
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the quarterly period ended March 31, 2003.

☐ 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: **000-26966**

ADVANCED ENERGY INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation
or organization)

84-0846841

(I.R.S. Employer Identification No.)

1625 Sharp Point Drive, Fort Collins, CO

(Address of principal executive offices)

80525

(Zip Code)

Registrant's telephone number, including area code: **(970) 221-4670**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes ☒ No ☐.

As of May 5, 2003, there were 32,178,276 shares of the Registrant's Common Stock, par value \$0.001 per share, outstanding.

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PART I FINANCIAL INFORMATION
ITEM 1. UNAUDITED FINANCIAL STATEMENTS
ADVANCED ENERGY INDUSTRIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands)

	March 31, 2003 (Unaudited)	December 31, 2002 (Unaudited)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 58,302	\$ 70,188
Marketable securities	102,519	102,159
Accounts receivable, net	40,915	43,885
Income tax receivable	13,766	14,720
Inventories	55,952	57,306
Other current assets	5,402	6,828
Deferred income tax assets, net	22,896	17,510
	<hr/>	<hr/>
Total current assets	299,752	312,596
	<hr/>	<hr/>
PROPERTY AND EQUIPMENT, net	40,772	41,178
	<hr/>	<hr/>
OTHER ASSETS:		
Deposits and other	4,711	5,181
Goodwill and intangibles, net	86,420	86,601
Demonstration and customer service equipment, net	6,660	6,086
Deferred debt issuance costs, net	3,815	4,091
	<hr/>	<hr/>
Total assets	\$442,130	\$455,733
	<hr/>	<hr/>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Trade accounts payable	\$ 14,556	\$ 16,055
Accrued payroll and employee benefits	9,175	9,348
Other accrued expenses	19,761	19,964
Acquisition related escrow	—	1,675
Customer deposits	332	77
Capital lease obligations, current portion	423	691
Senior borrowings, current portion	13,867	14,506
Accrued interest payable on convertible subordinated notes	1,601	2,338
	<hr/>	<hr/>
Total current liabilities	59,715	64,654
	<hr/>	<hr/>
LONG-TERM LIABILITIES:		
Capital leases, net of current portion	649	669
Senior borrowings, net of current portion	8,704	9,996
Deferred income tax liabilities, net	8,777	8,663
Convertible subordinated notes payable	187,718	187,718
Other long-term liabilities	742	694
	<hr/>	<hr/>
	206,590	207,740
	<hr/>	<hr/>
Total liabilities	266,305	272,394
	<hr/>	<hr/>
STOCKHOLDERS' EQUITY	175,825	183,339
	<hr/>	<hr/>
Total liabilities and stockholders' equity	\$442,130	\$455,733
	<hr/>	<hr/>

The accompanying notes to condensed consolidated financial statements
are an integral part of these condensed consolidated balance sheets.

ADVANCED ENERGY INDUSTRIES, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)

	Three Months Ended March 31,	
	2003 (Unaudited)	2002 (Unaudited)
SALES	\$ 56,158	\$ 42,887
COST OF SALES	38,208	29,513
Gross profit	17,950	13,374
OPERATING EXPENSES:		
Research and development	13,367	11,248
Sales and marketing	8,330	6,751
General and administrative	5,629	6,798
Restructuring charges	1,509	—
Total operating expenses	28,835	24,797
LOSS FROM OPERATIONS	(10,885)	(11,423)
OTHER (EXPENSE) INCOME:		
Interest income	520	940
Interest expense	(2,866)	(3,297)
Foreign currency (loss) gain	(78)	115
Other (expense) income, net	(326)	245
	(2,750)	(1,997)
Loss before income taxes	(13,635)	(13,420)
BENEFIT FOR INCOME TAXES	(5,045)	(4,697)
NET LOSS	\$ (8,590)	\$ (8,723)
BASIC AND DILUTED LOSS PER SHARE	\$ (0.27)	\$ (0.27)
BASIC AND DILUTED WEIGHTED-AVERAGE COMMON SHARES OUTSTANDING	32,159	31,874

The accompanying notes to condensed consolidated financial statements
are an integral part of these condensed consolidated statements.

ADVANCED ENERGY INDUSTRIES, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Three Months Ended March 31,	
	2003 (Unaudited)	2002 (Unaudited)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (8,590)	\$ (8,723)
Adjustments to reconcile net loss to net cash used in operating activities --		
Depreciation and amortization	6,192	3,892
Amortization of deferred debt issuance costs	276	335
Amortization of deferred compensation	122	131
Benefit for deferred income taxes	(5,818)	(72)
Impairment of investment	175	—
Loss on disposal of property and equipment	631	—
Changes in operating assets and liabilities (net of assets and liabilities acquired) --		
Accounts receivable, net	2,892	(4,558)
Inventories	1,502	(1,550)
Other current assets	1,486	1,095
Deposits and other	199	164
Demonstration and customer service equipment	(2,412)	(234)
Trade accounts payable	(1,584)	3,255
Accrued payroll and employee benefits	(144)	(156)
Customer deposits and other accrued expenses	(526)	(3,057)
Income taxes payable/receivable, net	1,020	(1,086)
	<u>2,433</u>	<u>(6,127)</u>
Net cash used in operating activities	<u>(4,579)</u>	<u>(10,564)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Marketable securities transactions	(373)	29,142
Purchase of property and equipment	(3,412)	(2,305)
Investments and advances	—	(1,583)
Acquisition of Aera Japan Limited, net of cash acquired	—	(35,689)
Acquisition of Dressler HF Technik GmbH, net of cash acquired	(1,675)	(14,395)
	<u>(5,460)</u>	<u>(24,830)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments on notes payable and capital lease obligations	(2,332)	(3,150)
Proceeds from common stock transactions	351	509
	<u>(1,981)</u>	<u>(2,641)</u>
EFFECT OF CURRENCY TRANSLATION ON CASH	134	(119)
DECREASE IN CASH AND CASH EQUIVALENTS	<u>(11,886)</u>	<u>(38,154)</u>
CASH AND CASH EQUIVALENTS, beginning of period	<u>70,188</u>	<u>81,955</u>
CASH AND CASH EQUIVALENTS, end of period	<u>\$ 58,302</u>	<u>\$ 43,801</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid for interest	\$ 3,328	\$ 3,492
Cash received from income taxes, net	\$ 319	\$ 2,079

The accompanying notes to condensed consolidated financial statements
are an integral part of these condensed consolidated statements.



ADVANCED ENERGY INDUSTRIES, INC. AND SUBSIDIARIES

**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)**

(1) BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

In the opinion of management, the accompanying unaudited condensed consolidated balance sheets, statements of operations and cash flows contain all adjustments necessary to present fairly the financial position of Advanced Energy Industries, Inc., a Delaware corporation, and its wholly owned subsidiaries (the "Company") at March 31, 2003 and December 31, 2002, and the results of the Company's operations and cash flows for the three-month periods ended March 31, 2003 and 2002.

The unaudited financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all the information and note disclosures required by accounting principles generally accepted in the United States. The financial statements should be read in conjunction with the audited financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2002, filed March 27, 2003.

The preparation of the Company's condensed consolidated financial statements requires the Company's management to make certain estimates and assumptions that affect the amounts reported and disclosed in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

CASH AND CASH EQUIVALENTS -- For purposes of reporting cash flows, the Company considers all amounts on deposit with financial institutions and highly liquid investments with an original maturity of 90 days or less to be cash and cash equivalents.

MARKETABLE SECURITIES -- The Company has investments in marketable equity securities and municipal bonds, which have original maturities of 90 days or more. In accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities," these investments are classified as available-for-sale securities and reported at fair value with unrealized gains and losses included in other comprehensive income. Due to the short-term, highly liquid nature of the marketable securities held by the Company, the cost, including accrued interest of such investments, is typically the same as their fair value.

The Company also has investments in marketable equity securities which have been included with deposits and other in the accompanying condensed consolidated balance sheets. In accordance with SFAS No. 115, these investments are classified as available-for-sale securities and reported at fair value with unrealized holding gains and losses included in other comprehensive income. During the first quarter of 2003, the fair value of one of these securities continued to decline. Under the provisions of SFAS No. 115 and related interpretations the Company recorded an other than temporary decline in value impairment of approximately \$175,000 which is included in other expense in the accompanying condensed consolidated statements of operations. If the fair value of this investment continues to decline, the Company will record additional impairments equal to the difference between the carrying value of \$1.8 million at March 31, 2003, and its fair value. Any subsequent recovery in the fair value of this investment will be recorded as other comprehensive income in the Company's statements of stockholders' equity.

INVENTORIES -- Inventories include costs of materials, direct labor and manufacturing overhead. Inventories are valued at the lower of market or cost, computed on a first-in, first-out basis and are presented net of reserves for obsolete and excess inventory. Inventory is written down or written off when it becomes obsolete, generally because of engineering changes to a product or discontinuance of a product line, or when it is deemed excess. These determinations involve the exercise of significant judgment by

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management, and as demonstrated in recent periods, demand for the Company's products is volatile and changes in expectations regarding the level of future sales can result in substantial charges against earnings for obsolete and excess inventory.

PROPERTY AND EQUIPMENT -- Property and equipment is stated at cost or estimated fair value upon acquisition. Additions, improvements, and major renewals are capitalized. Maintenance, repairs, and minor renewals are expensed as incurred.

Depreciation is provided using the straight-line method over three to ten years for machinery, equipment, furniture and fixtures, with computers and communication equipment depreciated over a three-year life. Amortization of leasehold improvements and leased equipment is provided using the straight-line method over the lease term or the estimated useful life of the assets, whichever period is shorter.

DEMONSTRATION AND CUSTOMER SERVICE EQUIPMENT -- Demonstration and customer service equipment are manufactured products that are utilized for sales demonstration and evaluation purposes. The Company also utilizes this equipment in its customer service function as replacement and loaner equipment to existing customers.

The Company depreciates this equipment based on its estimated useful life of three years.

GOODWILL AND INTANGIBLES -- The Company adopted Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets" on January 1, 2002. SFAS No. 142 established new standards for accounting for goodwill and other intangibles acquired in business combinations. Goodwill continues to be recognized as an asset, but is no longer amortized as previously required by Accounting Principles Board ("APB") Opinion No. 17, "Intangible Assets." Certain other intangible assets with indefinite lives, if present, may also not be amortized. Instead, goodwill and other intangible assets are subject to periodic (at least annual) tests for impairment. The impairment testing is performed in two steps: (i) the Company assesses goodwill for a potential impairment loss by comparing the fair value of a reporting unit with its carrying value, and (ii) if an impairment is indicated by a reporting unit whose fair value is less than its carrying amount, the Company measures the amount of impairment loss by comparing the implied fair value of goodwill with the carrying amount of that goodwill.

In accordance with SFAS No. 142, the Company ceased amortizing goodwill on January 1, 2002, and reassessed its goodwill and other intangible assets. The Company determined that the classifications it made and the useful lives it assigned were appropriate for the goodwill and amortizable intangibles it held as of December 31, 2001.

In the fourth quarter of 2002, the Company completed its evaluation of the goodwill and intangible assets recorded as a result of the acquisitions of Aera, which it acquired on January 18, 2002, Dressler, which it acquired on March 28, 2002, and the remaining 40.5% of LITMAS that the Company did not previously own on April 2, 2002. In the fourth quarter of 2002, the Company also performed its annual goodwill impairment test, and concluded that because the estimated fair value of the Company's reporting units exceeded their carrying amounts, no impairment of goodwill was indicated. As the Company is required to perform the test for impairment at least annually, it is reasonably possible that a future test may indicate impairment, and the amount of impairment may be material to the Company. Intangible assets are separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the asset can be sold, rented, transferred, licensed, or exchanged, regardless of the Company's intent to do so.

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Goodwill and other intangibles consisted of the following as of December 31, 2002:

	Original Gross Carrying Amount	Accumulated Amortization	Cumulative Effect of Changes in Exchange Rates	Net Carrying Amount	Weighted- average Useful Life
(In thousands, except weighted-average useful life)					
Amortizable intangibles:					
Technology-based	\$ 9,378	\$ (3,715)	\$ 937	\$ 6,600	6
Contract-based	9,210	(3,634)	936	6,512	4
Other	8,500	(537)	1,298	9,261	17
Total amortizable intangibles	27,088	(7,886)	3,171	22,373	10
Goodwill	61,955	(3,326)	5,599	64,228	
Total goodwill and intangibles	\$89,043	\$(11,212)	\$8,770	\$86,601	

Goodwill and other intangibles consisted of the following as of March 31, 2003:

	Original Gross Carrying Amount	Accumulated Amortization	Cumulative Effect of Changes in Exchange Rates	Net Carrying Amount	Weighted- average Useful Life
(In thousands, except weighted-average useful life)					
Amortizable intangibles:					
Technology-based	\$ 9,378	\$ (4,067)	\$1,025	\$ 6,336	6
Contract-based	9,210	(4,173)	1,102	6,139	4
Other	8,500	(746)	1,400	9,154	17
Total amortizable intangibles	27,088	(8,986)	3,527	21,629	10
Goodwill	61,955	(3,326)	6,162	64,791	
Total goodwill and intangibles	\$89,043	\$(12,312)	\$9,689	\$86,420	

Aggregate amortization expense related to other intangibles for the three-month periods ended March 31, 2003 and 2002 was approximately \$1.1 million and \$750,000, respectively. Estimated amortization expense related to the Company's acquired intangibles fluctuates with changes in exchange rates between the U.S. dollar, the Japanese yen and the euro. Estimated amortization expense for each of the five years 2003 through 2007 is as follows:

	(In thousands)
2003	\$4,180
2004	4,180
2005	4,180
2006	2,327
2007	1,103

CONCENTRATIONS OF CREDIT RISK -- Financial instruments, which potentially subject the Company to credit risk include cash, marketable securities and trade accounts receivable. The Company maintains cash and cash equivalents, investments, and certain other financial instruments with various major financial institutions. The Company performs periodic evaluations of the relative credit standing of these financial institutions and limits the amount of credit exposure with any one institution. The Company's customers generally are concentrated in the semiconductor capital equipment industry. As a result the Company is generally exposed to credit risk associated with this industry. Sales by the Company's foreign subsidiaries are primarily denominated in currencies other than the U.S. dollar. The Company establishes an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends and other information.

WARRANTY POLICY -- The Company offers warranty coverage for its products for periods ranging from 12 to 36 months after shipment, with the majority of its products ranging from 18 to 24 months. The Company estimates the anticipated costs of repairing products under warranty based on the historical cost of the repairs and expected failure rates. The assumptions used to estimate warranty accruals are

reevaluated periodically in light of actual experience and, when appropriate, the accruals are adjusted. The Company's

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determination of the appropriate level of warranty accrual is subjective and based on estimates. The industries in which the Company operates are subject to rapid technological change and, as a result, the Company periodically introduces newer, more complex products, which tend to result in increased warranty costs. Estimated warranty costs are recorded at the time of sale of the related product, are adjusted as appropriate and are considered a cost of sales.

FOREIGN CURRENCY TRANSLATION -- The functional currency of the Company's foreign subsidiaries is their local currency. Assets and liabilities of international subsidiaries are translated to U.S. dollars at period end exchange rates, and income statement activity and cash flows are translated at average exchange rates during the period. Resulting translation adjustments are recorded as a separate component of equity.

Transactions denominated in currencies other than the local currency are recorded based on exchange rates at the time such transactions arise. Subsequent changes in exchange rates result in foreign currency transaction gains and losses which are reflected in income as unrealized (based on period end translation) or realized (upon settlement of the transactions). Unrealized transaction gains and losses applicable to permanent investments by the Company in its foreign subsidiaries are included as cumulative translation adjustments, and unrealized translation gains or losses applicable to non-permanent intercompany receivables from or payables to the Company and its foreign subsidiaries are included in income.

The Company recognized a loss on foreign currency transactions of approximately \$78,000 for the three months ended March 31, 2003 and a gain of approximately \$115,000 for the three months ended March 31, 2002.

REVENUE RECOGNITION -- The Company generally recognizes revenue upon shipment of its products and spare parts, at which time title passes to the customer, as its shipping terms are FOB shipping point, the price is fixed and collectibility is reasonably assured. Generally, the Company does not generate revenue from the installation of its products.

In certain instances the Company requires its customers to pay for a portion or all of their purchases prior to the Company building or shipping these products. Cash payments received prior to shipment are recorded as customer deposits in the accompanying balance sheets, then recognized as revenue upon shipment of the products. The Company does not offer price protections to its customers or allow returns, unless covered by the Company's normal policy for repair of defective products.

The Company has an arrangement with one of its major customers, a semiconductor capital equipment manufacturer, in which completed products are shipped to the customer and held by them in their warehouse. The customer draws products from this inventory as needed, at which time title passes to the customer and the Company recognizes revenue. The customer is subject to the Company's normal warranty policy for repair of defective products.

In certain instances the Company delivers products to customers for evaluation purposes. In these arrangements, the customer retains the products for specified periods of time without commitment to purchase. On or before the expiration of the evaluation period, the customer either rejects the product, and returns it to the Company, or accepts the product. Upon acceptance, title passes to the customer, the Company invoices the customer for the product, and revenue is recognized. Pending acceptance by the customer, such products are reported on the Company's balance sheet at an estimated value based on the lower of cost or market, and are included in the amount for demonstration and customer service equipment, net of accumulated depreciation.

INCOME TAXES -- The Company accounts for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes." SFAS No. 109 requires deferred tax assets and liabilities to be recognized for temporary differences between the tax basis and financial reporting basis of assets and liabilities, computed at current tax rates, as well as for the expected tax benefit of net operating loss and tax credit carryforwards. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets

unless it is more likely than not that such assets will be realized. The Company has previously recorded a valuation allowance on a portion of its deferred tax assets. At March 31, 2003 the Company reassessed its valuation allowance and determined that no adjustment to the valuation allowance was required based on the Company's conclusion that it is more likely than not that its deferred tax assets net of related deferred tax liabilities and valuation allowance will be realized through future taxable income. Should circumstances change such that the Company's conclusion changes, this valuation allowance could be increased to reserve all or a portion of the net deferred tax assets and the amount of the related charge could be material.

RESTRUCTURING COSTS -- Restructuring charges include the costs associated with actions taken by the Company in response to the continuing downturn in the semiconductor capital equipment industry and as a result of the ongoing execution of the Company's strategy. These charges consist of costs that are incremental to the Company's ongoing operations, and are incurred to exit an activity or cancel an existing contractual obligation, including closure of facilities and employee termination related charges. Other related costs, consisting primarily of employee relocation, are expensed as incurred.

In June 2002, the Financial Accounting Standards Board ("FASB") issued SFAS No. 146, "Accounting for Exit or Disposal Activities." This statement addresses significant issues regarding the recognition, measurement and reporting of costs that are associated with exit and disposal activities, including restructuring activities that were previously accounted for pursuant to the guidance set forth in EITF Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity." SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. The Company adopted the provisions of SFAS No. 146 on January 1, 2003. The adoption of SFAS No. 146 did not have a material effect on the Company's financial position or results of operations, however expense recognition of certain future restructuring activities may be delayed due to its adoption.

The Company recorded restructuring charges totaling \$1.5 million in the first quarter of 2003 primarily associated with manufacturing and administrative personnel headcount reductions in the Company's Japanese operations. In accordance with Japanese labor regulations the Company offered voluntary termination benefits to all of its Japanese employees. Approximately 36 employees accepted the voluntary termination benefits prior to March 31, 2003 with termination dates in the second quarter of 2003. All termination benefits will be paid in the second quarter of 2003, and are not dependent on future service.

At March 31, 2003, outstanding liabilities related to the 2003 and 2002 restructuring charges were approximately \$6.1 million, and were reported as part of other accrued expenses on the accompanying condensed consolidated balance sheet.

The Company recorded restructuring charges totaling \$9.1 million in 2002, primarily associated with changes in operations designed to reduce redundancies and better align the Company's Aera mass flow controller business within its operating framework. The Company's restructuring plans and associated costs consisted of \$6.0 million to close and consolidate certain manufacturing facilities, and \$3.1 million for related headcount reductions of approximately 223 employees.

Included in the \$6.0 million facility charge are the closure of the Company's Advanced Energy Voorhees ("AEV") manufacturing facilities, due to the transfer of the manufacturing of AEV's products to Fort Collins, Colorado, and the closure of a manufacturing facility in Fort Collins, expected to be completed by the third quarter of 2003; the closure of EMCO's manufacturing facilities due to the transfer of the manufacturing of EMCO's products to Fort Collins, Colorado and Shenzhen, China, expected to be completed by the third quarter of 2003; and the closure of LITMAS, which was completed in the first quarter of 2003. During the fourth quarter of 2002, the Company closed its San Jose, California sales and service location; and the Company's Austin, Texas manufacturing facility for the Aera-brand mass flow controller products, due to the transfer of the manufacturing of these products to Hachioji, Japan, to be co-located with Aera Japan Limited. These costs consist primarily of payments required under operating lease contracts and costs for writing down related leasehold improvements.

The employee termination costs of \$3.1 million included severance benefits. All terminations and

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termination benefits were communicated to the affected employees prior to the accrual of the related charges. The affected employees were all part of the Company's U.S. operations and included full-time permanent and temporary employees, and consisted primarily of manufacturing and administrative personnel.

At December 31, 2002, outstanding liabilities related to the 2002 restructuring charges were approximately \$6.0 million, and were reported as part of other accrued expenses on the accompanying condensed consolidated balance sheet.

The following table summarizes the components of the restructuring charges, the payments and non-cash charges, and the remaining accrual as of March 31, 2003:

	Employee Severance and Termination Costs	Facility Closure Costs	Total Restructuring Charges
	(In thousands)		
Accrual balance December 31, 2001	\$ 965	462	1,427
Payments in the first quarter of 2002	(842)	(101)	(943)
Accrual balance March 31, 2002	123	361	484
Third quarter 2002 restructuring charge	1,033	2,187	3,220
Fourth quarter 2002 restructuring charge	2,021	3,819	5,840
Payments in the last nine months of 2002	(1,570)	(1,985)	(3,555)
Accrual balance December 31, 2002	1,607	4,382	5,989
First quarter 2003 restructuring charge	1,509	—	1,509
Payments in the first quarter of 2003	(844)	(593)	(1,437)
Accrual balance March 31, 2003	\$ 2,272	\$ 3,789	\$ 6,061

STOCK-BASED COMPENSATION -- At March 31, 2003, the Company had five stock-based compensation plans, which are more fully described in Note 16 to the Company's Form 10-K for the year ended December 31, 2002. The Company accounts for employee stock-based compensation using the intrinsic value method prescribed by APB Opinion No. 25, "Accounting for Stock Issued to Employees" and related interpretations. With the exception of certain options granted in 1999 and 2000 by a shareholder of Sekidenko, prior to its acquisition by the Company (which was accounted for as a pooling of interests), all options granted under these plans have an exercise price equal to the market value of the underlying common stock on the date of grant, therefore no stock-based compensation cost is reflected in net loss.

Had compensation cost for the Company's plans been determined consistent with SFAS No. 123, "Accounting for Stock-Based Compensation" as amended by SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure, an Amendment of FASB Statement No. 123," the Company's net loss would have increased to the following adjusted amounts:

	March 31, 2003	March 31, 2002
	(Unaudited) (In thousands, except per share data)	
Net loss:		
As reported	\$ (8,590)	\$ (8,723)
Adjustment for stock-based compensation determined under fair value based method for all awards, net of related tax effects	(2,690)	(2,095)
As adjusted	<u>\$ (11,280)</u>	<u>\$ (10,818)</u>
Basic and diluted loss per share:		
As reported	\$ (0.27)	\$ (0.27)
As adjusted	<u>(0.35)</u>	<u>(0.34)</u>

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Cumulative compensation cost recognized in adjusted net loss with respect to options that are forfeited prior to vesting is adjusted as a reduction of adjusted compensation expense in the period of forfeiture. Compensation expense related to awards granted under the Company's employee stock purchase plan is estimated until the period in which settlement occurs, as the number of shares of common stock awarded and purchase price are not known until settlement.

For SFAS No. 123 purposes, the fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2003	2002
Risk-free interest rates	2.90%	4.30%
Expected dividend yield rates	0.0%	0.0%
Expected lives	7 years	7 years
Expected volatility	87.73%	87.46%

For the quarters ended March 31, 2003 and 2002, \$122,000 and \$131,000, respectively, of stock-based compensation expense was included in the determination of net loss as reported related to Sekidenko option grants made prior to the Company's acquisition of Sekidenko.

EARNINGS PER SHARE -- Basic Earnings Per Share ("EPS") is computed by dividing (loss) income available to common stockholders by the weighted-average number of common shares outstanding during the period. The computation of diluted EPS is similar to the computation of basic EPS except that the numerator is increased to exclude certain charges which would not have been incurred, and the denominator is increased to include the number of additional common shares that would have been outstanding (using the if-converted and treasury stock methods), if securities containing potentially dilutive common shares (convertible notes payable, options and warrants) had been converted to such common shares, and if such assumed conversion is dilutive. Due to the Company's net loss for the quarters ended March 31, 2003 and 2002, basic and diluted EPS are the same, as the assumed conversion of all potentially dilutive securities would be anti-dilutive. Potential shares of common stock issuable under options and warrants for common stock at March 31, 2003 and 2002 were approximately 3,700,000 and 2,400,000 respectively. Potential shares of common stock issuable upon conversion of the Company's convertible subordinated notes payable were 5,411,000 and 5,838,000, respectively.

COMPREHENSIVE (LOSS) INCOME -- Comprehensive loss for the Company consists of net loss, foreign currency translation adjustments and net unrealized holding (losses) gains on available-for-sale marketable investment securities as presented below:

	Three Months Ended March 31, 2003 (Unaudited)	Three Months Ended March 31, 2002 (Unaudited)
	(In thousands)	
Net loss, as reported	\$(8,590)	\$(8,723)
Adjustment to arrive at comprehensive net loss, net of taxes:		
Unrealized holding (loss) gain on available-for-sale marketable securities	(89)	151
Cumulative translation adjustments	692	(648)
Comprehensive net loss	\$(7,987)	\$(9,220)

SEGMENT REPORTING -- The Company operates in one segment for the manufacture, marketing and servicing of key subsystems, primarily to the semiconductor capital equipment industry. In accordance with SFAS No. 131, "Disclosures About Segments of an Enterprise and Related Information," the Company's chief operating decision maker has been identified as the Office of the Chief Executive Officer, which reviews operating results to make decisions about allocating resources and assessing performance for the entire company. SFAS No. 131, which is based on a management approach to segment reporting, establishes requirements to report selected segment information quarterly and to report annually entity-wide disclosures about products and services, major customers, and the countries in which the entity holds material assets and reports revenue. All material operating units qualify for aggregation under SFAS No. 131 due to their similar customer base and similarities in: economic characteristics; nature of products and

services; and procurement, manufacturing and distribution processes. To report revenues from external customers for each product and service or group of similar products and services would not be practicable. Since the Company operates in one segment, all financial information required by SFAS No. 131 can be found in the accompanying condensed consolidated financial statements.

GAINS AND LOSSES FROM EXTINGUISHMENT OF DEBT -- In April 2002, the FASB issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections." This statement rescinds SFAS No. 4, "Reporting Gains and Losses from Extinguishment of Debt," which required all gains and losses from extinguishments of debt to be aggregated and, if material, classified as an extraordinary item, net of income taxes. As a result, the criteria in Accounting Principles Board Opinion No. 30 will now be used to classify those gains and losses. Any gain or loss on the extinguishment of debt that was classified as an extraordinary item in prior periods presented that does not meet the criteria in APB 30 for classification as an extraordinary item shall be reclassified. The provisions of SFAS No. 145 are effective for fiscal years beginning after May 15, 2002, with early application encouraged. The Company adopted the provisions of SFAS No. 145 on January 1, 2003. The adoption of this Statement will require the Company to reclassify its pretax extraordinary gain of \$4,223,000 recorded for the year ended December 31, 2002 to income from continuing operations in future financial statements.

DERIVATIVE INSTRUMENTS -- The Company accounts for its derivative instruments in accordance with SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 133 establishes accounting and reporting standards for derivative instruments and for hedging activity by requiring all derivatives to be recorded on the balance sheet as either an asset or liability and measured at their fair value. Changes in the derivative's fair value will be recognized currently in earnings unless specific hedging accounting criteria are met. SFAS No. 133 also establishes uniform hedge accounting criteria for all derivatives. The Company did not seek specific hedge accounting treatment for its foreign currency forward contracts.

The Company, including its subsidiaries, enters into foreign currency forward contracts with counterparties to mitigate foreign currency exposure from foreign currency denominated trade purchases and intercompany receivables and payables. These derivative instruments are not held for trading or speculative purposes. To the extent that changes occur in currency exchange rates, the Company is exposed to market risk on its open derivative instruments. This market risk exposure is generally offset by the gain or loss recognized upon the translation of its intercompany payables and receivables. Foreign currency forward contracts are entered into with major commercial U.S., Japanese and German banks that have high credit ratings, and the Company does not expect the counterparties to fail to meet their obligations under outstanding contracts. Foreign currency gains and losses under these arrangements are not deferred. The Company generally enters into foreign currency forward contracts with maturities ranging from four to eight months, with contracts outstanding at March 31, 2003 maturing through September 2003.

The Company's subsidiary Advanced Energy Japan K.K. ("AE-Japan") enters into foreign currency forward contracts to buy U.S. dollars to mitigate currency exposure from its payable position arising from trade purchases and intercompany transactions with its parent. At March 31, 2003, AE-Japan held foreign currency forward contracts with notional amounts of \$5,000,000 and market settlement amounts of \$5,020,000 for an unrealized loss position of approximately \$20,000 that has been included in foreign currency (loss) gain in the accompanying condensed consolidated statements of operations.

During the first quarter of 2003, the Company's subsidiary Advanced Energy Industries GmbH ("AE-Germany") entered into foreign currency forward contracts to buy U.S. dollars to mitigate currency exposure from its payable position arising from trade purchases and intercompany transactions with its parent. At March 31, 2003, AE-Germany held foreign currency forward contracts with notional amounts of \$1,000,000 and market settlements amounts of \$1,048,000 for an unrealized loss position of approximately \$48,000 that has been included in foreign currency (loss) gain in the accompanying condensed consolidated statements of operations.

ESTIMATES AND ASSUMPTIONS -- The preparation of the Company's condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States requires the Company's management 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. Significant estimates are used when establishing allowances for doubtful accounts, determining useful lives for depreciation and amortization, assessing the need for impairment charges, establishing restructuring accruals and warranty reserves, allocating purchase price among the fair values of assets acquired and liabilities assumed, accounting for income taxes, accounting for stock-based compensation, and assessing excess and obsolete inventory and various others items. The Company evaluates these estimates and judgments on an ongoing basis and bases its estimates on historical experience, current conditions and various other assumptions that are believed to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions.

NEW ACCOUNTING PRONOUNCEMENTS -- In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN No. 46"). This interpretation clarifies existing accounting principles related to the preparation of consolidated financial statements when the equity investors in an entity do not have the characteristics of a controlling financial interest or when the equity at risk is not sufficient for the entity to finance its activities without additional subordinated financial support from others parties. FIN No. 46 requires a company to evaluate all existing arrangements to identify situations where a company has a "variable interest" (commonly evidenced by a guarantee arrangement or other commitment to provide financial support) in a "variable interest entity" (commonly a thinly capitalized entity) and further determine when such variable interests require a company to consolidate the variable interest entities' financial statements with its own. The Company is required to perform this assessment by September 30, 2003 and consolidate any variable interest entities for which it will absorb a majority of the entities' expected losses or receive a majority of the expected residual gains. Management has not yet performed this assessment and is currently evaluating the impact on its financial statements of adopting this Standard.

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 No. 45"). This interpretation requires a liability to be recognized at the time a company issues a guarantee for the fair value of the obligations assumed under certain guarantee agreements. Additional disclosures about guarantee agreements are also required in the interim and annual financial statements, including a roll forward of the company's product warranty liabilities. The disclosure provisions of FIN No. 45 were effective for the Company as of December 31, 2002. The provisions for initial recognition and measurement of guarantee agreements are effective on a prospective basis for guarantees that are issued or modified after December 31, 2002. The adoption of FIN No. 45 did not 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". SFAS No. 148 provides alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. SFAS No. 148 also requires that disclosures of the pro forma effect of using the fair value method of accounting for stock-based employee compensation be displayed more prominently and in a tabular format. Additionally, SFAS No. 148 requires disclosure of the pro forma effect in interim financial statements. The transition and disclosure requirements of SFAS No. 148 were effective for the Company's fiscal year ended December 31, 2002. The adoption of SFAS No. 148 did not have a material effect on the consolidated financial statements.

RECLASSIFICATIONS -- Certain prior period amounts have been reclassified to conform to the current period presentation.

(2) ACQUISITIONS

LITMAS -- During 1998 the Company acquired a 29% ownership interest in LITMAS, a privately held, North Carolina-based early-stage company that designed and manufactured plasma gas abatement systems and high-density plasma sources. The purchase price consisted of \$1 million in cash. On October 1, 1999, the Company acquired an additional 27.5% interest in LITMAS for an additional \$560,000. The purchase price consisted of \$385,000 in the Company's common stock and \$175,000 in cash. The acquisition was accounted for using the purchase method of accounting and resulted in \$523,000 allocated to intangible assets as goodwill. The results of operations of LITMAS have been consolidated in the Company's consolidated financial statements from the date the controlling interest of 56.5% was acquired. On October 1, 2000, the Company acquired an additional 3.0% interest in LITMAS for an additional \$250,000, bringing the Company's ownership interest in LITMAS to 59.5%. On April 2, 2002, the Company completed its acquisition of the 40.5% of LITMAS that it did not previously own, by issuing approximately 120,000 shares of the Company's common stock valued at approximately \$4.2 million, and approximately \$400,000 of cash. The acquisition of all the minority interest in LITMAS resulted in approximately \$5 million of additional goodwill.

DRESSLER -- On March 28, 2002, the Company completed its acquisition of Dressler HF Technik GmbH ("Dressler"), a privately owned Stolberg, Germany-based provider of power supplies and matching networks, for a purchase price of approximately \$15 million in cash and a \$1.7 million escrow. The escrow fund was retained by the Company until January 6, 2003, at which time the related escrow liability was settled. The purchase price was also subject to a \$3.0 million earn-out provision if Dressler achieved certain key business objectives by March 30, 2003. These business objectives were not met prior to the expiration date.

The Company believes that Dressler will expand the Company's product offerings to customers in the semiconductor, data storage, and flat panel equipment markets due to its strong power product portfolio that includes a wide range of power levels and RF frequencies. In addition, with inroads already made into the laser and medical markets, Dressler will be used to explore new market opportunities for the Company. Dressler will also strengthen the Company's presence in the European marketplace. Dressler has well-established relationships with many European customers, who look to Dressler for innovative technical capability, quality products, and highly responsive customer service. The Company also expects to achieve synergies in product technology, production efficiency, logistics and worldwide service.

The acquisition was accounted for using the purchase method of accounting in accordance with SFAS No. 141, "Business Combinations," and the operating results of Dressler are reflected in the accompanying condensed consolidated financial statements prospectively from the date of acquisition. The tangible assets acquired and liabilities assumed were recorded at estimated fair values as determined by the Company's management. Goodwill and other intangible assets were recorded at estimated fair values based upon independent appraisals. In the fourth quarter of 2002, the Company finalized its purchase price allocation. The purchase price, as finalized, was allocated to the net assets of Dressler as summarized below:

	(In thousands)
Cash and cash equivalents	\$ 680
Accounts receivable	1,939
Inventories	1,111
Other current assets	83
Fixed assets	260
Goodwill	9,405
Other intangibles	7,750
Other assets	19
Accounts payable	(314)
Accrued payroll	(39)
Other accrued expenses	(474)
Deferred tax liability	(2,945)
Income taxes payable	(725)
	<u>\$16,750</u>

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The excess purchase price over the estimated fair value of tangible net assets acquired was allocated to goodwill and intangibles (see Note 1). In the fourth quarter of 2002, the Company reviewed these assets for impairment under the provisions of SFAS No. 142. Based on this evaluation, an impairment was not indicated. The Company will continue to review these assets in the future for impairment. The Company recognized approximately \$586,000 of amortization expense related to these amortizable intangibles acquired from Dressler in the quarter ended March 31, 2003. Due to the acquisition occurring on the last business day of the quarter ended March 31, 2002, no amortization expense was recognized during this quarter.

Prior to the combination, there were transactions between the Company and Dressler in 2001 and the first three months of 2002. In 2001, the Company purchased approximately \$2 million of inventory from Dressler, and Dressler purchased approximately \$200,000 of inventory from the Company. In the first three months of 2002, the Company purchased approximately \$500,000 of inventory from Dressler. These purchases were made in the normal course of the Company's business.

AERA -- On January 18, 2002, the Company completed its acquisition of Aera Japan Limited ("Aera"), a privately held Japanese corporation. The Company effected the acquisition through its wholly owned subsidiary, AE-Japan, which purchased all of the outstanding stock of Aera. The aggregate purchase price paid by AE-Japan was 5.73 billion Japanese yen (approximately \$44 million, based upon an exchange rate of 130:1), which was funded from the Company's available cash. In connection with the acquisition, AE-Japan assumed approximately \$34 million of Aera's debt. Aera, which is headquartered in Hachioji, Japan, has manufacturing facilities there and manufacturing, sales and service offices in Kirchheim, Germany; and Bundang, South Korea; and sales and service offices in Dresden, Germany and Edinburgh, Scotland. In response to the continuing downturn in the semiconductor capital equipment industry and as a result of the ongoing execution of the Company's strategy, the Company plans to close its Edinburgh, Scotland and Kirchheim, Germany facilities later in 2003. Aera supplies the semiconductor capital equipment industry with product lines that include digital mass flow controllers, pressure-based mass flow controllers, liquid mass flow controllers, ultrasonic liquid flow meters and liquid vapor delivery systems.

The Company believes that Aera provides it with a key leadership position in the gas delivery market and expands the Company's offering of critical sub-system solutions that enable the plasma-based manufacturing process used in the manufacture of semiconductors.

The acquisition was accounted for using the purchase method of accounting in accordance with SFAS No. 141, "Business Combinations," and the operating results of Aera are reflected in the accompanying condensed consolidated financial statements prospectively from the date of acquisition. The tangible assets acquired and liabilities assumed were recorded at estimated fair values as determined by the Company's management. Goodwill and other intangible assets were recorded at estimated fair values based upon independent appraisals. In the fourth quarter of 2002, the Company finalized its purchase price allocation. The purchase price, as finalized, was allocated to the net assets of Aera as summarized below:

	(In thousands)
Cash and cash equivalents	\$ 8,276
Marketable securities	115
Accounts receivable	8,405
Inventories	19,243
Other current assets	530
Fixed assets	13,388
Goodwill	24,869
Other intangibles	12,500
Other assets	427
Accounts payable	(2,329)
Accrued payroll	(2,924)
Other liabilities	(2,164)
Deferred tax liability	(4,765)
Current portion of long-term debt	(12,008)
Long-term debt	(19,598)
	<u>\$ 43,965</u>

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There were no transactions between the Company and Aera prior to the combination. The excess purchase price over the estimated fair value of tangible net assets acquired was allocated to goodwill and intangibles (see Note 1). In the fourth quarter of 2002, the Company reviewed these assets for impairment under the provisions of SFAS No. 142. Based on this evaluation, an impairment was not indicated. The Company recognized approximately \$351,000 and \$505,000 of amortization expense related to the amortizable intangibles acquired from Aera in the quarters ended March 31, 2003 and 2002, respectively.

Had the acquisitions of Aera and Dressler occurred on January 1, 2002, the pro forma, unaudited, combined results of operations for the Company, Aera and Dressler for the three-month period ended March 31, 2002 would not have differed materially from the results of operations for the Company.

(3) MARKETABLE SECURITIES

MARKETABLE SECURITIES consisted of the following:

	March 31, 2003 (Unaudited)	December 31, 2002 (Unaudited)
	(In thousands)	
Commercial paper	\$ 43,439	\$ 65,250
Municipal bonds and notes	54,787	34,100
Institutional money markets	4,293	2,809
Total marketable securities	\$102,519	\$102,159

These marketable securities are stated at period end market value. The commercial paper consists of high credit quality, short-term money market common and preferreds, with maturities or reset dates of 120 days or less.

(4) ACCOUNTS RECEIVABLE

ACCOUNTS RECEIVABLE consisted of the following:

	March 31, 2003 (Unaudited)	December 31, 2002 (Unaudited)
	(In thousands)	
Domestic	\$12,610	\$16,475
Foreign	27,745	27,378
Allowance for doubtful accounts	(3,110)	(3,056)
Trade accounts receivable	37,245	40,797
Other	3,670	3,088
Total accounts receivable	\$40,915	\$43,885

(5) INVENTORIES

INVENTORIES consisted of the following:

	March 31, 2003 (Unaudited)	December 31, 2002 (Unaudited)
	(In thousands)	
Parts and raw materials	\$39,944	\$40,147
Work in process	4,724	4,435
Finished goods	11,284	12,724
Total inventories	\$55,952	\$57,306

Inventories include costs of materials, direct labor and manufacturing overhead. Inventories are valued at the lower of market or cost, computed on a first-in, first-out basis. Inventory is expensed as cost of sales

upon shipment of product.

(6) STOCKHOLDERS' EQUITY

STOCKHOLDERS' EQUITY consisted of the following:

	March 31, 2003 (Unaudited)	December 31, 2002 (Unaudited)
(In thousands, except par value)		
Common stock, \$0.001 par value, 70,000 shares authorized; 32,178 and 32,140 shares issued and outstanding, respectively	\$ 32	\$ 32
Additional paid-in capital	138,780	138,429
Retained earnings	35,603	44,193
Deferred compensation	(420)	(542)
Unrealized holding losses on available-for-sale securities	(122)	(33)
Cumulative translation adjustments	1,952	1,260
Total stockholders' equity	\$175,825	\$183,339

(7) DEFERRED COMPENSATION

During 1999 and 2000, prior to its acquisition by the Company, a shareholder of the Company's wholly owned subsidiary, Sekidenko, Inc., granted employees options under a preexisting arrangement to purchase shares of his common stock already outstanding at exercise prices below fair value. Under this agreement, 29,700 and 34,250 of such options were granted in 1999 and 2000, respectively. These options result in the Company recognizing \$109,000 as compensation expense over the four-year vesting period related to the 1999 grants, and \$1,995,000 as compensation expense over the four-year vesting period related to the 2000 grants. Compensation expense of approximately \$122,000 and \$131,000 was recognized in the three-month periods ended March 31, 2003 and 2002, respectively. These amounts are presented as a reduction of stockholders' equity, and the remaining amount of deferred compensation of \$420,000 as of March 31, 2003 is being amortized over the four-year vesting period of the related stock options.

(8) CONVERTIBLE SUBORDINATED NOTES PAYABLE

In August 2001, the Company issued \$125 million of 5.00% convertible subordinated notes. These notes mature September 1, 2006, with interest payable on March 1st and September 1st of each year beginning March 1, 2002. Net proceeds to the Company were \$121.25 million, after deducting \$3.75 million of offering costs, which have been capitalized and are being amortized as additional interest expense over a period of five years. Holders of the notes may convert the notes at any time before maturity into shares of the Company's common stock at a conversion rate of 33.5289 shares per each \$1,000 principal amount of notes, equivalent to a conversion price of approximately \$29.83 per share. The conversion rate is subject to adjustment in certain circumstances. The Company may redeem the notes, in whole or in part, at any time before September 4, 2004, at specified redemption prices plus accrued and unpaid interest, if any, to the date of redemption if the closing price of the Company's common stock exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice. Upon any provisional redemption, the Company will make an additional payment in cash with respect to the notes called for redemption in an amount equal to \$150.56 per \$1,000 principal amount of notes, less the amount of any interest paid on the note. The Company may also make this additional payment in shares of its common stock, and any such payment will be valued at 95% of the average of the closing prices of the Company's common stock for the five consecutive trading days ending on the day prior to the redemption date. The Company will be obligated to make an additional payment on all notes called for provisional redemption. The Company may also redeem the notes from September 4, 2004 through August 31, 2005 at 102% times the principal amount, from September 1, 2005 through August 31, 2006 at 101% times the principal amount, and thereafter at 100% of the principal amount. The notes are subordinated to the

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Company's present and potential future senior debt, and are effectively subordinated in right of payment to all indebtedness and other liabilities of the Company's subsidiaries. At March 31, 2003, approximately \$520,000 of interest expense related to these notes was accrued as a current liability.

In November 1999, the Company issued \$135 million of 5.25% convertible subordinated notes. These notes mature November 15, 2006, with interest payable on May 15th and November 15th each year beginning May 15, 2000. Net proceeds to the Company were approximately \$130.5 million, after deducting \$4.5 million of offering costs, which have been capitalized and are being amortized as additional interest expense over a period of seven years. Holders of the notes may convert the notes at any time into shares of the Company's common stock, at \$49.53 per share. The Company may redeem the notes on or after November 19, 2002 at a redemption price of 103.00% times the principal amount, and may redeem at successively lesser amounts thereafter until November 15, 2006, at which time the Company may redeem at a redemption price equal to the principal amount. At March 31, 2003, approximately \$1.1 million of interest expense related to these notes was accrued as a current liability.

In October and November 2002, the Company repurchased approximately \$15.4 million and \$3.5 million principal amounts of its 5.25% and 5.00% convertible subordinated notes, respectively. These purchases were made in the open market, for a cost of approximately \$14.5 million, and resulted in a pre-tax gain of \$4.3 million in the fourth quarter of 2002. At March 31, 2003, approximately \$66.2 million and \$121.5 million principal amounts of the 5.25% and 5.00% notes remained outstanding.

In October and November 2000, the Company repurchased an aggregate of approximately \$53.4 million principal amount of its 5.25% convertible subordinated notes in the open market, for a cost of approximately \$40.8 million.

The Company may continue to purchase additional notes in the open market from time to time, if market conditions and the Company's financial position are deemed favorable for such purposes.

(9) COMMITMENTS AND CONTINGENCIES

GUARANTEES

The Company offers warranty coverage for its products for periods ranging from 12 to 36 months after shipment, with the majority of its products ranging from 18 to 24 months. The Company estimates the anticipated costs of repairing products under warranty based on the historical cost of the repairs and expected failure rates. The assumptions used to estimate warranty accruals are reevaluated periodically in light of actual experience and, when appropriate, the accruals are adjusted. The Company's determination of the appropriate level of warranty accrual is subjective and based on estimates. Estimated warranty costs are recorded at the time of sale of the related product, are adjusted as appropriate and are considered a cost of sales.

The following summarizes the activity in the Company's warranty reserves during the three-month period ended March 31, 2003:

	Balance at Beginning of Period	Additions Charged to Expense	Deductions	Balance at End of Period
		(In thousands)		
Reserve for warranty obligations	\$9,402	\$314	\$(1,373)	\$8,343

DISPUTES AND LEGAL ACTIONS

The Company is involved in disputes and legal actions arising in the normal course of its business. While the Company currently believes that the amount of any ultimate potential loss would not be material

to the Company's financial position, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on the Company's financial position or reported results of operations in a particular period. An unfavorable decision, particularly in patent litigation, could require material changes in production processes and products or result in the Company's inability to ship products or components found to have violated third-party patent rights. The Company accrues loss contingencies in connection with its litigation when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated.

In May 2002, the Company recognized approximately \$5.3 million of litigation damages and related legal expenses pertaining to a judgment entered by a jury against the Company and in favor of MKS Instruments, Inc. ("MKS") in a patent-infringement suit in which the Company was the defendant. The Company has entered into a settlement agreement with MKS allowing it to sell the infringing product subsequent to the date of the jury award. The settlement agreement is in effect until all patents subject to the litigation expire. Under the settlement agreement, royalties payable to MKS from sales of the related product were approximately \$57,000 for the three-month period ended March 31, 2003, and are recorded as a component of cost of sales.

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

Special Note on Forward-Looking Statements

The following discussion contains, in addition to historical information, forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements that are other than historical information are forward-looking statements. For example, statements relating to our beliefs, expectations and plans are forward-looking statements, as are statements that certain actions, conditions or circumstances will continue. Forward-looking statements involve risks and uncertainties. As a result, our actual results may differ materially from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences or prove any forward-looking statements, by hindsight, to be overly optimistic or unachievable, include, but are not limited to the following:

- changes or slowdowns in general economic conditions or conditions in the semiconductor and semiconductor capital equipment industries and other industries in which our customers operate;
- the spread of infectious diseases in any of the regions in which we operate, including but not limited to Severe Acute Respiratory Syndrome;
- the timing and nature of orders placed by major customers, including their product acceptance criteria;
- changes in customers’ inventory management practices;
- customer cancellations of previously placed orders and shipment delays;
- pricing competition from our competitors;
- component shortages or allocations or other factors that change our levels of inventory or substantially increase our spending on inventory;
- the introduction of new products by us or our competitors;
- costs incurred and judgments resulting from patent or other litigation;
- costs incurred by responding to specific feature requests by customers;
- timing and challenges of integrating recent and potential future acquisitions and strategic alliances;
- our ability to attract and retain key personnel; and

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- our exposure to currency exchange rate fluctuations between the several functional currencies in foreign locations in which we have operations.

For a discussion of these and other factors that may impact our realization of our forward-looking statements, see our Annual Report on Form 10-K for the year ended December 31, 2002, filed March 27, 2003, Part I “Cautionary Statements – Risk Factors.”

New risk factors emerge from time to time, and it is not possible for management to predict all such risk factors, nor can it assess the impact of all such risk factors on its business, or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Our expectations, beliefs and projections are expressed in good faith and are believed to have a reasonable basis. However, we make no assurance that such expectations, beliefs or projections will be achieved.

Because of the risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. We have no obligation or intent to release publicly any revisions to any forward-looking statements, whether as a result of new information, future events, or otherwise.

Critical Accounting Policies

The following discussion and analysis of our financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. In preparing our financial statements, we must make estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of our financial statements. Actual results may differ from these estimates under different assumptions or conditions. We believe that the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our condensed consolidated financial statements.

VALUATION OF INTANGIBLE ASSETS AND GOODWILL - - We have approximately \$86.4 million of intangible assets and goodwill as of March 31, 2003, including approximately \$21.6 million related to amortizable intangibles and \$64.8 million in goodwill. In addition to the original cost of these assets, their recorded value is impacted by a number of our policy elections, including estimated useful lives, foreign currency fluctuations and impairment charges, if any. In accordance with SFAS 142, “Goodwill and Other Intangible Assets,” we identified three reporting units. Generally, we allocated goodwill to the reporting unit that created goodwill upon its acquisition. However, we believe that our recently acquired companies provide future growth opportunities to our core business and as a result we allocated approximately 25% of the goodwill created upon the acquisitions of Aera and EMCO to our core business. We performed an annual impairment analysis of our non-amortizable intangible assets and

goodwill during the fourth quarter of 2002, which indicated that no impairment was required. This assessment requires estimates of future revenue, operating results and cash flows, as well as estimates of critical valuation inputs such as discount rates, terminal values and similar data. We will continue to perform periodic and annual impairment analyses of the non-amortizable intangible assets and goodwill resulting from our acquisitions. As a result of future periodic, at least annual, impairment analyses we may record impairment charges that have a material adverse impact on our financial position and operating results. Additionally, we may make strategic business decisions in future periods which impact the fair value of our intangible assets and goodwill, which could result in significant impairment charges.

LONG-LIVED ASSETS INCLUDING INTANGIBLES SUBJECT TO AMORTIZATION - - Depreciation and amortization of our long-lived assets is provided using the straight-line method over their estimated useful lives. Changes in circumstances such as the passage of new laws or changes in regulations, technological advances, changes to our business model or changes in our capital strategy could result in the actual useful lives differing from initial estimates. In those cases where we determine that the useful life of a long-lived asset should be revised, we will depreciate the net book value in excess of the estimated residual value over its revised remaining useful life. Factors such as changes in the planned use of equipment, customer attrition, contractual amendments or mandated regulatory requirements could result in shortened useful lives.

Long-lived assets and asset groups are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The estimated future cash flows are based upon, among other things, assumptions about expected future operating performance and may differ from actual cash flows. Long-lived assets evaluated for impairment are grouped with other assets to the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. If the sum of the projected undiscounted cash flows excluding interest is less than the carrying value of the assets, the assets will be written down to the estimated fair value in the period in which the determination is made. Impairments will also be assessed when assets are determined to be held-for-sale, as opposed to held and used in operations.

RESERVE FOR EXCESS AND OBSOLETE INVENTORY - - Inventory is valued at the lower of cost or market. Given the rapid change in technology, we monitor and forecast expected inventory needs based on our constantly changing sales forecast. Inventory is written down or written off when it becomes obsolete, generally because of engineering changes to a product or discontinuance of a product line, or when it is deemed excess. These determinations involve the exercise of significant judgment by management, and as demonstrated in recent periods demand for our products is volatile and changes in expectations regarding the level of future sales can result in substantial charges against earnings for obsolete and excess inventory.

RESERVE FOR WARRANTY -- We provide warranty coverage for our products, ranging from 12 to 36 months, with the majority of our products ranging from 18 to 24 months, and estimate the anticipated costs of repairing our products under such warranties based on the historical costs of the repairs and expected product failure rates. The assumptions we use to estimate warranty accruals are reevaluated periodically in light of actual experience and, when appropriate, the accruals are adjusted. Our determination of the appropriate level of warranty accrual is subjective, and based on estimates. The industries in which we operate are subject to rapid technological change. As a result, we periodically introduce newer, more complex products, which tend to result in increased warranty costs. We expect the industries in which we operate to continue to require the introduction of new technologies, which could cause our warranty costs to increase in the future. Should product failure rates differ from our estimates, actual costs could vary significantly from our expectations.

FAIR VALUE OF DERIVATIVE INSTRUMENTS -- We have entered into various foreign currency forward contracts to mitigate our foreign currency exposure from foreign currency denominated trade purchases and intercompany receivables and payables. These derivative instruments are not held for trading or speculative purposes. The valuation of derivative instruments under SFAS No. 133 requires us to make estimates and judgments that affect the fair value of the instruments. Fair value of our derivatives is determined relative to changes in the forward yield curves and discount rates. Such amounts are subject to significant estimates which may change in the future.

COMMITMENTS AND CONTINGENCIES -- We are involved in disputes and legal actions arising in the normal course of our business. While we currently believe that the amount of any ultimate potential loss would not be material to our financial position, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on our financial position or reported results of operations in a particular quarter. An unfavorable decision, particularly in patent litigation, could require material changes in production processes and products or result in our inability to ship products or components found to have violated third-party patent rights. We accrue loss contingencies in connection with our litigation when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated.

REVENUE RECOGNITION -- We generally recognize revenue upon shipment of our products and spare parts, at which time title passes to the customer, as our shipping terms are FOB shipping point, the price is fixed and collectibility is reasonably assured. Generally, we do not generate revenue from the installation of our products.

In certain instances we require our customers to pay for a portion or all of their purchases prior to our building or shipping the products. We record cash payments received prior to shipment as customer deposits in the accompanying condensed consolidated balance sheets, then recognize revenue upon shipment of the products. We do not offer price protections to our customers or allow returns, unless covered by our

normal policy for repair of defective products.

We have an arrangement with one of our major customers, a semiconductor capital equipment manufacturer, in which completed products are shipped to the customer and held by them in their warehouse. The customer draws products from this inventory as needed, at which time title passes to the customer and we recognize revenue. The customer is subject to our normal warranty policy for repair of defective products.

In certain instances we deliver products to customers for evaluation purposes. In these arrangements, the customer retains the products for specified periods of time without commitment to purchase. On or before the expiration of the evaluation period, the customer either rejects the product, and returns it to us, or accepts the product. Upon acceptance, title passes to the customer, we invoice the customer for the product, and revenue is recognized. Pending acceptance by the customer, such systems are reported on our balance sheet at an estimated value based on the lower of cost or market, and are included in the amounts for demonstration and customer service equipment, net of accumulated depreciation.

While we maintain a stringent credit approval process, significant judgments are made by management in connection with assessing our customers' ability to pay at the time of shipment. Despite this assessment, from time to time, our customers are unable to meet their payment obligations. We continue to monitor our customers' credit worthiness, and use our judgment in establishing the estimated amounts of customer receivables which will ultimately not be collected. A significant change in the liquidity or financial position of our customers could have a material adverse impact on the collectibility of our accounts receivable and our future operating results.

STOCK-BASED COMPENSATION - - As allowed by SFAS No. 123, we have elected to continue to account for our employee stock-based compensation plans using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations, which do not require compensation expense to be recorded if the consideration to be received is at least equal to the fair value of the common stock to be received at the measurement date. We provide information as to what our earnings and earnings per share would have been had we used the fair value method prescribed by SFAS No. 123.

DEFERRED INCOME TAXES - - Each reporting period we estimate our ability to realize our net deferred tax assets. Realization of our net deferred tax assets is dependent upon our generating sufficient taxable income in the appropriate tax jurisdictions in future years to obtain benefit from the reversal of net deductible temporary differences and from tax loss and tax credit carryforwards. We have previously recorded a valuation allowance on a portion of our deferred tax assets. At March 31, 2003 we reassessed our valuation allowance and determined that no adjustment to the valuation allowance was required based on our conclusion that it is more likely than not that our deferred tax assets net of related deferred tax liabilities and valuation allowance will be realized through future

taxable income. Should circumstances change such that our conclusion changes, this valuation allowance could be increased to reserve all or a portion of the net deferred tax assets and the amount of the related charge could be material.

When recording acquisitions, we have recorded valuation allowances due to the uncertainty related to the realization of certain deferred tax assets existing at the acquisition dates. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed. We believe that it is more likely than not that we will realize the benefits of our deferred tax asset, net of valuation allowance. Reversals of valuation allowances recorded in purchase accounting will be reflected as a reduction of goodwill in the period of reversal.

Results of Operations for the Three Months Ended March 31, 2003 and 2002

OVERVIEW

We design, manufacture and support a group of key components and subsystems for vacuum process systems. Our primary products are complex power conversion and control systems. Our products also control the flow of gases into the process chambers and provide thermal control and sensing within the chamber. Our customers use our products in plasma-based thin-film processing equipment that is essential to the manufacture of semiconductors; compact disks, DVDs and other digital storage media; flat-panel computer and television screens; coatings for architectural glass and optics; industrial laser and medical applications; and a power supply for advanced technology computer workstations. We also sell spare parts and repair services worldwide through our customer service and technical support organization.

We provide solutions to a diversity of markets and geographic regions. However, we are focused on the semiconductor capital equipment industry, which accounted for approximately 59% of our sales in the first quarter of 2003, and 71% in the first quarter of 2002. In 2002 and 2001 the semiconductor capital equipment industry saw the steepest cutback in capital equipment purchases in industry history. This cutback continues to affect our sales to the industry. We expect future sales to the semiconductor capital equipment industry to represent approximately 55% to 70% of our total revenue, depending upon the strength or weakness of the industry cycles. Additionally, two of the other major industry groups which use our products, data storage and flat panel display, are also highly cyclical and have experienced significant reductions in demand during this period.

We have incurred significant losses over the past eight quarters primarily as a result of lower revenues. Our results in the first quarter of 2003 include revenues from two companies acquired during the first quarter of 2002, Aera and Dressler. Excluding revenue from these acquired companies, our revenues would have increased 25% from the first quarter of 2002 to the first quarter of 2003, instead of the 31% actual increase.

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To date, we have been unable to achieve profitability at current revenue levels and do not have confidence of an industry recovery in the short-term. We have established a goal of reducing our operating cash flow breakeven point to a quarterly revenue level of approximately \$55 million to \$60 million by the end of 2003, but cannot provide any assurance that such goals or revenue levels are achievable in 2003.

Our losses during the quarters ended March 31, 2003 and 2002 were impacted by high product costs and other expenses, primarily research and development, sales and marketing, and general and administrative expenses. To address product costs we are in the process of shifting a significant portion of our manufacturing to China, rebalancing our supply chain to tier one Asian suppliers, and relocating certain domestic operations to our headquarters in Fort Collins, Colorado. We will also attempt to reduce research and development, sales and marketing, and general and administrative expenses without significantly impacting our future competitive position in the rapidly changing industry in which we operate.

SALES

Sales were \$56.2 million in the first three months of 2003 and \$42.9 million in the first three months of 2002, representing an increase of 31% from the first three months of 2002 to the first three months of 2003. Excluding sales from Aera and Dressler, our sales would have increased approximately 25% during these periods. The revenue increase came primarily from the flat panel display and advanced product applications markets, while the semiconductor capital equipment industry remained relatively flat. The historical volatility in the semiconductor industry as well as general economic conditions continue to impact overall investment activities, which led to semiconductor manufacturers purchasing less capital equipment.

The following tables summarize net sales and percentages of net sales by customer type for the three-month periods ended March 31, 2003 and 2002. Sales for the three-month periods ended March 31, 2003 and 2002, include combined sales from Aera and Dressler subsequent to their acquisitions of approximately \$11.0 million and \$6.7 million, respectively:

	Three Months Ended March 31,	
	2003	2002
	(In thousands)	
Semiconductor capital equipment	\$33,078	\$30,442
Data storage	3,883	2,427
Flat panel display	6,686	2,250
Advanced product applications	12,511	7,768
	<u>\$56,158</u>	<u>\$42,887</u>

	Three Months Ended March 31,	
	2003	2002
Semiconductor capital equipment	59%	71%
Data storage	7	6
Flat panel display	12	5
Advanced product applications	22	18
	<u>100%</u>	<u>100%</u>

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The following table summarizes annual percentage changes in net sales by customer type for us from the three-month period ended March 31, 2002 to the three-month period ended March 31, 2003:

	First three months of 2003 change from first three months of 2002
Semiconductor capital equipment	9%
Data storage	60%
Flat panel display	197%
Advanced product applications	61%
Total sales	31%

The following tables summarize net sales and percentages of net sales by geographic region for the three-month periods ended March 31, 2003 and 2002:

	Three Months Ended March 31,	
	2003	2002
	(In thousands)	
United States and Canada	\$29,418	\$26,751
Europe	9,442	5,592
Asia Pacific	17,298	10,473
Rest of world	—	71
	\$56,158	\$42,887

	Three Months Ended March 31,	
	2003	2002
United States and Canada	52%	62%
Europe	17	13
Asia Pacific	31	25
Rest of world	—	—
	100%	100%

GROSS MARGIN

Our gross margin was 32.0% in the first three months of 2003 and 31.2% in the first three months of 2002. Our gross margin improved due to the higher revenue base and a reduction in charges for obsolete and excess inventory and warranty repairs, partially offset by costs associated with our China facility.

While we expect the transition of a portion of our manufacturing to China and move to tier one Asian suppliers will improve our gross margins in future periods, factors that could cause our margins to be negatively impacted include, but are not limited to the following:

- costs associated with transitioning a portion of our manufacturing to our new China facility;
- the semiconductor industry's continued move to 300mm wafers and smaller line widths, which require new products that early in their life cycle and at low production levels, typically have lower margins than our established products;

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- cost reduction programs initiated by original equipment manufacturers and semiconductor capital equipment manufacturers;
- warranty costs in excess of historical rates and our expectations;
- increased levels of excess and obsolete inventory, either due to market conditions, the introduction of new products by our competitors, or our decision to discontinue certain product lines; and
- continued erosion in our sales base, due to industry cycles, general economic conditions and other factors.

Given the rapid change in technology, we monitor and forecast expected inventory needs based on our constantly changing sales forecast. Inventory is written down or written off when it becomes obsolete, generally because of engineering changes to a product or discontinuance of a product line, or when it is deemed excess. These determinations involve the exercise of significant judgment, and as demonstrated in recent periods, demand for our products is volatile and changes in expectations regarding the level of future sales can result in substantial charges against earnings for obsolete and excess inventory. Charges for obsolete and excess inventory were \$462,000 in the first quarter of 2003 and \$817,000 in the first quarter of 2002, which affected gross margins by 1% and 2% in these periods, respectively.

We provide warranty coverage for our products ranging from 12 to 36 months, with the majority of our products ranging from 18 to 24 months, and estimate the anticipated costs of repairing our products under such warranties based on the historical costs of the repairs and expected product failure rates. The assumptions we use to estimate warranty accruals are reevaluated periodically in light of actual experience, and when appropriate, the accruals are adjusted. Our determination of the appropriate level of warranty accrual is subjective and based on estimates. Should product failure rates differ from our estimates, actual costs could vary significantly from our expectations. We recognized charges for warranty expense of \$314,000 in the first quarter of 2003 and \$2.2 million in the first quarter of 2002.

The following summarizes the activity in our warranty reserve during the first quarter of 2003:

	Balance at Beginning of Period	Additions Charged to Expense	Deductions	Balance at End of Period
		(In thousands)		
Reserve for warranty obligations	\$9,402	\$314	\$(1,373)	\$8,343

Historically, price competition has not had a material effect on margins. However, as a result of the prolonged downturn in the semiconductor industry, OEMs and semiconductor capital equipment manufacturers are striving to reduce their costs. Any cost reduction programs initiated by OEMs and semiconductor capital equipment

manufacturers could have a significant impact on our future gross margins.

RESEARCH AND DEVELOPMENT EXPENSES

We believe continued investment in the research and development of new products and subsystems is critical to our ability to serve new and existing markets, develop new products and improve existing product designs. However, we cannot provide assurance that the products we develop will meet customer requirements when those products are introduced to the market. To be advantageously positioned for a turnaround in demand we continue to invest heavily in new product development even during industry downturns, which allows us to compete for ongoing design wins on our customers' new production tools. Since our inception, all of our research and development costs have been expensed as incurred.

Our research and development expenses were \$13.4 million in the first three months of 2003 and \$11.2 million in the first three months of 2002. This represents an increase of 18.8% from the first three months of 2002 to the first three months of 2003. The 18.8% increase in research and development expenses from the 2002 period to the 2003 period was primarily due to the acquisitions of Aera and Dressler, a licensing agreement and expenditures to launch new radio frequency and direct current products. As a percentage of sales, research and development expenses decreased from 26.2% in the first three months of 2002 to 23.8% in the first three months of 2003, because of the higher sales base. We intend to maintain our quarterly spending on research and development at approximately \$12.5 million during each of the last three quarters of 2003.

SALES AND MARKETING EXPENSES

As we have expanded our product offerings and sales channels through acquisitions, our sales and marketing efforts have become increasingly complex. We continue to refine our sales and marketing functions as we acquire and integrate new companies. We have continued the effort to market directly to end users of our products, in addition to our traditional marketing to manufacturers of semiconductor capital equipment and other industries. Our sales and marketing expenses support domestic and international sales and marketing activities that include personnel, trade shows, advertising, and other selling and marketing activities.

Sales and marketing expenses were \$8.3 million in the first three months of 2003 and \$6.8 million in the first three months of 2002. The 23.4% increase in sales and marketing expenses from the 2002 period to the 2003 period was primarily due to the acquisitions of Aera and Dressler, sales and marketing headcount additions and depreciation of demonstration and customer service equipment additions. As a percentage of sales, sales and marketing expenses decreased from 15.7% in the first three months of 2002 to 14.8% in the first three months of 2003, primarily due to the higher sales base.

GENERAL AND ADMINISTRATIVE EXPENSES

Our general and administrative expenses support our worldwide corporate, legal, patent, tax, financial, administrative, information systems and human resources functions in addition to our general management. General and administrative expenses were \$5.6 million in the first three months of 2003 and \$6.8 million in the first three months of 2002. The 17% decrease in general and administrative expenses from the 2002 period to the 2003 period was primarily due to our ongoing cost reduction measures. Due to these cost reduction measures we expect our general and administrative expenses to continue to decline in 2003. See restructuring charges below for a discussion of these cost reduction measures.

RESTRUCTURING CHARGES

As part of our ongoing efforts to bring our operating costs in line with the current market environment we recorded restructuring charges totaling \$1.5 million in the first quarter of 2003 primarily associated with manufacturing and administrative personnel headcount reductions in our Japanese operations. In accordance with Japanese labor regulations we offered voluntary termination benefits to all of our Japanese employees. Approximately 36 employees accepted the voluntary termination benefits prior to March 31, 2003 with termination dates in the second quarter of 2003. All termination benefits will be paid in the second quarter of 2003.

OTHER (EXPENSE) INCOME

Other (expense) income consists primarily of interest income and expense, foreign currency exchange gains and losses and other miscellaneous gains, losses, income and expense items.

Interest income was \$520,000 in the first three months of 2003 and \$940,000 in the first three months of 2002. The decrease in interest income was due to our lower level of investment in marketable securities resulting from our use of a portion of our cash reserves to acquire Aera in January 2002 and Dressler in March 2002; to settle a patent infringement case in May 2002, and to fund our operating losses.

Interest expense consists principally of accruals of interest on our convertible subordinated notes, on borrowings under capital lease facilities and debt assumed in our acquisition of Aera. Interest expense was approximately \$2.9 million in the first three months of 2003 and \$3.3 million in the first three months of 2002. The decrease in interest expense was primarily due to our repurchase of approximately \$15.4 million and \$3.5 million of our 5.25% and 5.00% convertible subordinated notes in the fourth quarter of 2002.

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Our foreign subsidiaries' sales are primarily denominated in currencies other than the U.S. dollar. We recorded a net foreign currency loss of \$78,000 in the first three months of 2003 and a net foreign currency gain of \$115,000 in the first three months of 2002. We have entered into various foreign currency forward contracts to mitigate currency fluctuations in the Japanese yen and the euro.

At March 31, 2003, our subsidiary AE-Japan held foreign currency forward contracts with notional amounts of \$5,000,000 and market settlement amounts of \$5,020,000 for an unrealized loss position of approximately \$20,000 that has been included in foreign currency (loss) gain in the accompanying condensed consolidated statements of operations.

During the first quarter of 2003, our subsidiary AE-Germany entered into foreign currency forward contracts to buy U.S. dollars to mitigate currency exposure from its payable position arising from trade purchases and intercompany transactions. At March 31, 2003, AE-Germany held foreign currency forward contracts with notional amounts of \$1,000,000 and market settlements amounts of \$1,048,000 for an unrealized loss position of approximately \$48,000 that has been included in foreign currency (loss) gain in the accompanying condensed consolidated statements of operations.

Miscellaneous expense was \$326,000 in the first three months of 2003 and consisted primarily of a \$175,000 other than temporary decline in value impairment of a marketable equity security. If the fair value of this investment continues to decline we will record an additional impairment in the second quarter of 2003. Our remaining carrying balance of this investment at March 31, 2003 was approximately \$1.8 million. Miscellaneous income was \$245,000 in the first three months of 2002.

BENEFIT FOR INCOME TAXES

The income tax benefit for the first three months of 2003 was \$5.0 million and represented an effective rate of 37%. The income tax benefit for the first three months of 2002 was \$4.7 million and represented an effective rate of 35%. The increase in our effective tax rate was due to our legal restructuring as discussed in Note 1 to our consolidated financial statements on Form 10-K for the year ended December 31, 2002, filed with the Securities and Exchange Commission on March 27, 2003.

Changes in our relative earnings and the earnings of our foreign subsidiaries affect our consolidated effective tax rate. We adjust our income taxes periodically based upon the anticipated tax status of all foreign and domestic entities, and have adopted income tax planning strategies to reduce our worldwide income tax expense.

Realization of our net deferred tax assets is dependent upon our generating sufficient taxable income in the appropriate tax jurisdictions in future years to obtain benefit from the reversal of net deductible temporary differences and from tax loss and tax credit

carryforwards. We have previously recorded a valuation allowance on a portion of our deferred tax assets. At March 31, 2003 we reassessed our valuation allowance and determined that no adjustment to the valuation allowance was required based on our conclusion that it is more likely than not that our deferred tax assets net of related deferred tax liabilities and valuation allowance will be realized through future taxable income. Should circumstances change such that our conclusion changes, this valuation allowance could be increased to reserve all or a portion of the net deferred tax assets and the amount of the related charge could be material.

When recording acquisitions, we have recorded valuation allowances due to the uncertainty related to the realization of certain deferred tax assets existing at the acquisition dates. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed. We believe that it is more likely than not that we will realize the benefits of our deferred tax asset, net of valuation allowance. Reversals of valuation allowances recorded in purchase accounting will be reflected as a reduction of goodwill in the period of reversal.

Liquidity and Capital Resources

Our financing strategy has been to raise capital from debt and equity markets to provide liquidity to enable our investments in acquisitions and alliances, which support our strategic vision of being a single source provider of high value subsystems. We maintain substantial levels of cash and marketable securities to have funding readily available for such investment opportunities when they arise. Since 1995, to better enable such strategic investments, we have attained this liquidity with proceeds from underwritten public offerings of our common stock and, since 1999, offerings of convertible subordinated debt.

Operating activities used cash of \$4.6 million in the first three months of 2003, reflecting our net loss of \$8.6 million partially offset by non-cash items of \$1.6 million and net working capital changes of approximately \$2.4 million. Non-cash items primarily consisted of depreciation and amortization of \$6.2 million, partially offset by a benefit from deferred income taxes of \$5.8 million. Net working capital changes provided cash of approximately \$2.4 million and primarily consisted of a \$2.9 million decrease in accounts receivable; a \$1.5 million decrease in inventory; a \$1.5 million decrease in other current assets; a \$2.4 million increase in demonstration and customer service equipment; a \$1.6 million decrease in trade accounts payable; and a \$1.0 million decrease in net taxes receivable.

Operating activities used cash of \$10.6 million in the first three months of 2002, reflecting our net loss of \$8.7 million partially offset by non-cash items of \$4.3 million, increased by working capital changes of \$6.1 million. Non-cash items primarily consisted of depreciation and amortization of \$3.9 million. Net working capital changes used cash of approximately \$6.1 million and primarily consisted of a \$4.6 million increase in accounts receivable; a \$1.5 million increase in inventory; a \$1.1 million

decrease in other current assets; a \$3.3 million increase in trade accounts payable; a \$3.1 million decrease in customer deposits and other accrued expenses; and a \$1.1 million increase in net taxes receivable.

We expect near-term future operating activities to continue to use cash. Any future decline in the industries in which we operate could substantially affect our ability to generate new sales and collect payments from our customers, could cause us to initiate future reductions in force requiring substantial severance payments, and other cash payments to exit certain operating activities, among other uses of cash. Conversely, as receivable and inventory balances tend to fluctuate with net sales any future upturn in the industries we serve, primarily the semiconductor industry, may result in an increase in our net receivables and inventory balances. We are typically required to use our cash reserves to finance our inventory purchases and extend credit to our customers to finance their purchases from us. We are unable to provide any assurance regarding our future cash flow from operations.

Investing activities used cash of \$5.5 million in the first three months of 2003, and primarily consisted of the purchase of property and equipment of \$3.4 million and the settlement of our escrow deposit liability related to our acquisition of Dressler in the first quarter of 2002 of \$1.7 million. Investing activities used cash of \$24.8 million in the first three months of 2002 and primarily consisted of cash generated from the sale of marketable securities of \$29.1 million, offset by purchases of property and equipment of \$2.3 million; the acquisition of Aera Japan Limited for \$35.7 million net of \$8.3 million of cash acquired; the acquisition of Dressler HF Technik GmbH for \$14.4 million net of \$680,000 of cash acquired; and the purchase of other investments of \$1.6 million.

Investing cash flows experience significant fluctuations from period to period as we buy and sell marketable securities, which we convert to cash to fund strategic investments, acquisitions, and our operating cash flow, and as we transfer cash into marketable securities when we attain levels of cash that are greater than needed for current operations. However, we do not expect to generate levels of cash that are greater than needed for our current operations in the near term.

Financing activities used cash of \$2.0 million in the first three months of 2003, and consisted of the repayment of notes payable and capital leases of \$2.3 million, partially offset by proceeds from common stock transactions of \$351,000. Financing activities used cash of \$2.6 million in the first three months of 2002, and consisted of the repayment of notes payable and capital leases of \$3.2 million, partially offset by proceeds from common stock transactions of \$509,000.

We plan to spend approximately \$10 million to \$12 million in 2003 for the acquisition of equipment, leasehold improvements and furnishings, with depreciation expense for 2003 projected to be \$13 million to \$14 million. Our planned level of capital expenditures is subject to frequent revisions because our business experiences sudden changes as we move into industry upturns and downturns and expected sales levels

change. In addition, fluctuations in foreign currency may significantly impact our capital expenditures and depreciation expense recognized in a particular period.

As of March 31, 2003, we had working capital of \$240.0 million, a decrease of \$7.9 million from December 31, 2002. Our principal sources of liquidity consisted of \$58.3 million of cash and cash equivalents and \$102.5 million of marketable securities, and a credit facility consisting of a \$25.0 million revolving line of credit, none of which was outstanding at March 31, 2003. Advances under the revolving line of credit bear interest at the prime rate (4.25% at May 5, 2003) minus 1%. Any advances under this revolving line of credit will be due and payable May 2003. We are subject to covenants on our line of credit that provide certain restrictions related to working capital, net worth, acquisitions and payment and declaration of dividends. We were in compliance with all such covenants at March 31, 2003.

We have committed to advance up to \$1.0 million to a privately held company over the next two years. The amount and timing of this advance is dependent upon the privately held company achieving certain business development milestones.

To finance the facilities for our headquarters and main U.S. manufacturing location, we lease our executive offices and manufacturing facilities in Fort Collins, Colorado from two limited liability partnerships whose ownership includes one of our directors, who is also an officer and other individuals unrelated to us. The leases relating to these spaces expire in 2009, 2011 and 2016 and contain monthly payments of approximately \$67,000, \$55,000 and \$64,000, respectively.

We believe that our cash and cash equivalents, marketable securities, cash flow from operations and available borrowings, will be sufficient to meet our working capital needs for at least the next twelve months. After that time, we may require additional equity or debt financing to address our working capital, capital equipment or expansion needs. In addition, any significant acquisitions we make may require additional equity or debt financing to fund the purchase price, if paid in cash. There can be no assurance that additional funding will be available when required or that it will be available on terms acceptable to us. In 2006, when our convertible subordinated notes become due, it is possible we may need substantial funds to repay such debt, which was \$187.7 million at March 31, 2003. Our 5.00% convertible subordinated notes of \$121.5 million are due September 1, 2006, and our 5.25% convertible subordinated notes of \$66.2 million are due November 15, 2006. Payment would be required if our common stock price remains at low levels throughout this period, the prices at which we can effect conversion are not met in the market in which our stock is traded, and the holders of our notes choose not to otherwise convert. In such a situation there can be no assurance that we will be able to refinance the debt. We may continue to repurchase additional notes in the open market from time to time, if market conditions and our financial position are deemed favorable for such purposes.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and long-term debt obligations. We generally place our investments with high credit quality issuers and by policy are averse to principal loss and seek to protect and preserve our invested funds by limiting default risk, market risk and reinvestment risk. As of March 31, 2003, our investments in marketable securities consisted primarily of commercial paper, municipal and state bonds and notes and institutional money markets. These securities are highly liquid. Earnings on our marketable securities are typically invested into similar securities. In the first quarter of 2003, the rates we earned on our marketable securities approximated 1.3% on a before tax equivalent basis. Because the Federal Reserve repeatedly lowered interest rates throughout 2001 and 2002, the interest rates we earn on our investments likewise decreased substantially. This, in conjunction with using our available cash and cash reserves for acquisitions, including the EMCO acquisition in January 2001, the Aera acquisition in January 2002, the Dressler acquisition in March 2002, and the repurchase of a portion of our convertible subordinated notes in the fourth quarter of 2002, has greatly reduced our recent and anticipated interest income. The impact on interest income of a 10% decrease in the average interest rate would have resulted in approximately \$52,000 less interest income in the first quarter of 2003.

The interest rates on our subordinated debt are fixed, specifically, at 5.25% for the \$66.2 million of our debt due November 2006, and at 5.00% for the \$121.5 million of our debt that is due September 2006. Our offerings of subordinated debt in 1999 and 2001 increased our fixed interest expense upon each issuance, though interest expense was partially reduced by the repurchase of a portion of these offerings in 2002. Because these rates are fixed, we believe there is no risk of increased interest expense.

The interest rates on our Aera Japan subsidiary's \$34 million credit lines are variable and currently range from 1.28% to 3.1%. We believe a 10% increase in the average interest rate on these instruments would not have a material effect on our financial position or results of operations.

Foreign Currency Exchange Rate Risk

We transact business in various foreign countries. Our primary foreign currency cash flows are generated in countries in Asia and Europe. During the first quarter of 2003, the U.S. dollar weakened approximately 1% against the Japanese yen and 4% against the euro. It is highly uncertain how currency exchange rates will fluctuate in the future. We have entered into various forward foreign currency exchange contracts to mitigate against

currency fluctuations in the Japanese yen and the euro. We will continue to evaluate various methods to minimize the effects of currency fluctuations when we translate the financial statements of our foreign subsidiaries into U.S. dollars. At March 31, 2003, our subsidiary AE-Japan held a foreign currency forward contracts to purchase U.S. dollars with notional amounts of \$5,000,000 and market settlement amounts of approximately \$5,020,000 for an unrealized loss position of approximately \$20,000, and our AE-Germany subsidiary held foreign currency forward contracts to purchase U.S. dollars with notional amounts of \$1,000,000 and market settlement amounts of approximately \$1,048,000 for an unrealized loss position of approximately \$48,000.

Other Risk

We have invested in start-up and early-stage companies and strategic alliances and may in the future make additional investments in such companies that develop products which we believe may provide future benefits. We have written down the majority of the cost of one such investment in 2001 and 2002, related to a strategic alliance we started in 2000. Such current investments and any future investments will be subject to all of the risks inherent in investing in companies that are not established, or in which, due to our level of investment, we do not exercise significant management control.

ITEM 4. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our chief executive officer and chief financial officer, we have implemented controls and other procedures that are designed to ensure that we record, process, summarize and report in a timely manner the information required to be disclosed by us in our Exchange Act reports, such as this Form 10-Q. Our disclosure controls and procedures include controls and procedures designed to ensure that material information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Within 90 days prior to the filing date of this report, our chief executive officer and chief financial officer evaluated our disclosure controls and procedures and concluded that they are effective. There have not been any significant changes in our internal controls or in other factors that could significantly affect our internal controls subsequent to the date of management's evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we are party to various legal proceedings related to our business. During the quarter ended March 31, 2003, there were no material developments in any of the material legal proceedings in which we are involved, nor were any of such proceedings terminated. For a description of the material pending legal proceedings to which we are a party, please see our 2002 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 27, 2003.

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

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:

3.1 Restated Certificate of Incorporation, as amended(1)

3.2 By-laws(2)

99.1 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

99.2 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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- (1) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (File No. 000-26966), filed August 13, 2001.
- (2) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 33-97188), filed September 20, 1995, as amended.

(b) Reports on Form 8-K

We filed the following report on Form 8-K:

- (i) We filed with the Securities and Exchange Commission a Current Report on Form 8-K on April 23, 2003 to furnish under Item 12 our press release and conference call transcript announcing our results of operations for the first quarter of 2003.

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.

ADVANCED ENERGY INDUSTRIES, INC.

/s/ Michael El-Hillow

Michael El-Hillow
Executive Vice President, Chief Financial Officer (Principal Financial Officer) May 12, 2003

CERTIFICATIONS

I, Douglas S. Schatz, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Advanced Energy Industries, Inc.;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a. designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b. evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and
 - c. presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a. all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

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6. The registrant's other certifying officer and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ Douglas S. Schatz

Douglas S. Schatz
Chief Executive Officer, President May 12, 2003
and Chairman of the Board

I, Michael El-Hillow, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Advanced Energy Industries, Inc.;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a. designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b. evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and
 - c. presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a. all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other

factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ Michael El-Hillow

Michael El-Hillow
Executive Vice President, Chief Financial Officer (Principal Financial Officer) May 12, 2003

INDEX TO EXHIBITS

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- (2) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 33-97188), filed September 20, 1995, as amended.

Certification Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to Section 906
of the Sarbanes-Oxley Act of 2002

In connection with the accompanying Form 10-Q of Advanced Energy Industries, Inc. (the “Company”) for the quarter ended March 31, 2003 (the “Report”), I, Douglas S. Schatz, Chief Executive Officer and President of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 has 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.

Date: May 12, 2003

/s/ Douglas S. Schatz

Douglas S. Schatz
Chief Executive Officer and President

Certification Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to Section 906
of the Sarbanes-Oxley Act of 2002

In connection with the accompanying Form 10-Q of Advanced Energy Industries, Inc. (the “Company”) for the quarter ended March 31, 2003 (the “Report”), I, Michael El-Hillow, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 has 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.

Date: May 12, 2003

/s/ Michael El-Hillow

Michael El-Hillow
Chief Financial Officer