SPIRE CORP Form 10QSB January 23, 2004

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

FORM 10-QSB

Commission file number: 0-12742

SPIRE CORPORATION

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

MASSACHUSETTS

(State or other jurisdiction of incorporation or organization)

04-2 57335

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

Transitional Small Business Disclosure Format (check one): Yes \mid_\mid No \mid X \mid

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FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SPIRE CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

	SEPTEMBER 30, 2003	2002
	(UNAUDITED)	
ASSETS		
Current assets		
Cash and cash equivalents Restricted cash	\$ 8,501,010 520,690	
Total cash	9,021,700	
Accounts receivable, trade:		
Amounts billed		3,574,8
Retainage Unbilled costs	54,958 389,622	67,7 634,9
Less allowance for doubtful accounts		
Net accounts receivable	3,083,373	
Inventories		2,220,5
Deferred tax asset Prepaid expenses and other current assets	373,000 661,563	988,5
Total current assets	14,819,792	15,051,8
Property and equipment Less accumulated depreciation and amortization	23,132,372 (14,136,828)	(13,132,2
Net property and equipment	8,995,544	2,472,5
Intangible assets (less accumulated amortization,		
\$518,469 in 2003 and \$499,505 in 2002) Other assets	381,651 8,325	241,3 6,3
Total other assets	389 , 976	247,6
Total assets	\$ 24,205,312 =======	\$ 17,772,1 ======
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities		
Current portion of capital lease obligation	\$ 361,754	\$
Current portion of capital lease obligation -	206 012	
related party (Note 9) Accounts payable	326,213 1,057,641	1,852,3
Accrued liabilities	1,836,532	1,392,5

Income taxes payable	11,000	224,0
Accrued lease obligation - related party	464,663	
Advances on contracts in progress	1,281,565	1,058,8
Total current liabilities	5,339,368 	4,527,7
Long-term portion of capital lease obligation	950,849	
Long-term portion of capital lease obligation -	0.054.465	
related party (Note 9)	2,954,465	
Accrued lease obligation - related party	486,565	
Unearned purchase discount	1,448,828	1,469,1
	11,180,075	5,996,8
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	67,617	67 , 5
Additional paid-in capital	•	9,246,4
Retained earnings	• •	2,461,2
Total stockholders' equity	13,025,237	11,775,2
Total liabilities and stockholders' equity	\$ 24,205,312	\$ 17,772,1
	=========	========

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 SEPTEMBER 30,		
	2003	2002	
Net sales and revenues Contract research, service and license revenues Sales of goods	1,843,631	\$ 1,468,085 \$ 2,728,589	
Net sales and revenues		4,196,674	
Costs and expenses Cost of contract research, services and licenses Cost of goods sold Internal research and development Selling, general and administrative expenses	388,197	1,890,515 66,642 1,342,653	
Total costs and expenses		4,162,616	
Gain on sale of license			
Earnings (loss) from operations	(1,631,702)	34,058	

Interest income (expense), net	(68,065)	1,221	
Earnings (loss) before income taxes	(1,699,767)	35 , 279	
Income tax benefit (expense)	450 , 000	100	
Net earnings (loss)	\$ (1,249,767) =======	\$ 35,379 ======	\$ ===
Earnings (loss) per share of common stock - basic	\$ (0.18) ======	•	\$
Earnings (loss) per share of common stock - diluted	\$ (0.18)	\$ 0.01	\$
Weighted average number of common and common equivalent shares outstanding - basic	6,761,660 ======	6,757,585 ======	===
Weighted average number of common and common equivalent shares outstanding - diluted	6,761,660 ======	6,801,098 ======	===

See accompanying notes to condensed consolidated financial statements.

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

	NINE MONTHS END	ED SEP
	2003	
Cash flows from operating activities		
Net income (loss) Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:	\$ 1,237,804	\$
Depreciation and amortization	1,023,492	
Gain on sale of license	(4,989,150)	
Changes in assets and liabilities, excluding business acquisition:		
Restricted cash	(520 , 690)	
Accounts receivable, net	1,125,149	
Inventories	586,648	
Prepaid expenses and other current assets	146,077	
Accounts payable, income taxes payable and accrued liabilities	(1,166,585)	
Unearned purchase discount	(20,295)	
Other assets	(2,001)	
Advances on contracts in progress	222,713	
Net cash provided by (used in) operating activities	(2,356,838)	

Cash flows from investing activities

Proceeds from sale of license Additions to property and equipment Acquisition of business (Note 9) Increase in patent costs	4,989,150 (831,217) (724,969) (159,221)	
Net cash provided by (used in) investing activities	3,273,743	
Cash flows from financing activities Net payments on short-term debt Principal payment of capital lease obligations Principal payment on capital lease obligations - related party Exercise of stock options	(109,719) (117,107) 12,215	
Net cash used in financing activities	(214,611)	
Net increase (decrease) in cash and cash equivalents	702,294	(
Cash and cash equivalents, beginning of period	7,798,716	
Cash and cash equivalents, end of period	\$ 8,501,010 =======	\$ ===
Supplemental disclosures of cash flow and non-cash flow information		
Acquisition of Bandwidth Semiconductor: Assets acquired Liabilities assumed (including related party obligation of \$1,069,525) Cash paid	\$ 3,708,748 (2,983,779) 724,969	\$
Non-cash financing activities: Capital lease obligation for building - related party	\$ 3,390,397	\$
Cash paid during the period for: Interest	\$ 34,769 ======	\$ ===
Interest - related party	\$ 81,281 =======	\$ ===
Income taxes	\$ 662,000	\$

See accompanying notes to condensed consolidated financial statements.

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

SEPTEMBER 30, 2003

1. DESCRIPTION OF THE BUSINESS

The Company develops, manufactures and markets highly-engineered products and services in four principal business areas: Biomedical, Solar Equipment, Solar Systems and Optoelectronics bringing to bear expertise in materials technologies across all four business areas.

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 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 more than 140 factories and in 42 countries.

In the solar systems area, the Company provides electric power grid-connected distributed power generation systems employing photovoltaic technology.

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 September 30, 2003 and December 31, 2002 and the results of operations for the three and nine months ended September 30, 2003 and 2002 and cash flows for the nine months ended September 30, 2003 and 2002. The results of operations for the three and nine months ended September 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:

,	September 30, 2003	December 31, 2002
Raw materials Work in process Finished goods	\$ 790,152 676,251 213,753	\$ 662,384 1,324,345 233,858
	\$ 1,680,156	\$ 2,220,587

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4. EARNINGS (LOSS) PER SHARE

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

the periods ended:

	Three Mon Septem	Nine Months Septembe	
	2003	2002	2003
Weighted average number of common shares outstanding - basic Add net additional common shares upon	6,761,660	6,757,585	6,757,971
exercise of common stock options		43,513	76,760
Adjusted weighted average common shares outstanding - diluted	6,761,660	6,801,098	6,834,731

For the three and nine months ended September 30, 2003, 228,147 and 425,563 shares, respectively, of common stock issuable relative to stock options were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive. Of those amounts, 55,000 and 425,563 shares, for the three and nine months ended September 30, 2003, respectively, had exercise prices per share that exceeded the average market price of the Company's common stock for those periods.

For the three and nine months ended September 30, 2002, 520,033 and 397,907 shares, respectively, of common stock issuable relative to stock options were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive. Of those amounts, 489,600 and 309,832 shares, for the three and nine months ended September 30, 2002, respectively, had exercise prices per share that exceeded the average market price of the Company's common stock for those periods.

5. 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."

The results for Bandwidth Semiconductor have been combined with the Company's Biophotonics Lifesciences segment which has been renamed the Optoelectronics segment. The acquisition of Bandwidth Semiconductor took place on May 23, 2003.

	E 	Solar Equipment	Solar Systems	E	Spire Biomedical
For the three months ended September 30, 2003					
Net sales and revenues Loss from operations	\$	1,350,568 (242,167)	\$ 384,941 (365,679)	\$	1,602,605 (666,049)
For the three months ended September 30, 2002					
Net sales and revenues Earnings (loss) from operations	\$	1,685,154 60,597	\$ 831,173 41,474	\$	1,612,140 (47,536)

For the nine months ended September 30, 2003

Net sales and revenues Earnings (loss) from operations	\$ 3,545,152	\$ 1,195,138	\$ 4,908,928
	(797,813)	(911,741)	3,754,826
For the nine months ended September 30, 2002			
Net sales and revenues Earnings (loss) from operations	\$ 3,728,013	\$ 3,305,784	\$ 4,552,602
	(397,784)	145,577	(350,706)

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6. OTHER INTANGIBLE ASSETS

In July 2002, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 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 \$381,651 (net of accumulated amortization of \$518,469) and \$234,813 (net of accumulated amortization of \$486,579) at September 30, 2003 and December 31, 2002, respectively. These intangible assets primarily consist of patents that the Company had been awarded and are amortized over their useful lives or their terms, ordinarily five years. There are no expected residual values related to these intangible assets. For disclosure purposes, the table below includes amortization expense for patents owned by the Company as well as \$50,000 of estimated amortization expense related to patents that remain pending. Estimated amortization expense for the periods ending December 31, is as follows:

	Amortization
Year	Expense
2003	\$14,729
2003	61,459
	•
2005	58 , 875
2006	55,009
2007	54 , 448

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 proforma amounts indicated below.

-
End
]

Net earnings (loss), as reported Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of	\$ (1	,249,767)	\$ 35 , 379	\$ 1,237,804
related tax effects		85,021 	 82 , 395	 254 , 585
Pro forma net earnings (loss)	\$ (1	,334,788)	\$ (47,016)	\$ 983,219
Earnings (loss) per share:				
Basic - as reported		(0.18)	0.00	\$ 0.18
Basic - pro forma		(0.20)	(0.01)	\$ 0.15
Diluted - as reported	\$	(0.18)	\$ 0.00	\$ 0.18
Diluted - pro forma	\$	(0.20)	\$ (0.01)	\$ 0.14

For the quarter ended September 30, 2003, zero stock options were granted.

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The per-share weighted-average fair value of stock options granted during the quarter ended September 30, 2002 was \$2.25, 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 Vo
2003		3.33%	5 years	8
2002		4.93%	5 years	8

8. ACQUISITION AND RELATED PARTY TRANSACTION

On May 23, 2003, the Company acquired from Stratos Lightwave, Inc. ("Stratos") all of the ownership interests of Bandwidth Semiconductor, LLC ("Bandwidth"), a Delaware limited liability company, located in Hudson, New Hampshire. 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, until it was sold to Stratos for a total of \$12,950,000 in cash. On May 23, 2003, Bandwidth was re-acquired by the Company. The Company now owns 100% of the ownership interest of Bandwidth and the results of operations have been included herein since the date of the acquisition. Prior to the acquisition, Bandwidth was a wholly owned subsidiary of Stratos.

The total purchase price was \$724,969 in cash plus related acquisition costs of \$150,000 and liabilities assumed of \$2,983,779. In connection with the acquisition, 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 also included the release and forgiveness from all future obligations of Bandwidth and Stratos 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, that is now vacant. The Company's acquisition of Bandwidth did not include the building in Hudson, New Hampshire occupied by Bandwidth.

The total purchase price of \$3,858,748 was preliminarily allocated based on management's estimated fair value of the assets acquired and liabilities assumed, is summarized is as follows:

Current assets	\$ 402 , 796
Property and equipment	3,305,952
Reactor capital lease	(1,359,022)
Accrued lease obligation - related party	(1,069,525)
Other liabilities	(555,232)
Total cash paid	\$ 724 , 969

The allocation of the purchase price is subject to revision, based on the final valuation of the assets acquired. The Company is in the process of obtaining an independent appraisal of the assets.

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, the building that Bandwidth occupies for \$3.7 million. Subsequently, the Company entered into a lease for the building (90,000 square-feet) Bandwidth occupies in Hudson, New Hampshire with SPI-Trust whereby the Company will pay \$4.1 million to the SPI-Trust over an initial five year term expiring in 2008 with an option to extend for five years. The lease agreement does not provide for a transfer of ownership at any point. This lease has been classified as a related party capital lease and a summary of payments follows:

	Rate	e Per				
Year	Squa	re Foot	Ann	ual Rent	Мо	nthly Rent
				540.000		45.000
Year 1	\$	6.00	\$	540 , 000	\$	45,000
Year 2		7.50		675 , 000		56,250
Year 3		8.50		765,000		63 , 750
Year 4		10.50		945,000		78 , 750
Year 5		13.50		1,215,000		101,250
					\$	4,140,000

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The following pro forma information assumes that the acquisition of Bandwidth had been completed as of the beginning of 2003 and 2002, respectively

Three Months September		Nine Months September	
2003	2002	2003	2002

Revenue	\$ 4,073,313	\$ 4,733,626	\$ 11 , 393 , 936	\$ 13,659,027
Net loss	\$ (1,249,767)	\$ (1,140,596)	\$ (341,972)	\$ (4,604,278)
Loss per share	\$ (0.18)	\$ (0.17)	\$ (0.05)	\$ (0.68)

The pro forma financial information is not necessarily indicative of the results to be expected in future quarters as a result of the acquisition of Bandwidth.

9. COMMITMENTS

Property Under Capital Leases and Lease Commitments

At September 30, 2003, 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 capitalized costs and carrying value of the property under capital leases were as follows:

	2003
Unrelated party capital lease: Equipment Less accumulated amortization	\$ 773,170 (51,545)
	\$ 721,625
	2003
Related party capital lease: Hudson, New Hampshire building Less accumulated amortization	\$ 3,390,397 (226,026)
	\$ 3,164,371

At September 30, 2003, future minimum lease payments for the period ended December 31, 2003 are as follows:

	ated Party tal Lease	ted Party tal Lease	Op	ated Party erating Leases	Rela Op
2003	\$ 109,233	\$ 157,965	\$	83,236	\$
2004 2005	436,932 436,932	618 , 750 727 , 500		209,819 162,852	Ţ
2006	495,655	870,000		159,246	
2007		1,102,500		5 , 639	
2008	 	 495,260			
Total minimum lease payments	 1,478,752	 3,971,975	\$	620,792	\$ 2
Less amount representing interest	(166,149)	(691,299)			

Present value of minimum lease payments Less current portion	1,312,603 (361,754)	3,280,676 (326,213)
Long-term portion of capital lease	 	
obligation	\$ 950,849	\$ 2,954,463

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Unrelated Party Capital Lease

In September 2001, Bandwidth Semiconductor, LLC ("Bandwidth") entered into an agreement with GE Capital Leasing Corp, for the lease of a reactor for its 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. After the initial three-year period ending in September 2004, the lease allows for an additional two-year extension. The Company expects to extend the lease term for the additional two years to September 2006. The lease includes a residual value guarantee of \$204,000 at the end of extended period.

Related Party Capital Lease

In conjunction with the acquisition of Bandwidth by the Company, 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 the building that Bandwidth occupies from Stratos, the parent company, for \$3.7 million. The Company's Bandwidth Semiconductor division entered into a lease for the building it occupies from the Trust. 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 increasing monthly payments each year, through September 2008 for total payments of \$4.1 million. Interest costs were assumed at 7%. The lease does not provide for a transfer of ownership at anytime.

Unrelated Party Operating Leases

Unrelated party operating leases primarily consist of leases for copiers and the telephone system.

Related Party Operating Lease

The Company subleases 74,000 square-feet in a building leased by Mykrolis Corporation, who in turn leases the building from 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. 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. Rent expense under this sublease for the nine months ended September 30, 2003 was \$589,000, net of \$211,000 of sublet income received from Bandwidth prior to its acquisition.

In conjunction with the acquisition of Bandwidth by the Company, the Company released Bandwidth from the lease agreement that had existed between

Bandwidth and the Company. In November 2001, Bandwidth, under its previous owner, abandoned the space being subleased from the Company in Bedford, Massachusetts, to move to the new building and wafer fabrication lab in Hudson, New Hampshire. At that time, there were 48 months left on the lease. Subsequent to the move to Hudson, New Hampshire, Bandwidth was unable to sublease the Bedford, Massachusetts space, and was paying the Company for the unused space. In conjunction with the acquisition of Bandwidth in May 2003, the Company released Bandwidth from the remaining lease payments. However, the Company continues to be obligated to Mykrolis Corporation for the entire amount of the remaining lease agreement. As a result the present value of the remaining lease obligation associated with the unused space was recorded as an assumed liability of \$1,069,525. As of September 30, 2003, the remaining lease obligation is \$951,228. The difference between the actual rent payment and the discounted rent payment will be accreted to the income statement as interest expense which is reflected in the Company's balance sheet as of September 30, 2003 as an "accrued lease obligation - related party".

Total rent expense under operating leases was approximately \$1,045,000 for the nine months ended September 30, 2003. Rent expense was offset by the rental income from Bandwidth under the sublease agreement between the Company and Bandwidth, prior to the date Bandwidth was re-acquired.

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 (Spire Solar Chicago) and in return the Company agreed to purchase solar cells of a minimum of two megawatts per year over a five-year term for a fixed fee from BPS (the "Purchase Commitment"). BPS has the right to reclaim the equipment should the Company not meet its obligations in the Purchase Commitment. 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

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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 \$16,829 and \$20,295 for the three and nine month periods ended September 30, 2003, respectively.

In addition, the agreement contains a put option for BPS to have Spire create a separate legal entity for Spire Solar Chicago and for BPS to convert the value of the equipment and additional costs, as defined, into equity of the new legal entity. The percentage ownership in the joint venture would be determined based on the cumulative investments by BPS and Spire.

During the quarter ended September 30, 2003, the Company and BPS retroactively amended the agreement to include all purchases of solar modules, solar systems, inverter systems and other system equipment purchased by Spire from BPS in the purchase commitment calculation. As a result, amortization of the purchase discount amounted to \$16,829 during the quarter ended September 30, 2003.

The amended agreement also allows Spire to terminate the agreement on 30 days notice in consideration for a termination payment based on the aggregate amount of Spire purchases of BPS products and the fair market value of the production equipment purchased by BPS at the time of the termination election. As of September 30, 2003, Spire has no intention of terminating the agreement.

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. ("Bard"), 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 upon the earlier to occur of: (a) the date of the first commercial sale of a licensed product by Bard; or (b) no more than 18 months after signing. The agreement further provides for additional payments of \$3 million each on the first and second payment, if the agreement has not been canceled. Bard has the right to cancel the agreement at any time subsequent to the second payment. During the three months ended December 31, 2002, the Company recorded the initial payment under the agreement, resulting in a gain of \$4,464,929, net of direct costs. Due to the potential length of time between the first and second payments and the cancellation provisions within the agreement, the Company did not record the potential remaining payments at that time. During June 2003, in accordance with the agreement, the Company received notification from Bard of the first commercial sale, collected the \$5 million payment due and recorded gain of \$4,989,150, net of direct costs. This gain is recorded in the accompanying unaudited condensed consolidated statement of earnings for the nine months ended September 30, 2003. The Company believes that the sale of the license does not reflect the day-to-day operations of the Company. Therefore, the net proceeds received has been classified under investing activities in the unaudited condensed consolidated statement of cash flows for the nine months ended September 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 first refusal should the Company seek to sell the Catheter business.

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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 DISCUSSED IN THE FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE, BUT ARE NOT LIMITED TO, THOSE DISCUSSED 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.

Summary Results

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

Three Month Septembe		Nine Months Septembe	
2003	2002	2003	2002
100%	100%	100%	100

Cost of sales and revenues	81	66	79	70
Gross profit	19	34	21	30
Internal research and development	10	2	7	2
Gain on sale of license			(46)	
Selling, general and administrative expenses	49	32	45	33
Earnings (loss) from operations	(40)	1	15	 (5
Interest expense	(2)		(1)	
Earnings (loss) before income taxes	(42)	 1	1 4	
Income tax benefit	11		2	
Net earnings (loss)	(31%)	1%	12%	(5

Three and Nine Months Ended September 30, 2003 Compared to Three and Nine Months
----Ended September 30, 2002

NET SALES AND REVENUES

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

	Three 1	Months Ended Septer	mber
	2003	2002	 %
Contract research, service and license revenues Sales of goods	\$ 2,230,000 1,843,000	\$ 1,468,000 2,729,000	
Net sales and revenues	\$ 4,073,000 ======	\$ 4,197,000 ======	

Total net sales and revenues decreased \$124,000 or 3% for the three months ended September 30, 2003 to \$4,073,000, compared to \$4,197,000, for the three months ended September 30, 2002. Contract research, service and license revenues increased \$762,000 or 52% to \$2,230,000 for the three months ended September 30, 2003 compared to \$1,468,000 for the three months ended September 30, 2002. Sales of goods decreased \$886,000 or 32% to \$1,843,000 for 2003, compared to \$2,729,000 for 2002.

The increase in the contract research, service and license revenues is a result of increased demand for optoelectronics services, principally semiconductor foundry services at the Bandwidth Semiconductor unit offset in part by decreased demand for the Company's biomedical processing services. The decrease in sales of goods for the three month period ended September 30, 2003 is primarily due to decreased shipments of solar PV systems and to decreased shipments of solar PV manufacturing equipment offset in part by increased sales of biomedical catheter products.

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

	Nine Mo	onths Ended Septemb	er 3
	2003	2002	 %
Contract research, service and license revenues Sales of goods	\$ 5,748,000 5,039,000	\$ 4,815,000 7,270,000	
Net sales and revenues	\$ 10,787,000 =======	\$ 12,085,000 ======	

Net sales and revenues decreased \$1,298,000 or \$1\$ for the nine months ended September 30, 2003 to \$10,787,000, compared to \$12,085,000 for the nine months ended September 30, 2002. Contract research, service and license revenues increased \$933,000 or \$9\$ to \$5,748,000 for the nine months ended September 30, 2003 compared to \$4,815,000 for 2002. Sales of goods decreased \$2,231,000 or \$1\$ to \$5,039,000 for 2003, compared to \$7,270,000 for 2002.

The increase in contract research, service and license revenues for the nine month period ended September 30, 2003 is attributed primarily to increased demand for optoelectronics services, principally semiconductor foundry services at the Bandwidth Semiconductor unit offset in part by a decrease in the demand for the Company's biomedical processing services. The decrease in sales of goods for the nine month period ended September 30, 2003 is primarily due to decreased shipments of solar PV systems and to decreased shipments of solar PV manufacturing equipment offset in part by increased sales of biomedical catheter products.

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 I	∃n
		2003	%	
Cost of contract research, service and license revenues Cost of goods sold	\$	1,767,000 1,549,000	79 ⁹ 84 ⁹	-
Total cost of sales and revenues	\$ ==	3,316,000	819	ماه

The cost of total sales and revenues increased \$562,000 to \$3,316,000, and increased to 81% of net sales and revenues, for the quarter ended September 30, 2003, compared to \$2,754,000 or 66% of net cost of sales and revenues for the quarter ended September 30, 2002. The cost of contract research, service and license revenues increased \$904,000 to \$1,767,000, increasing to 79% of related revenues for the three months ended September 30, 2003, compared to \$863,000 or 59% of related revenues for the three months ended September 30, 2002. The increase is due to a change in the service mix. Cost of goods sold decreased \$342,000 to \$1,549,000, but increased to 84% of related sales, for the three months ended September 30, 2003, compared to \$1,891,000 or 69% of related sales for the three months ended September 30, 2002 due to reduced production unit volume in both solar PV systems and solar PV manufacturing equipment.

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:

		Nine Months E
	 2003 	%
Cost of contract research, service and license revenues Cost of goods sold	\$ 4,022,000 4,559,000	70% 90%
Total cost of sales and revenues	\$ 8,581,000 ======	80%

The cost of total sales and revenues increased \$99,000 to \$8,581,000, and increased to 80% of net sales and revenues, for the nine months ended September 30, 2003, compared to \$8,483,000 or 70% of cost of total sales and revenues for the nine months ended September 30, 2002. The cost of contract research, service and license revenues increased \$999,000 to \$4,022,000, while increasing to 70% of related revenues for the nine months ended September 30, 2003, compared to \$3,023,000 or 63% of related revenues for the nine months ended September 30, 2002. The increase is due to higher volume of sales of services and a shift in service mix. Cost of goods sold decreased \$900,000 to \$4,559,000, but increased to 90% of related sales, for the nine months ended September 30, 2003, compared to \$5,460,000 or 75% of related sales for the nine months ended September 30, 2002, due to reduced production unit volume in both solar PV systems and solar PV manufacturing equipment.

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INTERNAL RESEARCH AND DEVELOPMENT

Internal research and development for the three months ended September 30, 2003 increased \$321,000 or 479% to \$388,000, compared to \$67,000 for the three months ended September 30, 2002, as the Company continued its investment in the catheter development program and development of the "next generation" of solar manufacturing equipment.

Internal research and development for the nine months ended September 30, 2003 increased \$566,000 or 280% to \$768,000, compared to \$202,000 for the nine months ended September 30, 2002, as the Company continued its investment in the catheter development program and in the development of "next generation" solar energy module manufacturing equipment under a cost sharing contract with the Department of Energy National Renewable Energy Laboratory.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the three months ended September 30, 2003 increased \$658,000 to \$2,001,000, and increased to 49% of sales and revenues, compared to \$1,343,000 or 32% of sales and revenues for the three months ended September 30, 2002.

Selling, general and administrative expenses for the nine months ended September 30, 2003 increased \$900,000 to \$4,883,000, and increased to 45% of sales and revenues, compared to \$3,983,000 or 33% of sales and revenues for the nine months ended September 30, 2002. The increase in selling, general and administrative expenses reflects increased sales and marketing efforts

associated with the Company's hemodialysis catheter product line as well as additional costs for outside legal and accounting services offset in part by cost reductions put in place in prior periods by the Company. Selling, general and administrative expense increased as a percentage of revenue both as a result of increased spending and decreased revenue.

INTEREST

The Company incurred net interest expense of \$68,000 for the quarter ended September 30, 2003, compared to \$1,000 of interest income for the quarter ended September 30, 2002. The Company incurred interest expense of \$82,000 for the nine months ended September 30, 2003, compared to interest income of \$14,000 for the nine months ended September 30, 2002. This is primarily as a result of interest expense incurred on capital leases by the Bandwidth Semiconductor unit offset in part by interest earned on cash balances.

INCOME TAXES

The Company recorded a \$450,000 income tax benefit for the three months ended September 30, 2003 and a provision of \$225,000 of income tax expense for the nine months ended September 30, 2003, compared to zero income taxes for the quarter and the nine months ended September 30, 2002. The effective tax rate was 26% for the quarter ended September 30, 2003 and 15% for the nine months ended September 30, 2002. The effective tax rates reflect the effect of tax credit carryforwards from prior periods and reduction of the valuation allowance.

NET EARNINGS (LOSS)

The Company reported a net loss for the quarter ended September 30, 2003 of \$1,250,000, compared to a net income of \$35,000 for the quarter ended September 30, 2002. The Company reported net income of \$1,238,000 for the nine months ended September 30, 2003, compared to a net loss of \$568,000 for the same period of 2002.

The loss for the quarter is attributed to manufacturing cycles in its photovoltaic equipment business, as well as the Company's investment in new product and services. The Company began selling a hemodialysis catheter through a distributor network in the second quarter of 2003 and acquired a semiconductor foundry. The earnings for the nine months ended September 30, 2003 are 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

Our financial position remains strong, with cash and cash equivalents of \$9,022,000, including \$521,000 of restricted cash, at September 30, 2003.

To date, the Company has funded its operating cash requirements using operating cash flow, proceeds from the sale and licensing of technology and available lines of credit.

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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 September 30, 2003, the Company had \$521,000 of restricted cash associated with letters 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 and certain other covenants.

Cash and cash equivalents increased \$1,223,000 to \$9,022,000, including restricted cash of \$521,000 at September 30, 2003 from \$7,799,000 at December 31, 2002. To date, there are no material commitments by the Company for capital expenditures. At September 30, 2003, the Company's retained earnings were \$3,699,000, compared to retained earnings of \$2,461,000 as of December 31, 2002. Working capital as of September 30, 2003 decreased 10% to \$9,480,000, compared to \$10,524,000 as of December 31, 2002.

The Company believes it has sufficient resources to finance its current operations for the foreseeable future from operating cash flow and from proceeds from the sale and licensing of technology.

The following table summarizes the Company's contractual obligations at September 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	
Unrelated party capital lease Related party capital lease Unrelated party operating leases Related party operating lease	\$1,479,000 3,972,000 621,000 2,309,000	\$ 109,000 158,000 83,000 266,000	\$ 874,000 1,346,000 373,000 2,043,000	\$ 496,000 1,973,000 165,000	

Included in the related party operating lease is the accrued lease obligation in the amount of \$951,228.

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 (Spire Solar Chicago) and in return the Company agreed to purchase solar cells of a minimum of two megawatts per year over a five-year term for a fixed fee from BPS (the "Purchase Commitment"). BPS has the right to reclaim the equipment should be Company not meet its obligations in the Purchase Commitment. 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 \$16,829 and \$20,295 for the three and nine month periods ended September 30, 2003, respectively.

In addition, the agreement contains a put option for BPS to have Spire create a separate legal entity for Spire Solar Chicago and for BPS to convert the value of the equipment and additional costs, as defined, into equity of the new legal entity. The percentage ownership in the joint venture would be determined based on the cumulative investments by BPS and Spire.

During the quarter ended September 30, 2003, the Company and BPS retroactively amended the agreement to include all purchases of solar modules, solar systems, inverter systems and other system equipment purchased by Spire from BPS in the purchase commitment calculation. As a result, amortization of the purchase discount amounted to \$16,829 during the quarter ended September 30, 2003.

The amended agreement also allows Spire to terminate the agreement on 30 days notice in consideration for a termination payment based on the aggregate amount of Spire purchases of BPS products and the fair market value of the

production equipment purchased by BPS at the time of the termination election. As of September 30, 2003, Spire has no intention of terminating the agreement.

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

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period beginning after September 15, 2003. The adoption of this statement is not anticipated to have a material effect on the Company's results of operations or financial position.

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 including product warranties. The recognition provisions of FIN 45 will be effective for any guarantees that are issued or modified after December 31, 2002. The adoption of FIN 45 did not have a material impact on the Company's financial position or results of operations.

The Company provides warranties on certain of its products and services. The Company has historically recorded negligible warranty expenses and therefore does not record a warranty reserve. The Company warranty programs are described below:

Spire Solar Equipment warrants solar energy module manufacturing equipment sold for a total of 360 days, the first 90 days of which include the replacement of defective component parts and the labor to correct the defect and the next 270 days of which include only the cost of defective component parts.

Spire Solar Systems warrants photovoltaic electric power systems sold against defective components for 360 days to include the replacement of defective component parts and the labor to correct the defect. Spire Solar Systems also warrants that its photovoltaic electric power systems will achieve a minimum of 80% of rated electrical power output for 20 years.

Spire Biomedical warrants that any of its catheter products found to be defective will be replaced. No warranty is made that the failure of the product will not occur, and Spire disclaims any responsibility for any medical complications. Spire Biomedical warrants that its services only warrant that the products will meet the agreed upon specifications.

Bandwidth Semiconductor warrants that its products will meet the agreed upon specifications.

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. In December 2003, the FASB issued FASB Interpretation No. 46R, "Consolidation of Variable Interest Entities" ("FIN46R"). FIN 46R superceded FIN46 and defers the effective date for small business filers until the first reporting period that ends after December 15, 2004 (fourth quarter of 2004).

In September 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 141 ("SFAS No. 141"), "Business Combinations" and SFAS No. 142, "Goodwill and Other Intangible Assets". SFAS No. 141 requires that the purchase method of accounting be used for all business combinations. SFAS No. 141 specifies criteria that intangible assets acquired in a business combination must meet to be recognized and reported separately from goodwill. SFAS No. 142 will require that goodwill and intangible assets with indefinite useful lives no longer be amortized, but instead tested for impairment at least annually in accordance with the provisions of SFAS No. 142.

The Company adopted the provisions of SFAS No. 141 as of July 1, 2001, and SFAS No. 142 is effective January 1, 2002. Goodwill and intangible assets determined to have an indefinite useful life acquired in a purchase business combination completed after September 30, 2001, but before SFAS No. 142 is adopted in full, are not amortized. The adoption of the SFAS No. 141 and 142 has not had a material impact on the Company's financial position or results of operations.

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${\tt Impact\ of\ Inflation\ and\ Changing\ Prices}$

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 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.

Related Party Transactions

The Company subleases 74,000 square-feet in a building leased by Mykrolis Corporation, who in turn leases the building from 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. 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. Rent expense under this sublease for the nine months ended September 30, 2003 was \$589,000, net of \$211,000 of sublet income received from Bandwidth prior to its acquisition.

In conjunction with the acquisition of Bandwidth by the Company, the Company released Bandwidth from the lease agreement that had existed between Bandwidth and the Company. In November 2001, Bandwidth, under its previous owner, abandoned the space being subleased from the Company in Bedford, Massachusetts, to move to the new building and wafer fabrication lab in Hudson, New Hampshire. At that time, there were 48 months left on the lease. Subsequent to the move to Hudson, New Hampshire, Bandwidth was unable to sublease the Bedford, Massachusetts space, and was paying the Company for the unused space. In conjunction with the acquisition of Bandwidth in May 2003, the Company released Bandwidth from the remaining lease payments. However, the Company continues to be obligated to Mykrolis Corporation for the entire amount of the remaining lease agreement. As a result the present value of the remaining lease obligation associated with the unused space was recorded as an assumed liability of \$1,069,525. As of September 30, 2003, the remaining lease obligation is \$951,228. The difference between the actual rent payment and the discounted rent payment will be accreted to the income statement as interest expense which is reflected in the Company's balance sheet as of September 30, 2003 as an "accrued lease obligation - related party".

Total rent expense under operating leases was approximately \$1,045,000 for the nine months ended September 30, 2003. Rent expense was offset by the rental income from Bandwidth under the sublease agreement between the Company and Bandwidth, prior to the date Bandwidth was re-acquired.

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 long-lived assets, income taxes, warranties. 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.

REVENUE RECOGNITION

The Company derives its revenues from three primary sources: (1) commercial products including, but not limited to solar energy manufacturing equipment and solar energy systems; (2) biomedical 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 and determinable, and collectibility is deemed probable. Gross sales reflect reductions attributable to various customer incentive programs including pricing discounts and rebates. Certain customer incentive programs require management to estimate the cost of those programs. The accrued liability for these programs is determined through 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. 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 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.

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.

ACOUISITION ACCOUNTING

Through its acquisition, the Company has accumulated assets the valuation of which involves estimates based on fair value assumptions. Estimated lives assigned to the assets acquired in a business purchase also involve the use of estimates. These matters that are subject to judgments and estimates are inherently uncertain, and different amounts could be reported using different methodologies. Management uses its best estimate in determining the appropriate values and estimated lives to reflect in the financial statements, using historical experience, market data, and all other available information.

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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 Company's Chief Executive Officer and Financial Controller and Treasurer (the Company's principal financial officer), of the effectiveness of the Company's disclosure controls and procedures as of September 30, 2003. 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, in the course of this evaluation, management considered certain internal control areas, including those discussed below, in which we have made and our continuing to make changes to improve and enhance controls. Based upon the required evaluation, the Chief Executive Officer and the Financial Controller and Treasurer concluded that as of September 30, 2003 the Company's disclosure controls and procedures were effective (at the "reasonable assurance" level mentioned above) 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 rule and forms.

From time to time, the Company and its management have conducted and will continue to conduct further reviews and, from time to time put in place additional documentation of, the Company's disclosure controls and procedures, as well as its internal control over financial reporting. The Company may from time to time make changes aimed at enhancing their effectiveness, as well as changes aimed at ensuring that the Company's systems evolve with, and meet the needs of, the Company's business. These changes may include changes necessary or desirable to address recommendations of the Company's management, its counsel and/or its independent auditors, including any recommendations of our independent auditors arising out of their audits and reviews of the Company's financial statements. These changes may include changes to the Company's own systems, as well as to the systems of businesses that the Company has acquired or that the Company may acquire in the future and will, if made, be intended to enhance the effectiveness of the Company's controls and procedures. The Company is also continually striving to improve its management and operational

efficiency and the Company expects that its efforts in that regard will from time to time directly or indirectly affect the Company's disclosure controls and procedures, as well as the Company's internal control over financial reporting.

As disclosed in our quarterly report on Form 10-QSB for the quarterly period ended June 30, 2003, as amended (the "Second Quarter Form 10-QSB"), in connection with the initial filing of the Second Quarter Form 10-QSB, which was initially submitted prior to the completion of the required review by the Company's independent accountants, the Audit Committee engaged outside counsel to conduct an internal investigation into the events surrounding the preparation and filing of the Second Quarter Form 10-QSB. Based on the results of that investigation, outside counsel concluded that weaknesses existed in the Company's disclosure controls and procedures and proposed an action plan designed to strengthen the Company's disclosure controls and procedures. The Audit Committee, the Board of Directors and management have begun to adopt and implement certain of those recommendations in order to strengthen the Company's disclosure controls and procedures.

As further disclosed in the Second Quarter Form 10-QSB, subsequent to both the initial filing of the Second Quarter Form 10-QSB and Amendment No. 1 to the Second Quarter Form 10-QSB, the Company's former independent auditors, KPMG LLP, advised management and the Audit Committee by a letter dated December 24, 2003 that, in connection with KPMG's review of the financial statements of the Company for the three and six-month periods ended June 30, 2003, it noted certain matters involving internal control and its operation that it considered to be material weaknesses that constituted reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions are matters coming to an independent auditors' attention that, in their judgment, relate to significant deficiencies in the design or operation of internal control and could adversely affect the organization's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. Further, a material weakness is a reportable condition in which the design or operation of one or more internal control components does not reduce to a relatively low level the risk that errors or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. KPMG advised management and the Audit Committee that it considered the following to constitute material weaknesses in internal control and operations: the Company's failure to adequately staff its finance group with the appropriate level of experience to effectively control the increased level of transaction activity, address the complex accounting matters and manage the increased financial reporting complexities

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resulting from, among other things, the acquisition of Bandwidth and the implementation of a new financial reporting system.

The Company's new independent auditors, Vitale, Caturano & Company has, in connection with its review of the September 30, 2003 financial statements, informed the Audit Committee that the conditions identified in the December 24, 2003 letter as material weaknesses in internal controls by KPMG are still present.

The Company is currently assessing the findings of its independent auditors. As noted above, however, the Company has made and is continuing to make changes in its controls and procedures, including its internal control over financial reporting, aimed at enhancing their effectiveness and ensuring that the Company's systems evolve with, and meet the needs of, the Company's business. As further noted above, the Company is also continually striving to

improve its management and operational efficiency and the Company expects that its efforts in that regard will from time to time directly or indirectly affect the Company's controls and procedures, including its internal control over financial reporting. For example, the Company has recently added to its accounting staff and expects to hire additional professionals, including a chief financial officer, to manage the diverse and complex financial issues which may arise in the Company's business and the Company has arranged for additional compliance training for its staff. The Company is also continuing its efforts to upgrade its information technology capabilities. It has completed the implementation of a common accounting system at all of its business units and is working to complete integration of the systems at remote sites with its headquarters location.

Changes in Internal Control Over Financial Reporting

There was no change in the Company's internal control over financial reporting that occurred during the quarterly period covered by this quarterly report on Form 10-QSB that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

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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 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. In August and September, a total of seven new cases were filed against the Company in courts in Harris County.

A federal district court judge in Minnesota recently ruled against St. Jude Medical's request for early judgment on their cases now pending. This judge had decided that St. Jude's device is no longer FDA-approved which may affect the concept of federal preemption and possibly the ruling made in June 2003 dismissing most of the cases pending against the Company in Harris County, Texas.

ITEM 2. CHANGES IN SECURITIES

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

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

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

a. Exhibits

- 31.1 Certification of the Chairman of the Board, Chief Executive
 Officer and President pursuant toss.302 of the Sarbanes-Oxley Act
 of 2002
- 31.2 Certification of the Financial Controller and Treasurer (Principal Financial and Accounting Officer) pursuant toss.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 toss.906 of the Sarbanes-Oxley Act of 2002
- 32.2 Certification of the Financial Controller and Treasurer (Principal Financial and Accounting Officer) pursuant to 18 U.S.C. ss.1350, as adopted pursuant toss.906 of the Sarbanes-Oxley Act of 2002
- b. Reports on Form 8-K

There were no reports on Form 8-K that were filed by the Registrant in the quarter ended September 30, 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

Dated: January 23, 2004 By: /s/ Roger G. Little

Roger G. Little

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Chairman of the Board, Chief Executive Officer and President

Dated: January 23, 2004 By: /s/ Gregory G. Towle

Gregory G. Towle

Financial Controller and Treasurer (principal financial and accounting

officer)

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EXHIBIT INDEX

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