focus on developing the in-house knowledge of the ERP system, either through trainings or recruiting of an experienced information technology professional with the requisite knowledge.

The Company concurs with VCC's findings noted above and is continuing to make changes in its internal controls and procedures. Unfortunately, the Company was operating without a Controller, Assistant Controller and Senior Cost Accountant during the latter half of 2005. These positions are critical to the oversight and review of the finance group's output. As VCC noted, the Company supplemented those functions through the use of outside consultants and through the Chief Financial Officer assuming certain preparation and review roles. Unfortunately, this weakens the internal control structure as the review process is compressed and streamlined. The Company has hired a Senior Cost Accountant and expects to have its Assistant Controller position filled during the second quarter of 2006. The Company has had difficulty recruiting a full time Controller and will continue to search for a replacement. The Company has made significant strides in its monthly closing processes and expects that its internal controls will improve once a full finance staff is in place.

Changes in Internal Control Over Financial Reporting

There was no change in the Company's internal control over financial reporting that occurred during the first fiscal quarter of 2006 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II
OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

ITEM 5. OTHER INFORMATION

On May 10, 2006, James F. Parslow notified the Company that he would be resigning as Chief Financial Officer and Treasurer of the Company, effective May 19, 2006, to pursue an opportunity with another company. The Company has begun considering possible successors for these positions. Until a successor is appointed, the Company's existing management team will handle these responsibilities.

ITEM 6. EXHIBITS

10(q) Turn-Key Project Agreement, dated March 16, 2006. *

10(r) Wafer Supply Agreement, dated March 16, 2006. *

31.1 Certification of the Chairman of the Board, Chief Executive Officer and President pursuant to ss.302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of the Chief Financial Officer and Treasurer pursuant to ss.302 of the Sarbanes-Oxley Act of 2002.

32.1 Certification of the Chairman of the Board, Chief Executive Officer and President pursuant to 18 U.S.C. ss.1350, as adopted pursuant to ss.906 of the Sarbanes-Oxley Act of 2002.

32.2 Certification of the Chief Financial Officer and Treasurer pursuant to 18 U.S.C. ss.1350, as adopted pursuant to ss.906 of the Sarbanes-Oxley Act of 2002.

* Portions of this Exhibit have been omitted pursuant to a request for confidential treatment.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Spire Corporation

Dated: May 15, 2006

By: /s/ Roger G. Little

Roger G. Little
Chairman of the Board, Chief Executive Officer and President

Dated: May 15, 2006

By: /s/ James F. Parslow

James F. Parslow
Chief Financial Officer and Treasurer

EXHIBIT INDEX

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