SPIRE CORP
Form 10QSB
May 15, 2003

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, 2003; 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	04-2 57335
(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)	(Zip code)

(781) 275-6000
(Issuer's telephone number, including area code)

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 issuer was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [_]

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date. There were 6,756,660 outstanding shares of the issuer's only class of common equity, Common Stock, $0.01 par value, on May 1, 2003.

Transitional Small Business Disclosure Format (Check One): Yes [_] No [X]

SPIRE CORPORATION
FORM 10-QSB
FOR THE YEAR ENDED MARCH 31, 2003

TABLE OF CONTENTS

PART I
FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SPIRE CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

	MARCH 31, 2003	DECEMBER 31, 2002
ASSETS		
Current assets		
Cash and cash equivalents	$ 7,487,808	$ 7,798,716

Restricted cash	29,857	--
Total cash	7,517,665	7,798,716
Accounts receivable, trade:		
Amounts billed	3,124,833	3,574,851
Retainage	54,958	67,715
Unbilled costs	231,440	634,958
	3,411,231	4,277,524
Less allowance for doubtful accounts	(280,065)	(349,443)
Net accounts receivable	3,131,166	3,928,081
Inventories	2,318,831	2,220,587
Deferred tax asset	116,000	116,000
Prepaid expenses and other current assets	661,137	988,500
Total current assets	13,744,799	15,051,884
Property and equipment	15,831,763	15,604,809
Less accumulated depreciation and amortization	(13,317,102)	(13,132,220)
Net property and equipment	2,514,661	2,472,589
Patents (less accumulated amortization, $501,312 in 2003 and $499,505 in 2002)	258,405	241,313
Other assets	8,325	6,324
	266,730	247,637
	$ 16,526,190	$ 17,772,110

LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities		
Accounts payable	$ 1,649,396	$ 1,852,332
Accrued liabilities	1,327,267	1,616,585
Advances on contracts in progress	1,081,047	1,058,852
Total current liabilities	4,057,710	4,527,769
Unearned purchase discount	1,465,656	1,469,123
Stockholders' equity		
Common stock, $0.01 par value; shares authorized 20,000,000; issued 6,756,660 shares in 2003 and 6,755,660 shares in 2002	67,567	67,557
Additional paid-in capital	9,247,726	9,246,421
Retained earnings	1,687,531	2,461,240
Total stockholders' equity	11,002,824	11,775,218
	$ 16,526,190	$ 17,772,110

See accompanying notes to condensed consolidated financial statements

1

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

	THREE MONTHS ENDED MARCH 31, 2003	2002
Net sales and revenues		
Contract research and service revenues	$ 1,592,064	$ 1,640,650
Sales of goods	1,367,029	1,685,867
Total sales and revenues	2,959,093	3,326,517
Costs and expenses		
Cost of contract research and services	999,331	1,185,394
Cost of goods sold	1,287,737	1,395,941
Selling, general and administrative expenses	1,357,066	1,296,694
Internal research and development	96,097	56,218
Total costs and expenses	3,740,231	3,934,247
Loss from operations	(781,138)	(607,730)
Interest income, net	7,429	3,038
Loss before income taxes	(773,709)	(604,692)
Net loss	$ (773,709)	$ (604,692)
Loss per share of common stock - basic and diluted	$ (0.11)	$ (0.09)
Weighted average number of common and common equivalent shares outstanding - basic and diluted	6,756,582	6,732,660

See accompanying notes to condensed consolidated financial statements.

2

SPIRE CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

THREE MONTHS ENDED M

2003

Cash flows from operating activities:		
Net loss	$ (773,709)	$
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	186,680	
Changes in assets and liabilities:		
Accounts receivable, net	796,915	
Inventories	(98,244)	
Prepaid expenses and other current assets	327,363	
Accounts payable and accrued liabilities	(492,254)	
Unearned purchase discount	(3,467)	
Advances on contracts in progress	22,195	
Net cash used in operating activities	(34,521)	
Cash flows from investing activities:		
Additions to property and equipment	(226,954)	
Increase in patent costs	(18,890)	
Other assets	(2,001)	
Net cash used in investing activities	(247,845)	
Cash flows from financing activities:		
Net payments on short-term debt	--	
Exercise of stock options	1,315	
Net cash provided by (used in) financing activities	1,315	
Net decrease in cash and cash equivalents	(281,051)	(
Cash and cash equivalents and restricted cash, beginning of period	7,798,716	
Cash and cash equivalents and restricted cash, end of period	$ 7,517,665	$
Supplemental disclosures of cash flow information:		
Cash paid during the period for:		
Interest	$ 15,478	$
Income taxes	$ 435,000	$

See accompanying notes to condensed consolidated financial statements.

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

MARCH 31, 2003

(1) 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, 2003 and the results of operations for the three months ended March 31, 2003 and 2002 and cash flows for the three months ended March 31, 2003 and 2002. The results of operations for the three months ended March 31, 2003 are not necessarily indicative of the results to be expected for the fiscal year ending December 31, 2003.

The accounting policies followed by the Company are set forth in Note 2 to the Company's consolidated financial statements in its annual report on Form 10-KSB for the year ended December 31, 2002.

(2) INVENTORIES

Inventories consist of the following:

	March 31, 2003	December 31, 2002
Raw materials	$ 730,268	$ 662,384
Work in process	1,340,566	1,324,345
Finished goods	247,997	233,858
	$ 2,318,831	$ 2,220,587

(3) 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 Ende
	2003
Weighted average number of common shares outstanding - basic	6,756,582
Add net additional common shares upon exercise of common stock options	--
Adjusted weighted average common shares outstanding - diluted	6,756,582

At March 31, 2003 and 2002, 214,086 and 124,630 shares of common stock issuable under stock options, respectively, were not included in the calculation of diluted earnings per share because their effect would be antidilutive.

(4) 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", which was adopted in 1998.

	Solar Equipment	Solar Systems	Spire Biomedical	Biophoto Life Sci
For the Three Months Ended March 31, 2003				
Net sales and revenues	$1,243,361	$ --	$1,635,585	$80,1
Loss from operations	(67,313)	(400,442)	(303,501)	(9,8

For the Three Months Ended March 31, 2002				
Net sales and revenues	$1,155,869	$ 702,971	$1,254,987	$212,6
Loss from operations	(142,817)	(290,565)	(171,070)	(3,2

4

(5) OTHER INTANGIBLE ASSETS

In July 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 142 ("SFAS 142"), Goodwill and Other Intangible Assets. The Company adopted SFAS 142 as of January 1, 2002. SFAS 142 requires goodwill and intangible assets with indefinite lives to no longer be amortized, but instead be tested for impairment at least annually. With the adoption of SFAS 142, the Company reassessed the useful lives and residual values of all acquired intangible assets to make any necessary amortization period adjustments. Based on that assessment, no adjustments were made to the amortization period or residual values of other intangible assets.

Other intangible assets amounted to $258,405 (net of accumulated amortization of $501,312) and $241,313 (net of accumulated amortization of $499,505) at March 31, 2003 and December 31, 2002, respectively. These intangible assets primarily consist of patents that the Company has been awarded and are amortized over the shorter of their useful lives or their terms, principally five years. There are no expected residual values related to these intangible assets. Estimated fiscal year amortization expense is as follows:

Year	Amortization Expense
2003	$ 7,229
2004	51,489
2005	48,875
2006	45,009
2007	44,448

Patent costs are capitalized and amortized over five years using the straight-line method. The patent cost is primarily comprised of cost associated with securing and registering a patent.

(6) STOCK-BASED COMPENSATION

The Company has adopted the disclosure provisions of Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure" ("SFAS 148") which is an amendment of SFAS No. 123 "Accounting for Stock-Based Compensation" ("SFAS 123"), and continues to apply Accounting Principles Board Opinion No. 25 and related interpretations in accounting for its stock plans. If the Company had elected to recognize compensation cost for all of the plans based upon the fair value at the grant dates for awards under those plans, consistent with the method prescribed by SFAS 123, net income and earnings per share would have been changed to the pro forma amounts indicated below.

The per-share weighted-average fair value of stock options granted during the quarter ended March 31, 2003 and 2002 was $2.46 and $3.50, 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

2003	--	3.81%	5 years	83.4%
2002	--	5.28%	5 years	90.7%

The Company applies APB Opinion No. 25 in accounting for its plans and, accordingly, no compensation cost has been recognized for its stock options in the consolidated financial statements. Had the Company determined compensation cost based on the fair value at the grant date for its options under SFAS No. 123, the Company's net income (loss) would have been reduced (increased) to the pro forma amounts indicated below.

5

	2003	2002
Net loss as reported	$(773,709)	$(604,692)
Loss per share of common stock - diluted, as reported	$ (0.11)	$ (0.09)
Net loss pro forma	$(859,124)	$(657,103)
Loss per share of common stock - diluted, pro forma	$ (0.13)	$ (0.10)

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 THAT INVOLVE RISKS AND UNCERTAINTIES. 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 DESCRIBED OR REFERRED TO IN THIS REPORT AND IN ITEM 6 OF THE ANNUAL REPORT ON FORM 10-KSB FOR THE YEAR ENDED DECEMBER 31, 2002.

Overview

The Company develops, manufactures and markets highly-engineered solar electric module manufacturing equipment and systems and provides biomedical processing services and devices. The Company is a leading supplier in the design and manufacture of specialized equipment for the production of terrestrial photovoltaic modules from solar cells, with its equipment installed in more than 140 factories and in 42 countries. The Company's value-added biomedical processing services offer surface treatments to enhance the durability or the antimicrobial characteristics of orthopedic and other medical devices. The Company also markets two hemodialysis catheter devices for the treatment of chronic kidney disease.

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,	
	2003	2002
Net sales and revenues	100%	100%
Cost of sales and revenues	77	78
Gross profit	23	22

Selling, general and administrative expenses	46	39
Internal research and development	3	2
Loss from operations	(26)	(18)
Loss before income taxes	(26)	(18)
Net loss	(26%)	(18%)

Three Months Ended March 31, 2003 Compared to Three Months Ended March 31, 2002

NET SALES AND REVENUES

Net sales and revenues decreased $368,000 or 11% for the three months ended March 31, 2003 to $2,959,000, compared to $3,327,000 for the three months ended March 31, 2002. Contract research and service revenues decreased $49,000 or 3% to $1,592,000 for the three months ended March 31, 2003 compared to $1,641,000 for 2002. Sales of goods decreased $319,000 or 19% to $1,367,000 for the three months ended March 31, 2003, compared to $1,686,000 for 2002.

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

	Three Months Ended March 31,		
	2003	2002	%Change
Contract research and service revenues	$1,592,000	$1,641,000	(3%)
Sales of goods	1,367,000	1,686,000	(19%)
Net sales and revenues	$2,959,000	$3,327,000	(11%)

The decrease in contract research and service revenues for the three month period ended March 31, 2003 is attributable to a decline in United States government research and development contracts associated with the Company's former Optoelectronics division. The decrease was offset by strong demand for the Company's biomedical processing services. The decrease in sales of goods for the three month period ended March 31, 2003 is primarily due to zero solar systems revenue. During the quarter, the Solar Systems group was unable to secure building permits for its client to enable the delivery of the systems. The Company does not anticipate encountering permit issues in future quarters. The decrease was offset by an increase in revenue associated with the sale of the Company's hemodialysis split-tip catheter, which had not been launched at March 31, 2002.

COST OF SALES AND REVENUES

The total cost of sales and revenues decreased $294,000 to $2,287,000 to 77% of total net sales and revenues, for the quarter ended March 31, 2003, compared to $2,581,000 or 78% of total net cost of sales and revenues for the quarter ended March 31, 2002. The cost of contract research and service revenues decreased $186,000 to $999,000 decreasing to 63% of related revenues for the three months ended March 31, 2003, compared to $1,185,000 or 72% of related revenues for the three months ended March 31, 2002. The decrease is a result of a shift in mix towards the Company's biomedical processing services. Cost of good sold decreased $108,000 to $1,288,000, and increased to 94% of related sales, for the three months ended March 31, 2003, compared to $1,396,000 or 83% of related sales for the three months ended March 31, 2002. The increase in cost of goods as percentage of related sales is a result of the fixed cost associated with the Company's hemodialysis split-tip catheter.

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,			
	2003	%	2002	%
Cost of contract research and service revenues	$ 999,000	63%	$1,185,000	72%
Cost of goods sold	1,288,000	94%	1,396,000	83%
Total cost of sales and revenues	$2,287,000	77%	$2,581,000	78%

INTERNAL RESEARCH AND DEVELOPMENT

Internal research and development for the three months ended March 31, 2003 increased $40,000 or 71% to $96,000, compared to $56,000 for the three months ended March 31, 2002, as the Company continued its investment in the catheter development program.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the three months ended March 31, 2003 increased $60,000 to $1,357,000, and increased to 46% of sales and revenues, compared to $1,297,000 or 39% of sales and revenues for the three months ended March 31, 2002. The increase in selling, general and administrative expenses as a percentage of sales and revenues are due to lower revenues in 2003 as compared to the three months ended March 31, 2002.

INTEREST

The Company earned $23,000 of interest income for the quarter ended March 31, 2003, compared to $23,000 of interest income for the quarter ended March 31, 2002. The Company incurred interest expense of $15,000 for the quarter ended March 31, 2003 of which none was capitalized, compared to $20,000 in the first quarter of 2002 of which none was capitalized.

NET LOSS

The Company reported a net loss for the quarter ended March 31, 2003 of $774,000, compared to a net loss of $605,000 for the quarter ended March 31, 2002. The loss for the quarter is attributed to the Company's continued investment in its catheter product as well as zero revenue for solar systems in the quarter.

Liquidity and Capital Resources

To date, the Company has been able to fund its operating cash requirements using proceeds from the licensing of technology, operations, and available lines of credit. At March 31, 2003 the agreement with Silicon Valley Bank provided a $2 million revolving credit facility, based upon eligible accounts receivable requirements. The line of credit provided the Company with resources for general working capital purposes and Standby Letter of Credit Guarantees for foreign customers. The Company had negotiated an amendment to extend the agreement until April 23, 2003. The Company has decided not to renew the line with Silicon Valley Bank. At March 31, 2003 and 2002, interest on the line of credit was at the Bank's prime rate plus 1/2 percent. The line of credit contains covenants including provisions relating to profitability and net worth. The Company was in compliance with all such covenants as of March 31, 2003.

The Company has entered into a Letter of Credit Agreement with Citizens Bank of Massachusetts. The Agreement provides Standby Letter of Credit Guarantees for foreign customers and is 100% secured with cash. At March 31, 2003, the Company had $30,000 of restricted cash associated with the line of credit. It is the Company's intention to utilize this line while it negotiates and closes on a new revolving credit agreement with Citizens Bank. The Company anticipates closing on the new credit agreement by May 31, 2003.

The Company believes it has sufficient resources to finance its current operations for the foreseeable future through working capital. Cash and cash equivalents decreased $281,000 to $7,518,000 at March 31, 2003 from $7,799,000 at December 31, 2002. To date, there are no material commitments by the Company for capital expenditures. At March 31, 2003, the Company's retained earnings were $1,688,000, compared to retained earnings of $2,461,000 as of December 31, 2002. Working capital as of March 31, 2003 decreased 8% to $9,687,000, compared to $10,524,000 as of December 31, 2002.

Recent Accounting Pronouncements

In June 2002, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS 146"). SFAS 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of commitment to an exit or disposal plan. SFAS 146 is effective for exit or disposal activities initiated after December 31, 2002. The Company 's adoption of SFAS 146 did not have a material impact on its financial statements.

In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45"). FIN 45 requires that upon issuance of a guarantee, a guarantor must recognize a liability for the fair value of an obligation assumed under a guarantee. FIN 45 also requires additional disclosures by a guarantor in its interim and annual financial statements about the obligations associated with guarantees issued. The recognition provisions of FIN 45 will be effective for any guarantees that are issued or modified after December 31, 2002. The disclosure requirements will be effective for the Company's second quarter of fiscal 2003. Management does not expect the adoption of FIN 45 to have a material impact on the Company's financial position or results of operations.

In December 2002, the FASB issued Statement of Financial Accounting Standards No. 148, "Accounting for Stock Based Compensation - Transition and Disclosure - an Amendment of SFAS 123" ("SFAS 148"). SFAS 148 provides additional transition guidance for those entities that elect to voluntarily adopt the provisions of SFAS 123, "Accounting for Stock Based Compensation." Furthermore, SFAS 148 mandates new disclosures in both interim and year-end financial statements of the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The adoption of SFAS 148 did not have a material impact on the Company's financial position or results of operation.

In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46") which requires the consolidation of variable interest entities by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after June 15, 2003 (third quarter of fiscal 2003). The Company does not expect that the adoption of FIN 46 will have a material impact on our results of operations and financial condition.

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 Exchange Fluctuation

The Company sells its products and services only in United States 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 United States dollars and on the pricing competition on certain pieces of equipment that the Company sells in selected markets.

Related Party Transactions

The Company subleases 74,000-square-feet in a building from Mykrolis Corporation, which leases the building from a Trust of which Roger G. Little, Chairman of the Board, Chief Executive Officer and President, is sole trustee and principal beneficiary. The Company believes that the terms of the sublease are commercially reasonable. 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 agreement provides for minimum rental payments plus annual increases linked to the consumer price index. Total rent expense under this sublease was $263,000 in 2003. This amount does not take into account rent received by the Company for subleasing approximately 22,000-square-feet of its 74,000-square-feet to the purchaser of the Company's optoelectronics business.

Critical Accounting Policy - Revenue Recognition

The Company derives its revenues from three primary sources: (1) sales of solar energy manufacturing equipment and solar energy systems; (2) biomedical processing services; and (3) United States government funded research and development contracts.

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 EXW 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 a number of elements, the Company allocates fair value to each element based on rates quoted in the contract and revenue is recognized upon delivery of the element. The Company's biomedical subsidiary performs surface engineering services for various medical device manufacturers on a contractual basis. The Company recognizes revenue as the products are shipped back to the customer. The Company recognizes revenues and estimated profits on long term

government contracts on a percentage of completion method of accounting using a cost to cost methodology. 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 an audit performed by the United States government.

Contractual Obligations and Commercial Commitments

The following table summarizes the Company's contractual obligations at March 31, 2003 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 Obligation	Total	Less than 1 Year	1 - 3 Years	4 - 5 Years	After 5 Years
Non-cancelable operating leases	$3,930,000	$1,398,000	$2,416,000	$165,000	$ --

On October 8, 1999, the Company entered into an Agreement with BP Solarex ("BPS") in which BPS agreed to purchase certain production equipment built by the Company, for use in the Company's Chicago factory and in return the Company agreed to purchase solar cells of a minimum of two megawatts per year over a five-year term. As of March 31, 2003, the Company is committed to purchase 23 million solar cells. BPS has the right to repossess the equipment should the Company not purchase its committed quantity or convert into equity of Spire

Solar Chicago the initial purchase price of all equipment purchased from the Company. The proceeds from the sale of the production equipment purchased by BPS have been classified as an unearned purchase discount in the accompanying balance sheet. The Company will amortize this discount as a reduction to cost of sales as it purchases solar cells from BPS. Amortization of the purchase discount amounted to $3,500 during the quarter ended March 31, 2003. The Company is currently negotiating with BPS to include purchases other than solar cells to reduce the purchase discount.

ITEM 3. LEGAL PROCEEDINGS

The Company has been named as a defendant in 69 cases filed from August 2001 to date in state courts in Texas by persons claiming damages from the use of defective mechanical heart valves coated by a process licensed by the Company to St. Jude Medical, Inc., the valve manufacturer, which has also been named as a defendant in the cases. Cases involving the same basic fact situation pending in United States District Court in Nebraska (and subsequently consolidated with other cases in Minnesota) and in Nevada were dismissed in 2002 on jurisdictional grounds. The plaintiffs seek damages in amounts that are not quantified at this time. The Company believes it has adequate liability insurance coverage for protection against adverse results of this litigation.

The Company has received a written demand from a representative of ATmicro Solar, Ltd. alleging various claims against the Company, including the return of monies which ATmicro paid for certain equipment which ATmicro agreed to purchase from Spire. Spire has responded advising ATmicro that its claims are without merit and that ATmicro's misconduct has caused Spire additional monetary damages.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Spire's principal executive and financial officers have established and are maintaining disclosure controls and procedures that such officers believe are effective. The officers' conclusion is based on their evaluation of the controls and procedures as of March 31, 2003. The officers have designed such disclosure controls and procedures to ensure that material information relating to the Company and its consolidated subsidiaries is communicated to them by others within those organizations.

Changes in Internal Controls

The Company believes that there have not been significant changes in the Company's internal controls or in other factors that could significantly affect those controls subsequent to March 31, 2003, including any corrective action with regard to significant deficiencies and material weaknesses.

PART II
OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

a. Exhibits

99(a) Certifications of the Chairman of the Board, Chief Executive

Officer and President pursuant to 18 U.S.C.ss.1350 (filed herewith)

99(b) Certifications of the Financial Controller, Treasurer, and Principal Financial and Accounting Officer pursuant to 18 U.S.C. ss. 1350 (filed herewith)

b. Reports on Form 8-K

No reports on Form 8-K were filed by the Registrant in the quarter ended March 31, 2003.

11

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
(Registrant)

Dated: May 15, 2003 By: /s/ Roger G. Little

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

Dated: May 15, 2003 By: /s/ Gregory G. Towle

Gregory G. Towle
Financial Controller and Treasurer
(Principal Financial and Accounting Officer)