SPIRE CORP Form 10QSB August 19, 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 June 30, 2003;

or

I_I 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

Identification Number)

(I.R.S. Employer

(State or other jurisdiction of incorporation or organization)

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 issuer was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. Yes |X| = |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 6,765,660 outstanding shares of the issuer's only class of common equity, Common Stock, \$0.01 par value, on July 31, 2003.

 $\label{eq:constraint} $$ Transitional Small Business Disclosure Format (Check One): Yes |_| No |X| $$$

SPIRE CORPORATION FORM 10-QSB FOR THE PERIOD ENDED JUNE 30, 2003

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PART I FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SPIRE CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	JUNE 30, 2003
ASSETS	
Current assets	
Cash and cash equivalents Restricted cash	\$ 10,954,398 102,857
Total cash	11,057,255
Accounts receivable, trade: Amounts billed Retainage Unbilled costs	3,019,576 54,958 341,462 3,415,996
Less allowance for doubtful accounts	(318,109)
Net accounts receivable	3,097,887
Inventories Deferred tax asset Prepaid expenses and other current assets	1,823,905 116,000 851,138
Total current assets	16,946,185
Property and equipment Less accumulated depreciation and amortization	22,872,204 (13,614,619)
Net property and equipment	9,257,585
Patents (less accumulated amortization, \$505,700 in 2003 and \$499,505 in 2002) Other assets	328,601 8,325
	336,926
	\$ 26,540,696
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current liabilities	
Current portion of capital lease obligation unrelated party Current portion of capital lease obligation related party Accounts payable Accrued liabilities Income taxes payable Other current liabilities	\$ 390,771 644,199 1,723,073 1,305,618 957,000 464,663

Advances on contracts in progress	1,000,161
Total current liabilities	6,485,485
Long-term portion of capital lease obligation unrelated party	934,849
Long-term portion of capital lease obligation related party Other liabilities	3,004,120 604,862
Unearned purchase discount	1,465,657
Stockholders' equity	
<pre>Stockholders' equity Common stock, \$0.01 par value; shares authorized 20,000,000; issued 6,761,660 shares in 2003 and 6,755,660 shares in 2002 Additional paid-in capital Retained earnings</pre>	67,617 9,258,576 4,719,530
Common stock, \$0.01 par value; shares authorized 20,000,000; issued 6,761,660 shares in 2003 and 6,755,660 shares in 2002 Additional paid-in capital	9,258,576

See accompanying notes to condensed consolidated financial statements

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

	THREE MONTHS ENDED JUNE 30,			
		2002	2	
Net sales and revenues				
Contract research and service revenues Sales of goods	1,832,250	\$ 1,725,103 2,836,348	\$3, 3,	
Total sales and revenues		4,561,451	 6, 	
Costs and expenses				
Cost of contract research and services Cost of goods sold Selling, general and administrative expenses Internal research and development	1,536,068 284,744	2,177,870 1,343,297 78,771	2, 3, 2,	
Total costs and expenses		4,570,009	8, 8	
Gain on sale of license	5,000,000		5,	
Earnings (loss) from operations	3,994,871	(8,558)	3,	
Interest income (expense), net		10,099		
Earnings (loss) before income taxes	3,988,988	1,541	з,	

Income tax expense	957,000	100	
Net earnings (loss)	\$ 3,031,988 =======	\$ 1,441	\$2, =====
Earnings (loss) per share of common stock - basic	\$ 0.44	\$ 0.00	\$ =====
Earnings (loss) per share of common stock - diluted	\$ 0.43	\$ 0.00	\$ =====
Weighted average number of common and common equivalent shares outstanding - basic	6,761,660	6,735,757 =====	6, =====
Weighted average number of common and common equivalent shares outstanding - diluted	6,994,558	6,868,102	6, =====

See accompanying notes to condensed consolidated financial statements.

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

	SIX MONTHS EN	IDED JUNE 3
	2003	2002
Cash flows from operating activities.		
Cash flows from operating activities:	¢ 0.050.001	è (CO2
Net income (loss)	\$ 2,258,291	\$ (603
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	488,514	398
Gain on sale of license	(5,000,000)	
Changes in assets and liabilities:		
Accounts receivable, net	1,110,633	(1,019
Inventories	442,899	(662
Prepaid expenses and other current assets	213,503	(7
Accounts payable and accrued liabilities	116,107	1,295
Unearned purchase discount	(3,466)	
Other assets	(2,001)	Ę
Advances on contracts in progress	(58,691)	485
Net cash provided by (used in) operating activities	(434,211)	(106
Cash flows from investing activities:		
Proceeds from sale of license	5,000,000	
Additions to property and equipment	(411,442)	(87
Acquisition of business - Note 8	(724,969)	(0)
Increase in patent costs	(93,402)	(106
Net cash provided by (used in) investing activities	3,770,187	(194

Cash flows from financing activities:

Net payments on short-term debt		(875
Principal payment of capital lease obligations	(89,652)	
Exercise of stock options	12,215	34
Net cash provided by (used in) financing activities	(77,437)	(840
Net increase (decrease) in cash and cash equivalents	3,258,539	(1,141
Cash and cash equivalents and restricted cash, beginning of period	7,798,716	5 , 582
Cash and cash equivalents and restricted cash, end of period	\$ 11,057,255	\$ 4,441
Supplemental disclosures of cash flow information:		=======
Non cash financing:		
Capital lease obligation for building	\$ 3,700,000	\$
Cash paid during the period for:		
Interest	\$ 26,663	\$ 30
Income taxes	======================================	======= \$

See accompanying notes to condensed consolidated financial statements.

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

JUNE 30, 2003

1. DESCRIPTION OF THE BUSINESS

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's biomedical products business markets hemodialysis catheter devices for the treatment of chronic kidney disease. The Company also produces custom compound semiconductor wafers and devices used in biomedical instruments, telecommunications and defense applications.

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 June 30, 2003 and the results of operations for the three and six months ended June 30, 2003 and 2002 and cash flows for the six months ended June 30, 2003 and 2002. The results of operations for the three and six months ended June 30, 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.

3. INVENTORIES

Inventories consist of the following:

inventories consist of the forlowing.	June 30, 2003	December 31, 2002
Raw materials Work in process Finished goods	\$ 787,796 701,239 334,870	\$ 662,384 1,324,345 233,858
	\$1,823,905	\$2,220,587

4. NET EARNINGS (LOSS) PER SHARE

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

	Three Months	Ended June 30,	Six Months
	2003	2002	2003
Weighted average number of common shares outstanding - basic	6,761,660	6,735,757	6,759,127
Add net additional common shares upon exercise of common stock options	232,898	139,550	108,348
Adjusted weighted average common shares outstanding - diluted	6,994,558	6,875,307	6,867,475

At June 30, 2002, 239,062 shares of common stock issuable under stock options, were not included in the calculation of diluted earnings per share because their effect would be antidilutive.

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5. OPERATING SEGMENTS AND RELATED INFORMATION

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

The revenues for Bandwidth Semiconductor have been included in the optoelectronics segment along with the biophotonics lifesciences segment previously disclosed. The acquisition of Bandwidth took place on May 23, 2003. The revenues from that date through the end of the quarter ended June 30, 2003 were included in the segment disclosures.

Solar	Solar		
Equipment	Systems	Biomedical	Opt
			-

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For the three months ended June 30, 2003			
Net sales and revenues Earnings (loss) from operations	\$ 951,224 (488,333)	\$ 810,197 (145,620)	\$
For the three months ended June 30, 2002			
Net sales and revenues Earnings (loss) from operations		\$ 1,771,640 217,229	\$
For the six months ended June 30, 2003			
Net sales and revenues Earnings (loss) from operations		\$ 810,197 (546,062)	\$
For the six months ended June 30, 2002			
Net sales and revenues Earnings (loss) from operations		\$ 2,474,610 (73,335)	\$

6. INTANGIBLE ASSETS

Intangible assets amounted to \$328,601 (net of accumulated amortization of \$505,700) and \$241,313 (net of accumulated amortization of \$499,505) at June 30, 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. Included in the amortization expense estimates is \$50,000 of patents pending expenses which relate to costs incurred toward securing patents, but have not yet been granted. Estimated fiscal year amortization expense is as follows:

Year	Amortization Expense
2003	\$14,729
2004	61,489
2005	58,875
2006	55,009
2007	54,448

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

7. 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 June 30, 2003 and 2002 was \$9,562 and \$555,188, 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
2003		3.33%	5 years
2002		4.93%	5 years

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.

	2003
Net earnings as reported	\$ 3,031,988
Earnings per share of common stock – diluted, as reported	\$ 0.43
Net earnings (loss) pro forma	\$ 2,947,359
Earnings (loss) per share of common stock – diluted, pro forma	\$ 0.42

8. ACQUISITION

On May 23, 2003, the Company acquired from Stratos Lightwave, Inc. ("Stratos") all the ownership interest of Bandwidth Semiconductor, LLC, a Delaware limited liability company ("Bandwidth") located in Hudson, New Hampshire. Bandwidth is a wholly owned subsidiary of the Company. Bandwidth is a compound semiconductor foundry providing material and device fabrication services to defense, telecommunications and biomedical instrument industries.

Prior to December 30, 1999, Bandwidth had been the Company's Optoelectronics division, which had been sold to Methode Electronics, Inc. ("Methode"). In 2000, Methode spun off Stratos in an initial public offering. On May 23, 2003, 100 percent of the ownership interest of Bandwidth were acquired by Spire. Spire owns 100% of the ownership interest of Bandwidth. Prior to the acquisition, Bandwidth was a wholly owned subsidiary of Stratos.

The Company paid \$724,969 in cash, the Company's acquisition of Bandwidth did not include the following "excluded assets": various forms of cash held by Bandwidth and the building in Hudson, New Hampshire occupied by Bandwidth. The Company assumed an unrelated party capital lease with GE Capital that Bandwidth had entered into to finance the purchase of a wafer production reactor. The consideration from the Company to Stratos included the release and forgiveness from all future obligations of Bandwidth, Stratos and Methode in connection with a Sublease Agreement with the Company dated December 29, 1999 and expiring on November 30, 2005 for approximately 21,275 square-feet of space previously occupied by Bandwidth in Bedford, Massachusetts.

The total purchase price of \$724,969, was allocated to the present value of the future payments and the estimated fair value, of the assets acquired and liabilities assumed, is summarized as follows:

Current assets	\$	402 , 796
Property and equipment	3	,155,952

Liabilities Total (2,833,779) \$ 724,969

In conjunction with the acquisition of Bandwidth by Spire, a Trust of which Roger G. Little, Chairman of the Board, Chief Executive Officer and President, is sole trustee and principal beneficiary, purchased the building that Bandwidth occupies from Stratos, the parent company. Subsequently, Bandwidth Semiconductor entered into a lease for the building it occupies in Hudson, New Hampshire with SPI-Trust. The lease is for an initial five-year term expiring in 2008 with option to extend for five years. It has been classified as a related party capital lease. The following table summarizes Bandwidth's lease obligations to SPI-Trust at June 30, 2003.

			Payments Due by	Perio
Contractual Obligation	Total	Less than 1 Year	1 - 3 Years	4
Related party capital lease	\$4,140,000	\$315,000	\$1,346,250	

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The following pro forma information assumes that the acquisition of Bandwidth had been completed as of the beginning of the second quarter 2003. For comparative purposes, the Bandwidth results of operations for the second quarter 2002 have also been included in the prior year numbers.

	Three Months Ended June 30, 2003	Three Months Ended June 30, 2002
Revenue	\$ 3,931,395	\$ 5,139,314
Net income	\$ 2,425,348	\$(1,148,306)
Earnings per share	\$ 0.35	\$ (0.17)
	Six Months Ended	Six Months Ended
	June 30, 2003	June 30, 2002
	, 	
Revenue	\$ 7,324,724	\$ 8,959,901
Net income	\$ 640,526	\$(2,989,604)
Earnings per share	\$ 0.09	\$ (0.44)

9. PROPERTY UNDER CAPITAL LEASES AND LEASE COMMITMENTS

At June 30, 2003 and December 31, 2002, the Company had capital leases in effect for a building and fabrication equipment. The Company also had operating leases for office space and other miscellaneous items.

The components of property under capital leases were as follows:

	2003	2002
Unrelated party capital lease:		
Emcore reactor	\$ 1,524,931	\$ 1,915,702
Less accumulated amortization	(199,311)	(390,771)
	\$ 1,325,620	\$ 1,524,931

	2003	2002
Related party capital lease:		
Hudson, New Hampshire building	\$ 3,700,000	
Less accumulated amortization	(51,681)	
	\$ 3,648,319	

A schedule of future minimum lease payments at June 30, 2003 follows:

	Unrelated Party Capital Lease	Related Party Capital Lease	0
2003	\$ 238,902	\$ 315,000	\$
2004	477,804	618,750	
2005	477,804	727,500	
2006	318,536	870,000	
2007		1,102,500	
2008		506,250	
Total minimum lease payments	1,513,046	4,140,000	
Less amount representing interest	(187,426)	(491,681)	
Present value of minimum lease payments	1,325,620	3,648,319	
Less current portion	(390,771)	(644,199)	
	\$ 934,849	\$ 3,004,120	\$
			==

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In September 2001, Bandwidth Semiconductor, LLC ("Bandwidth") entered into an agreement with GE Capital Leasing Corp, for the lease of a reactor for the wafer production line. The lease is accounted for as a capital lease. Under the lease agreement, the Company is making monthly payments of \$36,000 for a period of 36 months. After the initial three-year period, the lease allows for an additional two-year extension with monthly payments of \$40,000. The Company expects to extend the lease term for the additional two years in September 2004. Therefore, the lease will have been amortized over the full five-year period.

In conjunction with the acquisition of Bandwidth by the Company, the Company's Bandwidth Semiconductor division entered into a lease for the building it occupies 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 lease is for an initial five-year term expiring in 2008 with option to extend for five years. It has been classified a capital lease; under the lease agreement, the Company is making monthly payments of \$45,000 for the first 12 months, with an increased monthly payment each year, through June 2008. Interest costs were assumed at 7%.

. Total rent expense under operating leases was approximately \$739,000 for the six months ended June 30, 2003.

10. SALE OF A LICENSE

In October 2002, the Company sold an exclusive patent license for a hemodialysis split-tip catheter to Bard Access Systems, Inc., a wholly owned

subsidiary of C.R. Bard, Inc., in exchange for \$5 million upon the execution of the agreement, with another \$5 million due no later than 18 months after signing, and another \$6 million upon achievement of certain milestones by Bard Access Systems. The Company recorded a net gain of \$4,465,000 from the proceeds received in 2002, after reduction of direct costs, and has been recorded as a component of earnings from operations. The second \$5 million payment was received in June 2003 and it was recorded as a net gain of \$5 million during the quarter ended June 30, 2003. In conjunction with the sale, the Company received a sublicense, which permits the Company to continue to manufacture and market hemodialysis catheters for the treatment of chronic kidney disease. In addition, the Company granted Bard Access Systems a right of refusal should the Company seek to sell the Catheter business.

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.

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 June 30,		Si	
	2003	2002	20	
Net sales and revenues Cost of sales and revenues	100% 78	100% 69	10	
Gross profit Selling, general and administrative expenses	22 41	31 29	2	
Internal research and development	8	2		
Gain on sale of license	133		7	
Earnings (loss) from operations	106		4	
Loss before income taxes	106		4	
Income tax expense	26		1	
Net earnings (loss)	 80%	 0%		

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Three and Six Months Ended June 30, 2003 Compared to Three and Six Months Ended

June 30, 2002

NET SALES AND REVENUES

Net sales and revenues decreased \$806,000 or 18% for the three months ended June 30, 2003 to \$3,755,000, compared to \$4,561,000 for the three months ended June 30, 2002. Contract research and service revenues increased \$198,000 or 11% to \$1,923,000 for the three months ended June 30, 2003 compared to \$1,725,000 for 2002. Sales of goods decreased \$1,004,000 or 35% to \$1,832,000 for the three months ended June 30, 2003, compared to \$2,836,000 for 2002.

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

	Three Months Ended June 30,		
	2003	2002	% Change
Contract research and service revenues Sales of goods	\$1,923,000 1,832,000	\$1,725,000 2,836,000	11% (35%)
Net sales and revenues	\$3,755,000	\$4,561,000	(18%)

The increase in contract research and service revenues for the three month period ended June 30, 2003 is attributable to an increase in United States government research and development contracts, and continued strong demand for the Company's biomedical processing services. The decrease in sales of goods for the three month period ended June 30, 2003 is primarily due to lower than expected solar systems revenue and low demand for the Company's manufacturing equipment due to excess capacity in the market place. A portion of the decrease was offset by an increase in revenue associated with the Company's hemodialysis split-tip catheter.

Net sales and revenues decreased \$1,174,000 or 15% for the six months ended June 30, 2003 to \$6,714,000, compared to \$7,888,000 for the six months ended June 30, 2002. Contract research and service revenues increased \$151,000 or 4% to \$3,515,000 for the six months ended June 30, 2003 compared to \$3,666,000 for 2002. Sales of goods decreased \$1,323,000 or 29% to \$3,199,000 for the six months ended June 30, 2003, compared to \$4,522,000 for 2002.

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

Six Months Ended June 30,

	SIX Month's Ended Julie 30,		
	2003	2002	% Change
Contract research and service revenues Sales of goods	\$3,515,000 3,199,000	\$3,366,000 4,522,000	4% (29%)
Net sales and revenues	\$6,714,000	\$7,888,000	(15%)

The increase in contract research and service revenues for the six month period ended June 30, 2003 is attributed to the increase in U.S. government research contracts and increased demand for the Company's biomedical processing services. The decrease in sales of goods for the six month period ended June 30, 2003 is primarily due to zero revenue associated with solar systems sales for the three month period ended March 31, 2003.

COST OF SALES AND REVENUES

The total cost of sales and revenues decreased \$209,000 to \$2,939,000, and increased to 78% of total net sales and revenues, for the quarter ended June 30, 2003, compared to \$3,148,000 or 69% of total net cost of sales and revenues for the quarter ended June 30, 2002. The cost of contract research and service revenues increased \$247,000 to \$1,217,000 increasing to 63% of related revenues for the three months ended June 30, 2003, compared to \$970,000 or 56% of related revenues for the three months ended June 30, 2002. The decrease is a result of a shift in mix towards the Company's biomedical processing services. Cost of goods sold decreased \$456,000 to \$1,722,000, and increased to 94% of related sales, for the three months ended June 30, 2003, compared to \$2,178,000 or 77% of related sales for the three months ended June 30, 2002. The increase in cost of goods as a percentage of related sales is a result of the fixed cost associated with the Company's manufacturing operation.

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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 June 30,
	2003	~~~~~~ % 	2002
Cost of contract research and service revenues Cost of goods sold	\$1,217,000 1,722,000	63% 94%	\$ 970,000 2,178,000
Total cost of sales and revenues	\$2,939,000	78%	\$3,148,000

COST OF SALES AND REVENUES

The total cost of sales and revenues decreased \$503,000 to \$5,226,000 increasing to 78% of total net sales and revenues, for the six months ended June 30, 2003, compared to \$5,729,000 or 73% of total net cost of sales and revenues for the six months ended June 30, 2002. The cost of contract research and service revenues increased \$56,000 to \$2,216,000 decreasing to 63% of related revenues for the six months ended June 30, 2003, compared to \$2,160,000 or 64% of related revenues for the six months ended June 30, 2003, compared to \$2,160,000 or 64% of related revenues for the six months ended June 30, 2002. The decrease is a result of a shift in mix towards the Company's biomedical processing services. Cost of good sold decreased \$559,000 to \$3,010,000, and increased to 94% of related sales, for the six months ended June 30, 2003, compared to \$3,569,000 or 80% of related sales for the three months ended June 30, 2002. The increase in cost of goods as a percentage of related sales is a result of the fixed cost associated with the Company's manufacturing operation.

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:

	Six M	lonths E	nded June 30,
	2003	% 	2002
Cost of contract research and service revenues Cost of goods sold	\$2,216,000 3,010,000	63% 94%	\$2,160,000 3,569,000
Total cost of sales and revenues	\$5,226,000	78%	\$5,729,000

INTERNAL RESEARCH AND DEVELOPMENT

Internal research and development for the three months ended June 30, 2003 increased \$206,000 or 261% to \$285,000, compared to \$79,000 for the three months ended June 30, 2002, as the Company continued its investment in the catheter development program and development of the next generation of manufacturing equipment.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the three months ended June 30, 2003 increased \$193,000 to \$1,536,000, and increased to 44% of sales and revenues, compared to 1,343,000 or 29% of sales and revenues for the three months ended June 30, 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 June 30, 2002.

Selling, general and administrative expenses for the six months ended June 30, 2003 increased \$253,000 to \$2,893,000, and increased to 43% of sales and revenues, compared to \$2,640,000 or 33% of sales and revenues for the six months ended June 30, 2002.

INTEREST

The Company incurred interest expense of \$6,000 for the quarter ended June 30, 2003, compared to \$10,000 of interest income for the quarter ended June 30, 2002. This is primarily as a result of interest associated with capital leases.

NET EARNINGS (LOSS)

The Company reported a net earnings for the quarter ended June 30, 2003 of \$3,032,000, compared to net earnings of \$1,000 for the quarter ended June 30, 2002. The Company reported net earnings for the six months ended June 30, 2003 of \$2,258,000, compared to a net loss of \$603,000 for the quarter ended June 30, 2002. The earnings for the quarter are

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attributed to the Company's income associated with a payment received relating to the sale of a license for the Company's hemodialysis split-tip catheter.

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. On June 23, 2003, the Company 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 June 30, 2003, the Company had \$103,000 of restricted cash associated with the line of credit.

The agreement also provides the Company with the ability to convert to a \$2 million revolving credit facility, based upon eligible accounts receivable.

The Company believes it has sufficient resources to finance its current operations for the foreseeable future through working capital. Cash and cash

equivalents increased \$3,259,000 to \$11,057,000 at June 30, 2003 from \$7,799,000 at December 31, 2002. To date, there are no material commitments by the Company for capital expenditures. At June 30, 2003, the Company's retained earnings were \$4,695,000, compared to retained earnings of \$2,461,000 as of December 31, 2002. Working capital as of June 30, 2003 increased 4% to \$10,997,000, compared to \$10,524,000 as of December 31, 2002.

Recent Accounting Pronouncements

In May 2003, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity", ("SFAS 150"). SFAS 150 requires issuers to classify as liabilities (or assets in some circumstances) three classes of freestanding financial instruments that embody obligations for the issuer. Generally, SFAS 150 is effective for financial instruments entered into or modified after May 31, 2003 and is otherwise effective at the beginning of the first interim period beginning after June 15, 2003. The adoption of this statement is not anticipated to have a material effect of Spire's results of operations or financial position.

In June 2002, the FASB issued SFAS 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 SFAS 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 11

after June 15, 2003 (third quarter of fiscal 2003). The adoption of FIN 46 did not 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 \$884,000 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.

The Company's Bandwidth Semiconductor division entered into a lease for the building it occupies 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 lease is for an initial five-year term expiring in 2008 with option to extend for five years. It has been classified a capital lease and is included in Note 8.

The following table summarizes Bandwidth's lease obligations to the Trust at June 30, 2003:

Payments Due by Period

Less than

After

Contractual Obligation	Total	1 Year	1-3 Years	4-5 Years	5 Years
Related party capital lease	\$4,140,000	\$315 , 000	\$1,346,250	\$1,972,500	\$506 , 250

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.

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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 June 30, 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
Unrelated party capital lease Related party capital lease Non-cancelable operating leases	\$1,513,000 \$4,140,000 \$4,350,000	\$239,000 \$315,000 \$934,000	\$ 956,000 \$1,346,250 \$3,251,000	\$ 318,000 \$1,972,500 \$ 165,000	\$ \$506,250 \$

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 June 30, 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 \$3,466 during the quarter ended June 30, 2003. The Company is currently negotiating with BPS to include purchases other than solar cells to reduce the purchase discount.

ITEM 3. 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 June 30, 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 June 30, 2003, including any corrective action with regard to significant deficiencies and material weaknesses.

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PART II OTHER INFORMATION

ITEM 1. 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 allegedly 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. In June 2003, a judge in a state court in Harris County, Texas agreed to grant the Company's motion for summary judgment based upon the principle of federal preemption with regard to 68 of those cases and to order that the cases against the Company be dismissed with prejudice. An order to this effect was signed in late July. The Company believes that the plaintiffs ultimately plan to appeal from the court's decision. The remaining case is still pending, and due to aspects of its fact situation is not subject to the principle of federal preemption.

The Company has concluded a dispute with ATmicro Solar, Ltd., a customer of the Company. In May 2003, the customer made various claims against the

Company and had requested the return of certain funds paid for equipment it had agreed to purchase from the Company. The Company agreed to pay \$75,000 to settle the dispute, with the execution by the parties of a full and general mutual release.

ITEM 2. CHANGES IN SECURITIES

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

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

On May 23, 2003, the Company held a Special Meeting in Lieu of Annual Meeting of Stockholders.

The number of directors was fixed at eight, leaving one vacancy, Udo Henseler, David R. Lipinski, Roger G. Little, Guy L. Mayer, Roger W. Redmond, and John A. Tarello, were elected to the Board of Directors to hold office until the 2004 annual meeting of the stockholders. The results for Proposal Number 1 were as follows:

Nominee	Shares Voting for	Shares Voting Against or Authority Withheld	Shares Abstaining	Broker Non-Vot
Udo Henseler	5,620,740	76,040		
David R. Lipinski	5,620,740	76,040		
Roger G. Little	5,620,740	76,040		
Michael J. Magliochetti	5,618,240	78,540		
Guy L. Mayer	5,618,240	78,540		
Roger W. Redmond	5,618,240	77,140		
John A. Tarello	5,620,740	76,040		

Proposal Number 2 was to approve an amendment to the Company's 1996 Equity Incentive Plan to increase the number of shares that may be offered thereunder from 1,000,000 to 1,500,000. The results for Proposal Number 2 were as follows:

	Shares	Shares Voting Against	Shares	Broker
	Voting for	or Authority Withheld	Abstaining	Non-Votes
Proposal Two	3,242,305	138,339	18,200	2,297,936

ITEM 5. OTHER INFORMATION.

None.

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ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

a. Exhibits

10(h) Purchase Agreement dated May 23, 2003 with Stratos Lightwave and Bandwidth Semiconductor, LLC

- 10(i) Lease Agreement dated May 23, 2003 by and between Roger G. Little, Trustee of SPI-Trust as Landlord and Spire Corporation as Tenant
- 31.1 Certification of the Chairman of the Board, Chief Executive Officer and President pursuant to Sarbanes-Oxleyss.302
- 31.2 Certification of the Financial Controller and Treasurer (Principal Financial and Accounting Officer) pursuant to Sarbanes-Oxley ss.302
- 32.1 Certification of the Chairman of the Board, Chief Executive Officer and President pursuant to 18 U.S.C.ss.1350
- 32.2 Certification of the Financial Controller and Treasurer (Principal Financial and Accounting Officer) pursuant to 18 U.S.C.ss.1350

A signed original of these written statements required by Section 906 have been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

b. Reports on Form 8-K

There was one report on Form 8-K that was filed by the Registrant in the quarter ended June 30, 2003.

June 5, 2003, Item 5 Other Events and Item 7 Financial Statements and Exhibits: Exhibit 99 News Release of the Company dated May 27, 2003.

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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	
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Dated:	August 19,	2003 B	: /s/ Roger G. Little
			Roger G. Little President, Chief Executive Officer and Chairman of the Board
Dated:	August 19,	2003 B	: /s/ Gregory G. Towle
			Gregory G. Towle Financial Controller and Treasurer (Principal Financial and Accounting Officer)