

MECHANICAL TECHNOLOGY INC  
Form 10-Q  
August 11, 2011

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED June 30, 2011  
OR

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

FOR THE TRANSITION PERIOD FROM \_\_\_\_ TO \_\_\_\_

**Mechanical Technology, Incorporated**

(Exact name of registrant as specified in its charter)

New York  
(State or Other Jurisdiction  
of Incorporation)

0-6890  
(Commission File Number)

14-1462255  
(IRS Employer  
Identification No.)

431 New Karner Road, Albany, New York 12205  
(Address of registrant's principal executive office)

(518) 533-2200  
(Registrant's telephone number, including area code)

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 has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer       Accelerated filer       Non-accelerated filer       Smaller reporting company   
(Do not check if a small reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12B-2 of the Act). Yes       No

The number of shares of common stock, par value of \$0.01 per share, outstanding as of August 04, 2011 was 5,234,883.

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MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES  
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PART I. FINANCIAL INFORMATION  
Item 1. Financial Statements

Mechanical Technology, Incorporated and Subsidiaries  
Condensed Consolidated Balance Sheets as of December 31, 2010 and June 30, 2011 (Unaudited)

(Dollars in thousands)	December 31, 2010	June 30, 2011
Assets		
Current Assets:		
Cash and cash equivalents	\$ 1,118	\$ 1,592
Accounts receivable	1,086	1,004
Inventories	844	1,086
Prepaid expenses and other current assets	128	101
<b>Total Current Assets</b>	<b>3,176</b>	<b>3,783</b>
Property, plant and equipment, net:	425	311
<b>Total Assets</b>	<b>\$ 3,601</b>	<b>\$ 4,094</b>
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 255	\$ 373
Accrued liabilities	1,273	1,485
Deferred revenue	21	53
Derivative liability	73	—
Income taxes payable	20	20
<b>Total Current Liabilities</b>	<b>1,642</b>	<b>1,931</b>
Stockholders' Equity (Deficit):		
Common stock, par value \$0.01 per share, authorized 75,000,000; 5,776,750 issued in both 2010 and 2011	58	58
Paid-in-capital	134,733	134,935
Accumulated deficit	(122,483)	(122,386)
Common stock in treasury, at cost, 1,005,092 shares in both 2010 and 2011	(13,754)	(13,754)
<b>Total MTI stockholders' deficit</b>	<b>(1,446)</b>	<b>(1,147)</b>
Non-controlling interest	3,405	3,310
<b>Total Equity</b>	<b>1,959</b>	<b>2,163</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 3,601</b>	<b>\$ 4,094</b>

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

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Mechanical Technology, Incorporated and Subsidiaries  
 Condensed Consolidated Statements of Operations (Unaudited)  
 For the Three and Six Months Ended June 30, 2010 and 2011

(Dollars in thousands, except per share)

	Three Months Ended		Six Months Ended	
	June 30, 2010	2011	June 30, 2010	2011
Product revenue	\$ 1,627	\$ 2,140	\$ 2,895	\$ 4,679
Funded research and development revenue	418	—	774	13
Total revenue	2,045	2,140	3,669	4,692
Operating costs and expenses:				
Cost of product revenue	726	850	1,271	1,789
Research and product development expenses:				
Funded research and product development	827	—	1,597	25
Unfunded research and product development	345	387	705	858
Total research and product development expenses	1,172	387	2,302	883
Selling, general and administrative expenses	850	1,318	2,706	2,625
Operating loss	(703)	(415)	(2,610)	(605)
Gain on derivatives	16	29	18	73
Other (expense) income, net	(13)	(9)	(28)	76
Loss before income taxes and non-controlling interest	(700)	(395)	(2,620)	(456)
Income tax benefit	—	—	—	—
Net loss, net of tax	(700)	(395)	(2,620)	(456)
Plus: Net loss attributed to non-controlling interest	263	298	949	553
Net income (loss) attributed to MTI	\$ (437)	\$ (97)	\$ (1,671)	\$ 97
Net earnings (loss) per share attributable to MTI (Basic and Diluted)	\$ (.09)	\$ (.02)	\$ (.35)	\$ .02
Weighted average shares outstanding (Basic and Diluted)	4,771,658	4,771,658	4,771,658	4,771,658

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

MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES  
Condensed Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Loss (Unaudited)  
For the Six Months Ended June 30, 2010 and 2011

(Dollars in thousands)	Six Months Ended	
	June 30,	
	2010	2011
<b>Common Stock</b>		
Balance, beginning	\$ 58	\$ 58
Balance, ending	\$ 58	\$ 58
<b>Paid-In Capital</b>		
Balance, beginning	\$ 133,286	\$ 134,733
Stock-based compensation	1,030	202
Balance, ending	\$ 134,316	\$ 134,935
<b>Accumulated Deficit</b>		
Balance, beginning	\$ (120,724)	\$ (122,483)
Net income (loss)	(1,671)	97
Balance, ending	\$ (122,395)	\$ (122,386)
<b>Treasury Stock</b>		
Balance, beginning	\$ (13,754)	\$ (13,754)
Balance, ending	\$ (13,754)	\$ (13,754)
<b>Non-Controlling Interest (NCI)</b>		
Balance, beginning	\$ 3,156	\$ 3,405
Equity contribution	990	458
Net loss attributed to NCI	(949)	(553)
Balance, ending	\$ 3,197	\$ 3,310
<b>Total Stockholders' Equity</b>		
Balance, ending	\$ 1,422	\$ 2,163
<b>Total Comprehensive Income (Loss)</b>		
Net income (loss)	\$ (1,671)	\$ 97
Other comprehensive income (loss)	—	—
Total comprehensive income (loss)	\$ (1,671)	\$ 97

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

MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES  
Condensed Consolidated Statements of Cash Flows (Unaudited)  
For the Six Months Ended June 30, 2010 and 2011

(Dollars in thousands)	Six Months Ended June 30,	
	2010	2011
<b>Operating Activities</b>		
Net loss	\$ (2,620)	\$ (456)
Adjustments to reconcile net loss to net cash used by operating activities:		
Gain on derivatives	(18)	(73)
Depreciation and amortization	257	187
Loss on disposal of fixed assets	—	35
Stock based compensation	1,030	202
Changes in operating assets and liabilities:		
Accounts receivable	201	82
Inventories	42	(242)
Prepaid expenses and other current assets	(73)	27
Accounts payable	178	118
Deferred revenue	—	32
Accrued liabilities	65	212
Net cash provided (used) by operating activities	(938)	124
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(26)	(108)
Net cash used by investing activities	(26)	(108)
<b>Financing Activities</b>		
Proceeds from capital raise and warrants issued	990	458
Net cash provided by financing activities	990	458
Increase in cash and cash equivalents	26	474
Cash and cash equivalents - beginning of period	785	1,118
Cash and cash equivalents - end of period	\$ 811	\$ 1,592

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

MECHANICAL TECHNOLOGY, INCORPORATED  
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

Notes to Condensed Consolidated Financial Statements (Unaudited)

1. Description of Business

Mechanical Technology, Incorporated, (“MTI” or the “Company”), a New York corporation, was incorporated in 1961. MTI operates in two segments, the Test and Measurement Instrumentation segment, which is conducted through MTI Instruments, Inc. (“MTI Instruments”), a wholly-owned subsidiary, and the New Energy segment which is conducted through MTI MicroFuel Cells Inc. (“MTI Micro”), a variable interest entity that is included in these consolidated statements.

MTI Instruments was incorporated in New York on March 8, 2000 and is a worldwide supplier of precision non-contact physical measurement solutions, condition based monitoring systems, portable balance equipment and wafer inspection tools. MTI Instrument’s products use a comprehensive array of technologies to solve complex, real world applications in numerous industries including manufacturing, semiconductor, solar, commercial and military aviation, automotive and data storage. Their products consist of electronic gauging instruments for position, displacement and vibration application within the design, manufacturing/production, test and research market; wafer characterization of semi-insulating and semi-conducting wafers within both the semiconductor and solar industries; tensile stage systems for materials testing at academic and industrial settings; and engine vibration analysis systems for both military and commercial aircraft.

MTI Micro was incorporated in Delaware on March 26, 2001, and is developing Mobion®, a handheld energy-generating device to replace current lithium-ion and similar rechargeable battery systems in many handheld electronic devices for the military and consumer markets. Mobion® handheld generators are based on direct methanol fuel cell (DFMC) technology, which has been recognized as enabling technology for advanced portable power sources by the scientific community and industry analysts. As the need for advancements in portable power increases, MTI Micro is developing Mobion® as a solution for advancing current and future electronic device power needs of the multi-billion dollar portable electronics market. As of June 30, 2011, the Company owned approximately 48.4% of MTI Micro’s outstanding common stock.

2. Liquidity and Going Concern

The Company has incurred significant losses, the majority stemming from the direct methanol fuel cell product development and commercialization programs of MTI Micro, and has a consolidated accumulated deficit of \$122 million and working capital of \$1.9 million at June 30, 2011. The Company has projected positive cash flows to meet future cash requirements for operations and capital expenditures exclusive of MTI Micro, and has cash and cash equivalents of \$1.6 million at June 30, 2011, \$1.5 million without MTI Micro. Because of previous losses, limited current cash and cash equivalents, negative cash flows and accumulated deficit, the report of the Company’s independent registered public accounting firm for the year ended December 31, 2010 expressed substantial doubt about the Company’s ability to continue as a going concern. These financial statements do not include any adjustments that might result from the outcome of this uncertainty. However, Management believes that MTI Instruments will continue to generate positive cash flows and be able to fund its current operations. Furthermore, due to ongoing Corporate cost savings initiatives, the Company currently believes that the positive cash flows generated by MTI Instruments will be sufficient enough to cover the parent company’s operations for the foreseeable future.

At present, the Company does not expect to continue to fund MTI Micro on a long-term basis. Since the company will no longer fund MTI Micro, MTI Micro has sought other sources of funding. In September 2008, MTI Micro closed on \$2.2 million of funding in the form of convertible secured notes (the “Bridge Notes”) to investors (the “Bridge Investors”), including MTI, Dr. Walter L. Robb, a member of the Company’s and MTI Micro’s Boards of Directors, and Counter Point Ventures Fund II, LP (Counter Point). Counter Point is a venture capital fund sponsored and managed by Dr. Walter L. Robb. In February 2009, MTI Micro issued additional bridge notes to Counter Point in the amount of \$500 thousand. On April 15, 2009, MTI Micro, Counter Point and an additional investor agreed to additional bridge notes in the amount \$800 thousand to be drawn down in increments not to exceed \$165 thousand monthly. The final principal draw down occurred on December 4, 2009. The Bridge Notes carried an annual interest rate of 10%. On December 9, 2009, these bridge notes with the aggregate principal and accrued interest amount of \$3,910,510 outstanding were converted into an aggregate of 55,864,425 shares of Common Stock of MTI Micro using a conversion price per share of \$0.070 (the “Negotiated Conversion”).

On January 11, 2010, MTI Micro entered into a Common Stock and Warrant Purchase Agreement (the “Purchase Agreement”) with Counter Point. The total \$2 million has been drawn against this Purchase Agreement. As a result of this Purchase Agreement, Counter Point received 28,571,429 shares of MTI Micro stock and 5,714,286 warrants. See Note 8 for further discussion of this transaction.





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On February 9, 2011, Amendment No. 1 to Common Stock and Warrant Purchase Agreement (the "Amendment") was entered into between MTI Micro and Counter Point. The Amendment allowed MTI Micro to draw down an additional \$450 thousand in exchange for 6,428,574 shares of MTI Micro Common Stock and 1,285,715 warrants. The funds were available through monthly "Closings", with \$90 thousand being drawn down for the month of February, \$45 thousand in April, \$210 thousand in May, and the final \$105 thousand in August. See Note 8 for further discussion of this transaction.

On April 16, 2009, MTI Micro was awarded a cost share funding grant of \$2.4 million from the United States Department of Energy (DOE) as part of DOE's \$41.9 million in American Recovery and Reinvestment Act funding for fuel cell technology. On April 30, 2010, MTI Micro was approved for an extension of this grant to December 31, 2010, with additional funds available of \$594 thousand under this program. As of April 25, 2011, all amounts awarded have been billed and paid by the DOE under this grant.

On July 28, 2010, MTI Micro was awarded a cost share funding grant of \$296 thousand from the New York State Energy Research and Development Authority (NYSERDA). MTI Micro has billed \$296 thousand for work performed to date, and received \$266 thousand through June 30, 2011.

On October 26, 2010, MTI Micro was awarded a \$100 thousand firm fixed contract from a United States Department of Defense agency for the development of proof of concept fuel cells for technical testing and subsequent demonstration in a capabilities based experiment. The total contract has been billed and received as of June 30, 2011.

In order to continue full commercialization of its micro fuel cell solution, MTI Micro will need to do one or more of the following to raise additional resources, or reduce its cash requirements:

- obtain additional government grants or private funding of its direct methanol fuel cell research, development, manufacturing readiness and commercialization;
- receive a purchase order from government agencies or OEM's MTI Micro is currently working with;
- secure additional debt or equity financing; or
- further reduce its current expenditure run-rate.

There is no guarantee that resources will be available to MTI Micro on terms acceptable to it, or at all, or that such resources will be received in a timely manner, if at all, or that MTI Micro will be able to reduce its expenditure run-rate further without materially and adversely affecting its business. MTI Micro had cash and cash equivalents of \$138 thousand as of June 30, 2011. MTI Micro drew down the final \$105 thousand available through the Amendment in the month of August. MTI Micro has \$30 thousand in outstanding invoices on the NYSERDA contract. In order to conserve cash and extend operations while MTI Micro pursues any additional necessary financing, MTI Micro has reduced operating expenses in the first half of 2011. Without other resources, management currently believes it will need to make significant changes to, curtail or discontinue MTI Micro's operations before the end of the third quarter of 2011.

### 3. Basis of Presentation

In the opinion of management, our Financial Statements reflect all adjustments, which are of a normal recurring nature, necessary for a fair statement of the results for the periods presented in accordance with U.S. Generally Accepted Accounting Principles (GAAP) and with the instructions to Form 10-Q in Article 10 of SEC Regulation S-X. The results of operations for the interim periods presented are not necessarily indicative of results for the full year.

Certain information and footnote disclosures normally included in the annual consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") have been condensed or omitted. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010.

The information presented in the accompanying condensed consolidated balance sheet as of December 31, 2010 has been derived from the Company's audited consolidated financial statements but does not include all disclosures required by U.S. GAAP. All other information has been derived from the Company's unaudited condensed consolidated financial statements for the three months ended June 30, 2011.

## Variable Interest Entities

The Company has performed an analysis under the Variable Interest Entity ("VIE") model and determined that MTI Micro is a VIE. One of the criteria for determining whether an entity is a VIE is determining if the entity (MTI Micro) has equity at risk. Management has concluded that MTI Micro does not have equity at risk to fund operations into its next phase of development. Further, it has been determined that the Company is the primary beneficiary of MTI Micro, and therefore should continue to include MTI Micro's results of operations in the Company's consolidated financial statements as of June 30, 2011.

The Company's analysis to determine the primary beneficiary of MTI Micro focused primarily on determining which variable interest holder had the power to direct the activities which the Company believes would have the most significant impact on the financial performance of MTI Micro. MTI Micro is governed by its own board of directors and significant decisions are determined by a majority vote of this board. MTI does not have control of the MTI Micro board of directors; however, at this time, the Company's board of directors and the MTI Micro board of directors consist of the same members. Under the Articles of Incorporation of MTI Micro, each share of MTI Micro stock is entitled to a vote, and further, holders of a majority of the shares of MTI Micro's common stock have the ability to reconstitute the board. As of June 30, 2011, upon additional equity financings from Counter Point (discussed in note 8), MTI, Counter Point and Dr. Robb own 48.4%, 44.2%, and 5.2% of the outstanding common stock of MTI Micro, respectively. As a result, a majority share is not held by one party but is shared amongst the related party group: MTI, Counter Point and Dr. Walter Robb. In situations in which a reporting entity concludes that neither it nor one of its related parties has power but, as a group, the reporting entity and its related parties have the power, then the party within the related party group that is most closely associated with the VIE is the primary beneficiary. MTI continues to oversee the day to day operations and exercise management decision making and to have a vested interest in the commercialization of MTI Micro. Since inception in 2001, MTI has made the largest investment and been the principal funder of MTI Micro. MTI is exposed to losses and has the ability to benefit from MTI Micro. Considering the facts and circumstances, management believes MTI is most closely associated with the VIE and therefore, as of June 30, 2011, is the primary beneficiary and has continued to consolidate MTI Micro into its results of operations.

Should there be a change in the facts and circumstances (such as a change in governance or a change to the related party group) management will reassess whether they act as the primary beneficiary and should continue to include MTI Micro in the Company's results of operations.

## 4. Accounts Receivable

Receivable balances consist of the following at:

(Dollars in thousands)

	New Energy	Test and Measurement Instrumentation	Consolidated Totals
<b>December 31, 2010</b>			
U.S. and State Government	\$ 111	\$ 232	\$ 343
Commercial	—	743	743
Total	\$ 111	\$ 975	\$ 1,086
<b>June 30, 2011</b>			
U.S. and State Government	\$ 31	\$ 11	\$ 42
Commercial	—	962	962
Total	\$ 31	\$ 973	\$ 1,004

For the six months ended June 30, 2010 and 2011, the largest commercial customer represented 8.2% and 17.1%, respectively, and a U.S. governmental agency represented 20.8% and 7.7%, respectively, of the Company's test and measurement instrumentation segment product revenue. As of December 31, 2010 and June 30, 2011, the largest commercial customer represented 7.2% and 0.0%, respectively, and a U.S. governmental agency represented 23.8% and 1.1%, respectively, of the Company's test and measurement instrumentation segment accounts receivable.

As of December 31, 2010 and June 30, 2011, a state agency represented 95% and 100%, respectively, of the accounts receivable of the new energy segment.

As of December 31, 2010 and June 30, 2011, the Company had no reserve for doubtful trade accounts receivable.



5. Inventories

Inventories consist of the following at:

(Dollars in thousands)

	December 31, 2010	June 30, 2011
Finished goods	\$ 283	\$ 277
Work in process	156	285
Raw materials	405	524
	\$ 844	\$ 1,086

6. Income Taxes

The Company's effective income tax (expense) rate from operations differed from the federal statutory rate for each of the three and six months ended June 30 as follows:

(Dollars in thousands)

	Three Months Ended		Six Months Ended	
	June 30, 2010	2011	June 30, 2010	2011
Federal statutory tax rate	34.00%	34.00%	34.00%	34.00%
State taxes, net of federal tax effect	6.14	6.44	6.04	6.91
Change in valuation allowance	(40.92)	(42.83)	(40.27)	(46.10)
Other permanent differences, net	—	(0.12)	—	(0.19)
Permanent tax difference on derivative valuation	0.78	2.51	0.23	5.38
Tax rate	0.00%	0.00%	0.00%	0.00%

Income tax (expense) benefit for the three and six months ended June 30 consists of the following:

(Dollars in thousands)

	Three Months Ended		Six Months Ended	
	June 30, 2010	2011	June 30, 2010	2011
Operations before non-controlling interest				
Federal	\$ —	\$ —	\$ —	\$ —
State	—	—	—	—
Total	\$ —	\$ —	\$ —	\$ —

The valuation allowance at December 31, 2010 and June 30, 2011 was \$27.8 and \$28.0 million, respectively, and represents a full valuation allowance. The valuation allowance reflects the estimate that it is more likely than not that the net deferred tax assets in excess of deferred tax liabilities may not be realized.

At June 30, 2011, the Company had unused Federal net operating loss carry forwards of approximately \$67.4 million. Of these carry forwards, \$1.3 million represents windfall tax benefits from stock option transactions, the tax effect of which are not included in the Company's net deferred tax assets. Additionally, it is estimated that \$6.69 million of these carryforwards will expire prior to utilization due to IRC Section 382 limitation described below. This net operating loss limited by IRC Section 382 is not reflected in the Company's deferred tax asset as of June 30, 2011. The Federal net operating loss carry forwards, if unused, will begin to expire in 2020.

The Company's and/or its subsidiaries' ability to utilize their net operating loss carryforwards may be significantly limited by Section 382 of the Internal Revenue Code of 1986, as amended, if the Company or any of its subsidiaries undergoes an "ownership change" as a result of changes in the ownership of the Company's or its subsidiaries' outstanding stock pursuant to the exercise of the warrants or otherwise. A corporation generally undergoes an "ownership change" when the ownership of its stock, by value, changes by more than 50 percentage points over any three-year testing period. In the event of an ownership change, Section 382 imposes an annual limitation on the amount of post-ownership change taxable income a corporation may offset with pre-ownership change net operating loss carryforwards and certain recognized built-in

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losses. As of June 30, 2011, although no formal Section 382 study has been performed, the Company does not appear to have had an ownership change for Section 382 purposes. However, as noted below, it appears that as a result of MTI Micro's conversion of the Bridge Notes (combined with the Company's ownership changes) MTI Micro appears to have had an ownership change for Section 382 purposes, which places limitations on the utilization of MTI Micro's separate company net operating loss carryforwards.

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As a result of the conversion of the Bridge Notes, MTI no longer maintains an 80% or greater ownership in MTI Micro. Thus, MTI Micro is no longer included in Mechanical Technology, Inc. and Subsidiaries' consolidated federal and combined New York State tax returns, effective December 9, 2009.

Pursuant to the Internal Revenue Service's consolidated tax return regulations (IRS Regulation Section 1.1502-36), upon MTI Micro leaving the Mechanical Technology, Inc. and Subsidiaries consolidated group, MTI has elected to reduce a portion of its stock tax basis in MTI Micro by "reattributing" a portion of MTI Micro's net operating loss carryforwards to MTI, for an amount equivalent to its built in loss amount in MTI's investment in MTI Micro's stock.

As a result of MTI making this election with its December 31, 2009 tax return, MTI reattributed approximately \$45.2 million of MTI Micro's net operating losses (reducing its tax basis in MTI Micro's stock by the same amount), leaving MTI Micro with approximately \$13 million of separate company net operating loss carryforwards at the time of the conversion of the Bridge Notes. However, as noted above, as the result of a Section 382 limitation, caused by the conversion, it is estimated that at least \$6.69 million of these net operation losses will expire prior to utilization.

As of June 30, 2011, it is estimated that MTI had net operating loss carryforwards of approximately \$51.1 million and MTI Micro has net operating loss carryforwards of approximately \$16.3 million (with a portion, as noted above, being subject to IRC Section 382 limitation).

As of June 30, 2011, the Company has approximately \$450 thousand of research and development tax credit carry forwards, which begin to expire in 2018, and approximately \$54 thousand of alternative minimum tax credit carry forwards, which have no expiration date. Deferred tax assets and liabilities are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates.

### 7. Stockholders' Equity

Changes in common shares issued and treasury stock outstanding are as follows:

	Year Ended December 31, 2010	Six Months Ended June 30, 2011
<b>Common Shares</b>		
Balance, beginning	5,776,750	5,776,750
Balance, ending	5,776,750	5,776,750
<b>Treasury Stock</b>		
Balance, beginning	1,005,092	1,005,092
Balance, ending	1,005,092	1,005,092

### Warrants Issued

On December 20, 2006, the Company issued warrants to investors to purchase 378,472 shares of the Company's common stock at an exercise price of \$18.16 per share. These warrants will be fair valued by the Company until expiration or exercise of the warrants. The warrants became exercisable on June 20, 2007 and expire on December 19, 2011.

We recognize all derivatives as either assets or liabilities in the statement of financial position and measure these instruments at fair value. The fair value of the derivative is recorded in the "Derivative liability" line on the financial statements, and is valued quarterly using the Black-Scholes Option Pricing Model. The significant assumptions used for the valuations are as follows:

	December 31, 2010	June 30, 2011
Expected life of warrant (number of days remaining)	365	182
Risk-free interest rate	0.29%	0.10%
Expected volatility of stock	219.4%	110.8%
Expected dividend yield	None	None





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The Company also follows the accounting provisions for Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock, which requires freestanding contracts that are settled in a company's own stock, including common stock warrants, to be designated as an equity instrument, asset or a liability. A contract designated as an asset or a liability must be carried at fair value, with any changes in fair value recorded in the results of operations. A contract designated as an equity instrument can be included in equity, with no fair value adjustments required. Based on the terms and conditions of the warrants discussed above, the instrument does not qualify to be designated as an equity instrument and is therefore recorded as a derivative liability.

The fair value of the warrants at December 31, 2010 and June 30, 2011 was \$73 thousand and \$0, respectively. Gains on derivatives are included in "Gain on derivatives" in the Consolidated Statement of Operations. During the six month periods ending June 30, 2010 and 2011, the Company recognized a gain on derivatives of \$18 thousand and \$73 thousand, respectively.

### Reservation of Shares

The Company has reserved common shares for future issuance as of June 30, 2011 as follows:

Stock options outstanding	850,236
Stock options available for issuance	715,716
Warrants outstanding	378,472
Number of common shares reserved	1,944,424

### Earnings (Loss) per Share

Not included in the computation of earnings per share, assuming dilution for the three and six months ended June 30, 2010, were options to purchase 707,716 shares of the Company's common stock, warrants to purchase 378,472 shares of the Company's common stock, and options to purchase 27,520,001 shares of MTI Micro's common stock. These potentially dilutive items were excluded because the Company incurred a loss for this period and their inclusion would be anti-dilutive.

Not included in the computation of earnings per share, assuming dilution for the three and six months ended June 30, 2011, were options to purchase 850,236 shares of the Company's common stock, warrants to purchase 378,472 shares of the Company's common stock, and options to purchase 32,416,820 shares of MTI Micro's common stock. These potentially dilutive items were excluded because the average market price of the common stock for both entities exceeded the exercise prices of the options and warrants for this period.

### 8. Issuance of Stock, Warrants and Stock Options by MTI Micro

#### Common Stock Issued – MTI Micro

MTI Micro was formed on March 26, 2001, and, as of June 30, 2011, the Company owned approximately 48.4% of MTI Micro's outstanding common stock, or 75,049,937 shares, and 54.1% of the common stock and warrants issued, which includes 32,904,136 warrants outstanding. The number of MTI Micro common stock shares authorized for issuance is 240,000,000 as of June 30, 2011.

On January 11, 2010, MTI Micro entered into a Common Stock and Warrant Purchase Agreement (the "Purchase Agreement") with Counter Point Ventures Fund II, L.P. ("Counter Point"). Counter Point is managed by Dr. Walter L. Robb, a member of the Board of Directors of the Company and MTI Micro, and is a current stockholder of MTI Micro. Pursuant to the Purchase Agreement, MTI Micro issued and sold to Counter Point 28,571,429 shares of common stock, par value \$0.01 per share (the "Micro Common Stock"), at a purchase price per share of \$0.070, over a period of twelve (12) months, and warrants ("Warrants") to purchase shares of Micro Common Stock equal to 20% of the shares of Micro Common Stock purchased under the Purchase Agreement at an exercise price of \$0.070 per share. The sale and issuance of the Micro Common Stock and Warrants occurred over multiple closings (each, a "Closing"). Nine Closings occurred through December 31, 2010, with MTI Micro raising \$1.89 million from the sale of 26,952,386 shares of Micro Common Stock and Warrants to purchase 5,390,477 shares of Micro Common Stock to Counter Point. The final Closing occurred on January 5, 2011, whereby MTI Micro drew down the remaining \$113 thousand available under the Purchase Agreement.

On February 9, 2011, Amendment No. 1 to Common Stock and Warrant Purchase Agreement (the "Amendment") was entered into between MTI Micro and Counter Point. The Amendment allowed MTI Micro to draw down an additional \$450 thousand in exchange for 6,428,574 shares of MTI Micro Common Stock and 1,285,715 warrants. The funds were available through monthly "Closings", with \$90 thousand drawn down for the month of February, \$45 thousand for the month of April, \$210 thousand for the month of May, and the final \$105 thousand for the month of August.



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Dr. Robb and Counter Point beneficially held approximately 41.4% of the common stock and warrants of MTI Micro of December 31, 2010, and as of June 30, 2011 hold an aggregate of approximately 43.7% of the common stock and warrants of MTI Micro.

The following table represents changes in common shares of MTI Micro, broken down between MTI holdings and non-controlling interests:

	MTI		Non Controlling Interest		Total Shares
	Average Price	Shares	Ownership %	Shares	
Balance at 12/31/2008		63,797,770	97.3	1,750,345	65,548,115
Stock issued for MTI Options to MFC Employees	\$ 0.14	10,501			31,469
Conversion of Bridge Loan	\$ 0.07	11,241,666		44,622,759	55,864,425
Balance at 12/31/09		75,049,937	61.8	46,373,104	121,423,041
Stock issued under Purchase Agreement	\$ 0.07			26,952,386	26,952,386
Balance at 12/31/10		75,049,937	50.6	73,325,490	148,375,427
Stock issued under Purchase Agreement & Amendment	\$ 0.07			2,904,757	2,904,757
Balance at 03/31/11		75,049,937	49.6	76,230,247	151,280,184
Stock issued under Amendment	\$ 0.07			3,642,857	3,642,857
Balance at 06/30/11		75,049,937	48.4	79,873,104	154,923,041

### Warrants Issued – MTI Micro

On December 9, 2009, MTI Micro issued warrants to the current shareholders of MTI Micro, including the Company, without consideration, to purchase 32,779,310 shares of MTI Micro Stock at an exercise price of \$0.07 per share. The warrants became exercisable on December 9, 2010 and expire on December 8, 2017. The warrants have been accounted for as an equity distribution of \$2.03 million, including warrants to the Company with a value of \$1.97 million that were eliminated in consolidation.

On December 9, 2009, MTI Micro issued warrants to the Bridge Investors of MTI Micro, including the Company, to purchase 5,081,237 shares of MTI Micro Stock at an exercise price of \$0.07 per share. The Warrants became exercisable on December 9, 2009 and will expire on the earlier of: (i) April 15, 2014; (ii) immediately prior to a change in control; or (iii) immediately prior to an initial public offering of MTI Micro. The warrants were issued without consideration and were accounted for as equity and a loss on extinguishment of debt was recorded in the amount of \$289 thousand, including warrants to the Company with a value of \$57 thousand that were eliminated in consolidation.

MTI Micro issued 5,714,286 warrants to Counter Point to purchase shares of MTI Micro Stock at an exercise price of \$0.07 per share under the Purchase Agreement. The warrants became exercisable on the date of issuance and will expire on the earlier of (a) the five (5) year anniversary of the Date of Issuance of the Warrant; (b) immediately prior to a Change of Control; or (c) the closing of a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act. The warrants were accounted for as equity.

Through June 30, 2011, under the Amendment MTI Micro has issued 985,714 warrants to Counter Point to purchase shares of MTI Micro Stock at an exercise price of \$0.07 per share. The warrants became exercisable on the date of issuance and will expire on the earlier of (a) the five (5) year anniversary of the Date of Issuance of the Warrant; (b) immediately prior to a Change of Control; or (c) the closing of a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act. The warrants were accounted for as equity.



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### 9. Fair Value Measurement

The estimated fair value of certain financial instruments, including cash, cash equivalents and short-term debt approximates their carrying value due to their short maturities and varying interest rates. "Fair value" is the price that would be received to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Based on the observability of the inputs used in the valuation methods, the Company is required to provide the following information according to the fair value accounting standards. These standards established a fair value hierarchy that ranks the quality and reliability of the information used to determine fair values. Financial assets and liabilities are classified and disclosed in one of the following three categories:

- Level 1: Quoted market prices in active markets for identical assets or liabilities, which includes listed equities.
- Level 2: Observable market based inputs or unobservable inputs that are corroborated by market data. These items are typically priced using models or other valuation techniques. These models are primarily financial industry-standard models that consider various assumptions, including the time value of money, yield curves, volatility factors, as well as other relevant economic measures.
- Level 3: These use unobservable inputs that are not corroborated by market data. These values are generally estimated based upon methodologies utilizing significant inputs that are generally less observable from objective sources.

In determining the appropriate levels, the Company performs a detailed analysis of financial assets and liabilities. At each reporting period, all assets and liabilities for which the fair value measurements are based upon significant unobservable inputs are classified as Level 3. The derivative liability is valued using the Black-Sholes Option Pricing Model which is based upon unobservable inputs. The following is a summary of the Company's fair value instruments categorized by their associated fair value input level:

(Dollars in thousands)

Balance Sheet Classification	Level 1	Level 2	Level 3	Balance at June 30, 2011
<b>Financial Liabilities:</b>				
Derivative liability	\$ —	\$ —	\$ —	\$ —
Total fair value of liabilities	\$ —	\$ —	\$ —	\$ —

The following is a rollforward of Level 3 fair value instruments for the twelve months ended December 31, 2010:

(Dollars in thousands)

Instrument	Beginning Balance as of Jan. 1, 2010	Total (Gains) / Losses Realized and Unrealized	Purchases, Issuances, Sales and Settlements	Ending Balance as of Dec. 31, 2010
Derivative liability	\$ 70	\$ 3	\$ —	\$ 73
Total Level 3 instruments	\$ 70	\$ 3	\$ —	\$ 73

The following is a rollforward of Level 3 fair value instruments for the six months ended June 30, 2011:

(Dollars in thousands)

Instrument	Beginning Balance as of Jan. 1, 2011	Total (Gains) / Losses Realized and Unrealized	Purchases, Issuances, Sales and Settlements	Ending Balance as of June 30, 2011
Derivative liability	\$ 73	\$ (73)	\$ —	\$ —

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Total Level 3 instruments	\$	73	\$	(73)	\$	—	\$	—
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### 10. Segment Information

The Company operates in two business segments, New Energy and Test and Measurement Instrumentation. The New Energy segment is focused on commercializing direct methanol fuel cells. The Test and Measurement Instrumentation segment designs, manufactures, markets and services high performance test and measurement instruments and systems, wafer characterization tools for the semiconductor and solar industries and computer-based balancing systems for aircraft engines. The Company's principal operations are located in North America.

The accounting policies of the New Energy and Test and Measurement Instrumentation segments are similar to those described in the summary of significant accounting policies in the Company's Annual Report on Form 10-K. The Company evaluates performance based on profit or loss from operations before income taxes, accounting changes, items management does not deem relevant to segment performance, and interest income and expense. Inter-segment sales and expenses are not significant.

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Summarized financial information concerning the Company's reportable segments is shown in the following table. The "Other" column includes corporate related items and items such as income taxes or unusual items, which are not allocated to reportable segments. The "Reconciling Items" column includes non-controlling interests in a consolidated entity. In addition, segments' non-cash items include any depreciation and amortization in reported profit or loss.

(Dollars in thousands)

	New Energy	Test and Measurement Instrumentation	Other	Reconciling Items	Condensed Consolidated Totals
Three months ended June 30, 2010					
Product revenue	\$ —	\$ 1,627	\$ —	\$ —	\$ 1,627
Funded research and development revenue	418	—	—	—	418
Research and product development expenses	931	241	—	—	1,172
Selling, general and administrative expenses	66	506	278	—	850
Segment (loss) / profit from operations before income taxes and non-controlling interest	(590)	48	(158)	—	(700)
Segment (loss) profit	(590)	48	(158)	263	(437)
Total assets	824	1,677	865	—	3,366
Capital expenditures	—	13	—	—	13
Depreciation and amortization	100	22	4	—	126

Three months ended June 30, 2011

Product revenue	\$ —	\$ 2,140	\$ —	\$ —	\$ 2,140
Funded research and development revenue	—	—	—	—	—
Research and product development expenses	119	268	—	—	387
Selling, general and administrative expenses	388	545	385	—	1,318
Segment (loss) / profit from operations before income taxes and non-controlling interest	(582)	359	(172)	—	(395)
Segment (loss) profit	(582)	359	(172)	298	(97)
Total assets	303	2,140	1,651	—	4,094
Capital expenditures	—	90	5	—	95
Depreciation and amortization	65	21	2	—	88

Six months ended June 30, 2010

Product revenue	\$ —	\$ 2,895	\$ —	\$ —	\$ 2,895
Funded research and development revenue	774	—	—	—	774
Research and product development expenses	1,798	504	—	—	2,302
Selling, general and administrative expenses	1,173	978	555	—	2,706
Segment (loss) / profit from operations before income taxes and non-controlling interest	(2,226)	(86)	(308)	—	(2,620)
Segment (loss) profit	(2,226)	(86)	(308)	949	(1,671)
Total assets	824	1,677	865	—	3,366
Capital expenditures	—	26	—	—	26
Depreciation and amortization	204	45	8	—	257

Six months ended June 30, 2011

Product revenue	\$ —	\$ 4,679	\$ —	\$ —	\$ 4,679
Funded research and development revenue	13	—	—	—	13
Research and product development expenses	285	598	—	—	883
Selling, general and administrative expenses	781	1,078	766	—	2,625
Segment (loss) / profit from operations before					

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income taxes and non-controlling interest	(1,107)	981	(330)	—	(456)
Segment (loss) profit	(1,107)	981	(330)	553	97
Total assets	303	2,140	1,651	—	4,094
Capital expenditures	—	103	5	—	108
Depreciation and amortization	142	40	5	—	187



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The following table presents the details of "Other" segment loss:

(Dollars in thousands)	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2010	2011	2010	2011
Corporate and other (expenses) income:				
Depreciation and amortization	\$ (3)	\$ (2)	\$ (8)	\$ (5)
Salaries and Benefits	(27)	(176)	(46)	(352)
Gain on derivatives	16	29	18	73
Income tax (expense) benefit	—	—	—	—
Other expense, net	(144)	(23)	(272)	(46)
Total income (expense)	\$ (158)	\$ (172)	\$ (308)	\$ (330)

### 11. Commitments and Contingencies

#### Leases

The Company and its subsidiaries lease certain manufacturing, laboratory and office facilities. The leases generally provide for the Company to pay either an increase over a base year level for taxes, maintenance, insurance and other costs of the leased properties or the Company's allocated share of insurance, taxes, maintenance and other costs of leased properties. The leases contain renewal provisions.

The Company's future minimum rental payments required under non-cancelable operating leases are (dollars in thousands): \$299 remaining in 2011, \$484 in 2012 and \$365 in 2013 and \$260 in 2014.

#### Warranties

Below is a reconciliation of changes in product warranty liabilities:

(Dollars in thousands)	Six Months Ended	
	June 30,	
	2010	2011
Balance, January 1	\$ 21	\$ 36
Accruals for warranties issued	14	23
Settlements made (in cash or in kind)	(7)	(6)
Balance, end of period	\$ 28	\$ 53

#### Licenses

Under a 2002 NYSERDA contract, MTI Micro agreed to pay NYSERDA a royalty of 5.0% of the sales price of any product sold incorporating IP developed pursuant to the NYSERDA contract. If the product is manufactured by a New York State manufacturer, this royalty is reduced to 1.5%. Total royalties are subject to a cap equal to two times the total contract funds paid by NYSERDA to MTI Micro, and may be reduced to reflect any New York State jobs created by MTI Micro.

Under the 2010 NYSERDA contract, MTI Micro agreed to pay NYSERDA a royalty of 5.0% of the sales price of any product sold incorporating IP developed pursuant to the NYSERDA contract. The obligation commences on the first date of the first sale of these products and is in place for fifteen years. Total royalties are subject to a cap equal to three times the total contract funds paid by NYSERDA to MTI Micro. However, if the product is manufactured by a New York State manufacturer, this royalty is reduced to 1.5% and total royalties are subject to a cap equal to one times the total contract funds paid by NYSERDA to MTI Micro.

#### Employment Agreements

The Company has employment agreements with certain employees that provide severance payments, certain other payments, accelerated vesting and exercise extension periods of certain options upon termination of employment under certain circumstances, as defined in the applicable

agreements. As of June 30, 2011, the Company's potential minimum cash obligation to these employees was approximately \$709 thousand.

Royalty Commitment

On January 28, 2010, MTI Instruments entered into an Asset Purchase and Sale Agreement to acquire the tensile stage line of products from Ernest F. Fullam, Inc, a pioneering microscopy accessories company from Clifton Park, NY. As part of the acquisition, Mr. Peter Fullam joined MTI Instruments as a Product Sales Engineer and MTI Instruments purchased machinery, inventory and the rights to use the Fullam/MTI Instruments product name. Additionally, commencing with the calendar quarter ending March 31, 2010 and ending at the close of the calendar quarter ending December 31, 2012, MTI Instruments will pay Ernest F. Fullam, Inc. a royalty equal to 5% of the Gross Sales achieved on specific Fullam products. MTI Instruments paid Fullam \$3 thousand of royalties for the six month period ending June 30, 2011.

12. Subsequent Events

On July 5, 2011 the Board of Directors (the "Board") approved the adoption of the Amended and Restated 2006 Equity Incentive Plan (the "Amended Plan"), effective June 30, 2011, for the purpose of increasing the aggregate number of shares of Common Stock the Company may issue under the Amended Plan from 600,000 to 1,200,000. In addition, the Board approved the grant of 15,000 shares of fully vested restricted Common Stock (the "stock") under the Amended Plan to each of its four outside directors. Peng K. Lim, the Company's Chief Executive Officer, was granted 403,225 shares of the Stock. All expenses related to these transactions will be accounted for in the third quarter of 2011. Further details are available in the Company's Form 8K filed on July 5, 2011 with the SEC.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Unless the context requires otherwise, the terms "we," "us," and "our" refer to Mechanical Technology, Incorporated, a New York Corporation, "MTI Instruments" refers to MTI Instruments, Inc., a New York corporation and our wholly owned subsidiary, and "MTI Micro" refers to MTI MicroFuel Cells Inc., a Delaware corporation and variable interest entity that is included in these consolidated results. MTI Micro has a registered trademark in the United States for "Mobion." Other trademarks, trade names, and service marks used in this Quarterly Report on Form 10-Q are the property of their respective owners.

The following discussion of our financial condition and results of operations should be read in conjunction with the condensed consolidated financial statements and the notes thereto included in Item 1 of Part I of this Quarterly Report on Form 10-Q and the audited consolidated financial statements and the notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations for the year ended December 31, 2010 contained in our 2010 Annual Report on Form 10-K.

In addition to historical information, the following discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements. Important factors that could cause actual results to differ include those discussed in Part II, Item 1A "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q.

Overview

MTI operates in two segments: the Test and Measurement Instrumentation segment, through MTI Instruments, Inc. (MTI Instruments) and the New Energy segment conducted through MTI MicroFuel Cells, Inc. (MTI Micro).

Test and Measurement Segment – MTI Instruments is a worldwide supplier of metrology, portable balancing equipment and inspection systems. Their products use state-of-the-art technology to solve complex real world applications in numerous industries including automotive, semiconductor, solar cell manufacturing, commercial and military aviation and data storage. MTI Instruments is continuously working on ways to expand their sales reach, including expanded sales coverage throughout Europe and Asia, as well as a focus on internet marketing.

Our test and measurement segment has three product groups: Precision Instruments, Semiconductor and Solar Metrology Systems and Aviation Balancing Systems. Their products consist of electronic, computerized gauging instruments for position, displacement and vibration applications for the design, manufacturing/production and test and research markets; metrology tools for wafer characterization of semiconductor and solar wafers; tensile stage systems for materials testing in research and industrial settings; and engine balancing and vibration analysis systems for both military and commercial aircraft.

New Energy Segment - MTI Micro is developing and commercializing off-the-grid power solutions for various portable electronic devices. MTI Micro's patented proprietary direct methanol fuel cell (dmfc) technology platform called Mobion®, converts 100% methanol fuel to usable electricity capable of providing continuous power as long as necessary fuel flows are maintained. This proprietary fuel cell power solution consists of two primary components integrated into an easily manufactured device: the direct methanol fuel cell power engine, the Mobion® Chip, and methanol fuel cartridges. The methanol used by the technology is fully biodegradable. It has demonstrated power density of over 100 mW/cm<sup>2</sup>, while producing more than 1,800 Wh/kg or 1.4 Wh/cc of fuel from its direct methanol fuel feed, which we believe is the highest performance achieved in a vapor-feed, passive water management direct methanol fuel cell, which should allow for more dense micro fuel cell systems. For these reasons, we believe this technology offers a superior power solution compared to current lithium-ion and similar rechargeable battery systems currently used by original equipment manufacturers (OEMs) and branded partners in many handheld devices, such as military sensors, global positioning systems (gps), smart phones, digital cameras, portable gaming devices, e-readers and power accessories for other portable devices. We believe this platform will facilitate further developments of numerous electronic product advantages, including smaller size, environmental friendliness, greatly extended run-time of current portable devices, and simplicity of design, all critical for commercialization in the consumer market. We also believe this platform can be implemented as three different product options: a handheld power generator for consumer and military electronic devices, a snap-on or attached power accessory, or an embedded fuel cell in handheld devices.

MTI Micro's Mobion® technology is protected by a patent portfolio that includes 54 US patents and 5 Patent Cooperation Treaty Foreign patents issued, covering five key technologies and manufacturing areas, one of which is the process that eliminates the need for active water recirculation pumps or the inclusion of water as a fuel dilutant. The water required for the electrochemical process is transferred internally within the Mobion® Chip from the site of water generation on the air-side of the cell. This internal flow of water takes place without the need for any pumps, complicated re-circulation loops or other micro-plumbing tools.

MTI Micro has strategic agreements with a global Japanese consumer electronics company; with a U.S. based developer and marketer of universal chargers, and a letter of intent with Duracell, part of the Procter & Gamble Company. In the second half of 2010, we entered into a third phase developmental contract with a global power tool manufacturer, as well as a firm fixed price contract for the development of proof of concept fuel cells for technical testing with a United States Department of Defense agency. Additionally, during the first quarter of 2011, we completed the work required under the DOE grant awarded for the period January 8, 2009 through March 30, 2011. The objective of the grant was to demonstrate and field test a commercially viable one watt dmfc charger for consumer electronic devices. As part of this objective, MTI Micro field tested 75 units to various users, including 17 OEM's, 33 individuals, 21 military agencies and four governmental agencies. We have achieved all technical performance targets required by the DOE under this grant; this field testing has concluded and the final report to the DOE may be found at <http://www.mtimicrofuelcells.com/news/events.asp>. Further testing is being conducted by OEMs and governmental agencies, which may result in the signing of product customization contracts or purchase orders with MTI Micro for final production of our Mobion® platform.

#### Liquidity

Our cash requirements depend on numerous factors, including operating results of our test and measurement instrumentation segment, completion of MTI Micro's portable power source products development activities, MTI Micro's ability to commercialize its portable power source products, market acceptance of MTI Micro's portable power source products, and other factors.

Several key indicators of our liquidity are summarized in the following table:

(Dollars in thousands)	Six Months Ended	
	June 30, 2010	2011
Cash and cash equivalents	\$ 811	\$ 1,592
Working capital	846	1,852
Net income (loss)	(1,671)	97
Net cash provided (used) in operating activities	(938)	124
Purchase of property, plant and equipment	26	108

From inception through June 30, 2011, we have incurred an accumulated deficit of \$122 million. Management believes that MTI Instruments will continue to generate positive cash flows and operating results, and will continue to be able to fund its current operations. Furthermore, due to ongoing Corporate cost savings initiatives, the Company currently believes that the positive cash flows generated by MTI Instruments will be sufficient enough to cover the parent company's operations for the foreseeable future.

We expect that MTI Micro will continue to incur losses for the foreseeable future as it continues micro fuel cell product development and commercialization programs. We expect that their losses will fluctuate from year to year and that such fluctuations may be substantial as a result of, among other factors, operating results, the availability of equity financing, and the ability to attract government funding resources to offset research and development costs. At present, the Company does not expect to continue to provide further long-term equity funding for MTI Micro's development and commercialization of its portable power source products. MTI Micro had cash and cash equivalents as of June 30, 2011 of \$138 thousand. MTI Micro has and will seek additional capital from external sources to fund future development and operations.

On February 9, 2011, MTI Micro entered into Amendment No. 1 to Common Stock and Warrant Purchase Agreement (the "Amendment") with Counter Point. The Amendment allowed MTI Micro to draw down \$450 thousand in exchange for 6,428,574 shares of MTI Micro Common Stock at a purchase price per share of \$0.07, and 1,285,715 warrants to purchase shares of Micro Common Stock equal to 20% of the shares of Micro Common Stock purchased under the Purchase Agreement at an exercise price of \$0.07 per share. The funds were available through monthly "Closings", with \$90 thousand drawn down for the month of February, \$45 thousand for the month of April, \$210 thousand for the month of May, and the final \$105 thousand for the month of August.

Dr. Robb and Counter Point beneficially held approximately 41.4% of the outstanding common shares and warrants of MTI Micro of December 31, 2010, and as of June 30, 2011 hold 43.7% of the outstanding common shares and warrants of MTI Micro. When MTI Micro issued and sold the remainder of the 6,428,574 shares under the Amendment in August, the Company holds an aggregate of 48.0% of the outstanding common shares and 53.6% of the outstanding common shares and warrants of MTI Micro. Further dilution could occur if the outstanding warrants or options were exercised.



MTI Micro will be required to raise additional funds through issuance of its equity or debt, government funding and/or explore other strategic alternatives including but not limited to the sale of assets and/or the company. If MTI Micro is unable to raise additional financing, it may be required to discontinue or severely reduce its business operations. In order to conserve cash and extend operations while additional necessary financing is being pursued, MTI Micro has reduced operating expenses effective January 1, 2011, and has taken further cost reducing measures in the third quarter to date. There is no assurance that funds raised in any financing will be sufficient, that the financing will be available on terms favorable to us or to existing stockholders and at such times as required, or that we will be able to obtain the additional financing required for the continued operation and growth of MTI Micro. During the last thirty four months, MTI Micro has raised \$5.2 million in external debt and equity financing. If we raise additional funds by issuing equity securities, MTI Micro's stockholders will experience further dilution. Additional debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity financing may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, reduce the scope of or eliminate some or all of our research and development programs, or discontinue our portable power source business. Without other resources, management currently believes it will need to make significant changes to, curtail or discontinue MTI Micro's operations before the end of the third quarter of 2011.

### Results of Operations

Results of Operations for the Three and Six Months Ended June 30, 2011 Compared to the Three and Six Months Ended June 30, 2010.

#### Test and Measurement Instrumentation Segment

##### Product Revenue

Product revenue in our test and measurement instrumentation business for the three months ended June 30, 2011 increased in comparison to the same period in 2010 by \$513 thousand, or 31.5%, to \$2.14 million. This rise in revenue was due to higher capacitance product sales combined with an increase in shipments of new aviation balancing systems. For the quarter ended June 30, 2011, the top customer for the segment was a distributor in China which accounted for \$250 thousand, or 11.7%, of the second quarter revenue. In 2010, the top commercial customer during the second quarter accounted for \$155 thousand, or 9.5%, of the quarterly revenue. The U.S. Air Force was the top government customer for the quarter ended June 30, 2011 and accounted for \$246 thousand, or 11.5%, of the second quarter revenue. In 2010, the U.S. Air Force was also the top government customer during the second quarter and accounted for \$588 thousand, or 36.1%, of the quarterly revenue. The decrease in U.S. Air Force activity was attributed to reduced activity under the multi-year maintenance contract (as detailed below).

Product revenue in our test and measurement instrumentation business for the six months ended June 30, 2011 increased in comparison to the same period in 2010 by \$1.78 million, or 61.6%, to \$4.68 million. This revenue increase was attributed to higher aviation balancing system shipments combined with a rise in capacitance product sales. For the six month period ended June 30, 2011, the top customer for the segment was a U.S. military aerospace equipment subcontractor which accounted for \$801 thousand, or 17.1%, of the year-to-date revenue. In 2010, the top commercial customer during the first six months accounted for \$237 thousand, or 8.2%, of the year-to-date revenue. The U.S. Air Force was the top government customer for the six months ended June 30, 2011 and accounted for \$358 thousand, or 7.7%, of the year-to-date revenue. In 2010, the U.S. Air Force was also the top government customer during the first six months and accounted for \$603 thousand, or 20.8%, of the year-to-date revenue. The decrease in U.S. Air Force activity was attributed to reduced activity under the multi-year maintenance contract (as detailed below).

Information regarding government contracts included in product revenue is as follows:

(Dollars in thousands)

Contract (1)	Expiration	Revenues for the		Revenue	Total
		Three Months Ended June 30, 2010	Three Months Ended June 30, 2011	Contract to Date June 30, 2011	Contract Orders Received to Date June 30, 2011
\$2.3 million Air Force New PBS-4100 Systems	07/28/2010 (2)	\$ —	\$ —	\$ 2,166	\$ 2,166
\$6.5 million Air Force Retrofit and Maintenance of PBS-4100 Systems	9/27/2014 (3)	\$ 583	\$ 120	\$ 2,028	\$ 2,303





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(Dollars in thousands)

Contract (1)	Expiration	Revenues for the Six Months Ended June 30,		Revenue Contract	Total Contract Orders Received
		2010	2011	to Date June 30, 2011	to Date June 30, 2011
\$2.3 million Air Force New PBS-4100 Systems	07/28/2010 (2)	\$ —	\$ —	\$ 2,166	\$ 2,166
\$6.5 million Air Force Retrofit and Maintenance of PBS-4100 Systems	9/27/2014 (3)	\$ 587	\$ 203	\$ 2,028	\$ 2,303

(1) Contract values represent maximum potential values and may not be representative of actual results.

(2) Date represents expiration of contract, including all three option extensions.

(3) Date represents expiration of contract, including all four potential option extensions.

### Cost of Product Revenue

Cost of product revenue in our test and measurement instrumentation business for the three months ended June 30, 2011 increased in comparison to the same period in 2010 by \$124 thousand, or 17.1%, to \$850 thousand. This increase corresponded to the 31.5% rise in product revenue for the quarter. Gross profit, as a percentage of product revenue, increased to 60%, compared to 55% for the same period in 2010. This improvement was attributed to lower inventory overhead and a reduction in reserve expense for potentially obsolete or slow-moving stock.

Cost of product revenue in our test and measurement instrumentation business for the six months ended June 30, 2011 increased in comparison to the same period in 2010 by \$518 thousand, or 40.8%, to \$1.79 million. This increase corresponded to the 61.6% rise in product revenue for the quarter. Gross profit, as a percentage of product revenue, increased to 62%, compared to 56% for the same period in 2010. This rise is attributed to lower inventory overhead and a reduction in reserve expense for potentially obsolete or slow-moving stock.

### Unfunded Research and Product Development Expenses

Unfunded research and product development expenses in our test and measurement segment rose \$27 thousand, or 11.2%, to \$268 thousand for the three months ended June 30, 2011 from \$241 thousand for the three months ended June 30, 2010. This increase is attributable to additional staffing costs in the segment's engineering department in conjunction with on-going product development initiatives.

Unfunded research and product development expenses in our test and measurement segment rose \$94 thousand, or 18.7%, to \$598 thousand for the six months ended June 30, 2011 from \$504 thousand for the six months ended June 30, 2010. This increase is attributable to additional staffing costs in the segment's engineering department and higher external spending in conjunction with on-going product development initiatives.

### Selling, General and Administrative Expenses

Selling, general and administrative expenses in our test and measurement segment increased by \$39 thousand, or 7.7%, to \$545 thousand for the three months ended June 30, 2011 from \$506 thousand for the three months ended June 30, 2010. This increase is due to the hiring of additional sales staff and higher sales commissions corresponding to the increased quarterly sales volume.

Selling, general and administrative expenses in our test and measurement segment increased by \$100 thousand, or 10.2%, to \$1.08 million for the six months ended June 30, 2011 from \$978 thousand for the six months ended June 30, 2010. This increase is due to the hiring of additional sales staff, higher travel costs and a rise in sales commissions corresponding to the aforementioned growth in sales.

### New Energy Segment

#### Funded Research and Development Revenue

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We had no funded research and development revenue in our new energy segment for the three months ended June 30, 2011 in comparison to \$418 thousand for the same period in 2010. The final billings for both the DOE and NYSERDA grants were done in the first quarter of 2011 and no further grants have been obtained in the second quarter, while 2010 represented a full quarter of DOE billings.

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Funded research and development revenue in our new energy segment for the six months ended June 30, 2011 was \$13 thousand in comparison to \$774 thousand for the same period in 2010. The final billings for both the DOE and NYSERDA grants were done in the first quarter of 2011 for approximately \$6 thousand each, as the majority of work was finished in 2010, while 2010 represented a two full quarters of DOE billings.

Information regarding our contracts included in funded research and development revenue is as follows:

(Dollars in thousands)

Contract	Expiration (1)	Revenue Six Months Ended		Revenue Six Months Ended June 30, 2011		Revenue Contract to Date June 30, 2011
		June 30, 2010	% of 2010 Total	June 30, 2011	% of 2011 Total	
\$2.9 million DOE (2)	3/31/2011	\$ 774	100%	\$ 6	50%	\$ 2,997
\$296 thousand NYSERDA	12/31/10	\$ —	—%	\$ 7	50%	\$ 296

(1) Dates represent expiration of contract, not date of final billing.

(2) The DOE contract was initially awarded for \$2.4 million, effective for January 2009 through March 31, 2010. An extension to this was granted in April 2010, increasing total funding to \$2.99 million and an expiration date of March 31, 2011. The DOE contract is a cost share contract.

### Research and Product Development Expenses

Research and product development expenses in our new energy segment for the three months ended June 30, 2011 decreased by \$812 thousand, from \$931 thousand to \$119 thousand. This change was the result of the decrease in billings under the current DOE and NYSERDA contracts, as mentioned above in Funded Research and Development Revenue.

Research and product development expenses in our new energy segment for the six months ended June 30, 2011 decreased by \$1.5 million, from \$1.8 million to \$285 thousand. This change was the result of the decrease in billings under the current DOE and NYSERDA contracts, as mentioned above in Funded Research and Development Revenue.

### Selling, General and Administrative Expenses

Selling, general and administrative expenses in our new energy segment increased by \$322 thousand to \$388 thousand for the three months ended June 30, 2011 from \$66 thousand for the three months ended June 30, 2010. This increase was primarily the result of the decrease in allocations of administrative costs at governmental rates, as no contracts were open for the quarter in 2011.

Selling, general and administrative expenses in our new energy segment decreased by \$392 thousand to \$781 thousand for the six months ended June 30, 2011 from \$1.2 million for the six months ended June 30, 2010. This decrease was primarily the result the recognition of the stock option expense in relation to options granted to MTI Micro employees in the first quarter of 2010 equaling \$833 thousand, while stock option expense for 2011 was only \$10 thousand.

### Results of Consolidated Operations

#### Operating Loss

Operating loss decreased by \$288 thousand, from a \$703 thousand loss for the three months ended June 30, 2010 to a loss of \$415 thousand for the three months ended June 30, 2011 as a result of the factors noted above.

Operating loss decreased by \$2.0 million, from a \$2.6 million loss for the six months ended June 30, 2010 to a loss of \$605 thousand for the six months ended June 30, 2011 as a result of the factors noted above.

#### Gain on Derivatives.

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Our gain on derivatives related to the freestanding warrants issued in conjunction with our December 2006 capital raise increased by \$13 thousand, to \$29 thousand for the three months ended June 30, 2011 compared with \$16 thousand for the three months ended June 30, 2010. The increase in derivative gain was attributable to valuation changes of the underlying warrants using the Black-Scholes pricing model.

Our gain on derivatives related to the freestanding warrants issued in conjunction with our December 2006 capital raise increased by \$55 thousand, to \$73 thousand for the six months ended June 30, 2011 compared with \$18 thousand for the six months ended June 30, 2010. The increase in derivative gain was attributable to valuation changes of the underlying warrants using the Black-Scholes pricing model.

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### Income Tax Benefit

Our effective income tax rate for the three and six months ended June 30, 2010 and 2011 was 0.00%. This is primarily the result of losses generated by operations, changes in the valuation allowance, and permanent differences for derivative valuations. The valuation allowance against our deferred tax assets at June 30, 2011 and at December 31, 2010 was \$28.0 and \$27.8 million, respectively. We determined that it was more likely than not that ultimate recognition of certain deferred tax assets would not be realized.

### Net Losses Attributed to Non-Controlling Interests (of MTI Micro)

The net loss attributed to non-controlling interests increased from \$263 thousand for the three months ended June 30, 2010 to \$298 thousand for the three months ended June 30, 2011. This is a result of the increase in the percentage of ownership by the non-controlling interests.

The net loss attributed to non-controlling interests decreased from \$949 thousand for the six months ended June 30, 2010 to \$553 thousand for the six months ended June 30, 2011. This is a result of the decrease in the losses of MTI Micro's results of operations, which was \$2.2 million loss for 2010, and \$1.1 million loss for 2011 and an increase in ownership percentage by the non-controlling interests.

### Net Income (Loss)

Net loss for the three month period ended June 30, 2011 was \$97 thousand compared to a loss of \$437 thousand for the same period in 2010. This decrease in losses can be attributed to the MTI Instruments' quarterly net income of \$359 thousand for 2011, as compared to a net income of \$49 thousand for 2010. This is a result of the factors discussed above.

Net income for the six month period ended June 30, 2011 was \$97 thousand compared to a loss of \$1.7 million for the same period in 2010. This shift from a loss situation to an income position can be attributed to the MTI Instruments' six month net income of \$981 thousand for 2011, as compared to a net loss of \$86 thousand for 2010, and a reduction of the net loss for MTI Micro from \$2.2 million in 2010 to \$1.1 million for 2011. These are a result of the factors discussed above.

### Capital Resources

Our working capital was \$1.9 million at June 30, 2011, compared to the December 31, 2010 balance of \$1.5 million.

At June 30, 2011, our order backlog was \$1.7 million compared to \$2.13 million at December 31, 2010.

Our inventory turnover ratios and accounts receivable days sales outstanding for the trailing twelve month periods and their changes at June 30, 2010 and 2011 are as follows:

	2010	2011	Change
Inventory turnover	2.7	4.0	1.3
Average accounts receivable days sales outstanding	41	41	—

The increase in inventory turnover is driven by a 2% decrease in average inventory balances on 43% higher sales volume. Lower inventory balances have been a result of better managed production quantities and inventory purchases over the last twelve months.

The average accounts receivable days sales outstanding for the last twelve months compared to the previous twelve months, remaining consistent.

Net cash provided by operating activities was \$124 thousand for the six months ended June 30, 2011 compared with cash used by operating activities of \$938 thousand in 2010. This cash use decrease of \$1.1 million reflects a net decrease in cash expenditures to fund operations together with net balance sheet changes reflecting the timing of cash payments and receipts.

There were \$108 thousand in capital expenditures during the six months ended June 30, 2011, compared with \$26 thousand in capital expenditures in the same period for 2010. There were no outstanding commitments for capital expenditures as of June 30, 2011. We expect to finance any potential future expenditures with current cash and cash equivalents as appropriate and to the extent available.



Off-Balance Sheet Arrangements

There were no off balance sheet arrangements.

Contractual Payment Obligations

We have entered into various agreements that result in contractual payment obligations in future years. These contracts include financing arrangements for current manufacturing, laboratory and office facility lease agreements. The following table summarizes cash payments that we are committed to make under the existing terms of contracts to which we are a party as of June 30, 2011. There are no contingencies as of June 30, 2011.

Contractual Payment Obligations (in thousands)	Less			More	Total
	Than 1 Year	1-3 Years	3-5 Years	Than 5 Years	
Operating Leases / Total Contractual Payment Obligations	\$ 299	\$ 1,110	\$ —	\$ —	\$ 1,409

Critical Accounting Policies and Significant Judgments and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. Note 2 to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2010 includes a summary of our most significant accounting policies. There have been no material changes to the critical accounting policies previously disclosed in our 2010 Annual Report on Form 10-K. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of assets and liabilities. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventories, income taxes, stock-based compensation and derivatives. Management bases its estimates on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Periodically, we review our critical accounting estimates with the Audit Committee of our Board of Directors.

Statement Concerning Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Any statements contained in this Form 10-Q that are not statements of historical fact may be forward-looking statements. When we use the words “anticipate,” “estimate,” “plans,” “projects,” “continuing,” “ongoing,” “expects,” “management believes,” “we believe,” “we intend,” “should,” “could,” “may,” “will” and similar phrases, we are identifying forward-looking statements. Forward-looking statements involve risks, uncertainties, estimates and assumptions which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. Important factors that could cause these differences include the following:

- the need to raise additional financing for MTI Micro;
- our history of recurring net losses and the risk of continued net losses;
- our independent auditors have included a going concern paragraph in their opinion;
- sales revenue growth of our test and measurement instrumentation business may not be achieved;
- the dependence of our test and measurement instrumentation business on a small number of customers and potential loss of government funding;
- our ownership position in MTI Micro may be further reduced as a result of our plans to seek external financing for MTI Micro’s operations;
- risks related to developing Mobion® direct methanol fuel cells and whether MTI Micro will ever successfully develop reliable and commercially viable Mobion® fuel cell solutions;
- MTI Micro’s or their customer’s portable products that utilize the portable power source products may not be accepted by the market;
- our inability to build and maintain relationships with our customers;
- MTI Micro’s lack of experience in manufacturing fuel cell systems on a commercial basis;





- MTI Micro's dependence on others for the production requirements of their portable power source products;
- MTI Micro's dependence on manufacturing subcontractors to maintain high levels of productivity and satisfactory delivery schedules for the portable power source products;
- MTI Micro's dependence on third-party suppliers for most of the manufacturing equipment necessary to produce their portable power source products;
- MTI Micro's inability to obtain sufficient quantities of components and other materials, including platinum and ruthenium, necessary for the production of their portable power source products;
- MTI Micro's dependence on OEMs integrating Mobion® fuel cell systems into their devices;
- our lack of long-term purchase commitments from our customers and the ability of our customers to cancel, reduce, or delay orders for our products;
- risks related to protection and infringement of intellectual property;
- MTI Micro's inability to commercialize their proposed portable power source solutions and develop new product solutions on a timely basis;
- our inability to develop and utilize new technologies that address the needs of our customers;
- intense competition in the direct methanol fuel cell and instrumentation businesses;
- change in policies by U.S. or foreign governments that hinder, disrupt or economically disadvantage international trade;
- the impact of future exchange rate fluctuations;
- the uncertainty of the U.S. economy;
- the historical volatility of our stock price;
- the cyclical nature of the electronics industry;
- failure of our strategic alliances to achieve their objectives or perform as contemplated and the risk of cancellation or early termination of such alliance by either party;
- product liability or defects;
- risks related to the flammable nature of methanol as a fuel source;
- the loss of services of one or more of our key employees or the inability to hire, train, and retain key personnel;
- significant periodic and seasonal quarterly fluctuations in our results of operations;
- our dependence on sole suppliers or a limited group of suppliers for both business segments;
- risks related to the limitation of the use of our net operating losses in the event of certain ownership changes; and
- other factors discussed under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 and in Part II, Item 1A of this Quarterly Report on Form 10-Q.

Forward-looking statements speak only as of the date they are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions, or changes in other factors affecting forward-looking information, except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

#### Item 4. Controls and Procedures

The certifications of our Chief Executive Officer and Acting Chief Financial Officer attached as Exhibits 31.1 and 31.2 to this Quarterly Report on Form 10-Q include, in paragraph 4 of such certifications, information concerning our disclosure controls and procedures and internal control over financial reporting. Such certifications should be read in conjunction with the information contained in this Item 4 for a more complete understanding of the matters covered by such certifications.

##### (a) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and our acting chief financial officer, evaluated the effectiveness of MTI's disclosure controls and procedures as of June 30, 2011. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. We recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and we necessarily apply our judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the valuation of our disclosure controls and procedures as of June 30, 2011, our chief executive officer and acting chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.



(b) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, during our fiscal quarter ended June 30, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

At any point in time, we may be involved in various lawsuits or other legal proceedings. Such lawsuits could arise from the sale of products or services or from other matters relating to our regular business activities, compliance with various governmental regulations and requirements, or other transactions or circumstances. We do not believe there are any such proceedings presently pending that could have a material adverse effect on our financial condition. See Note 11 to our Condensed Consolidated Financial Statements for further information.

Item 1A. Risk Factors

Our Annual Report on Form 10-K for the year ended December 31, 2010 contains a detailed discussion of our risk factors. In addition, information regarding risk factors appears in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Statement Concerning Forward Looking Statements". These risk factors could cause our actual results to differ materially from those stated in forward-looking statements contained in this document and elsewhere. Pursuant to the instructions to this Quarterly Report on Form 10-Q, we have provided below only those risk factors that are new or that have been materially amended since the time that we filed our 2010 Annual Report on Form 10-K. Accordingly, the information presented below should be read in conjunction with the risk factors and information disclosed in our 2010 Annual Report on Form 10-K.

We have incurred recurring net losses and anticipate continued net losses as we execute our commercialization plan for our portable power source business.

We have incurred recurring net operating losses, including losses of \$2.6 million and \$605 thousand for the six months ended June 30, 2010 and the six months ended June 30, 2011, respectively. As a result of ongoing operating losses, we had an accumulated deficit of \$122 million as of June 30, 2011. Subject to cash availability, we expect to continue to make expenditures and incur expenses in our new energy segment as we develop and commercialize our proposed portable power source products; develop our manufacturing, sales, and distribution networks; implement internal systems and infrastructure; and hire additional personnel. As a result, we expect to continue to incur significant losses in our new energy segment as we execute our plan to commercialize our portable power source business and may never achieve or maintain profitability. If we continue to incur substantial losses and are unable to secure additional financing in our new energy segment, we could be forced to discontinue or curtail our business operations; sell assets at unfavorable prices; or merge, consolidate, or combine with a company with greater financial resources in a transaction that may be unfavorable to us.

At present, the Company does not expect to continue to fund MTI Micro on a long-term basis. Based on the Company's projected cash requirements for operations and capital expenditures and its current cash and cash equivalents of \$1.5 million at June 30, 2011, management believes it will have adequate resources to fund its current operations, excluding MTI Micro operations, but there can be no assurance. Since the company will no longer fund MTI Micro on a long-term basis, MTI Micro has sought other sources of funding, but there is no assurance that such funding will be available on acceptable terms, if at all.

We currently do not have sufficient funds to commercialize our portable power source products.

In order to continue full commercialization of its micro fuel cell solution, MTI Micro will need to do one or more of the following to raise additional resources, or reduce its cash requirements:

- obtain additional government or private funding for its direct methanol fuel cell research, development, manufacturing readiness and commercialization;
- receive a purchase order from government agencies or OEM's MTI Micro is currently working with;
- secure additional debt or equity financing; or
- further reduce its current expenditure run-rate.



There is no guarantee that resources will be available to MTI Micro on terms acceptable to it, or at all, or that such resources will be received in a timely manner, if at all, or that MTI Micro will be able to reduce its expenditure run-rate without materially and adversely affecting its business. MTI Micro had cash and cash equivalents as of June 30, 2011 of \$138 thousand. Subsequent to June 30, 2011, MTI Micro received the final drawdown of \$105 thousand available under the Amendment.

In order to conserve cash and extend operations while we pursue additional necessary financing, we have made reductions to operating expenses at MTI Micro in the first half of 2011 and further reductions in the beginning of the third quarter. There is no assurance that funds raised in any future financing arrangements will be sufficient, that the financing will be available on terms favorable to us or to existing stockholders and at such times as required, or that we will be able to obtain the additional financing required for the continued operation and growth of our business. During the last thirty four months, MTI Micro has raised \$5.2 million in external debt and equity financing. If we raise additional funds by issuing equity securities, MTI Micro's stockholders will experience further dilution. Additional debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity financing may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, reduce the scope of or eliminate some or all of our research and development programs, or discontinue our portable power source business. Without other resources, management currently believes it will need to make significant changes to, curtail or discontinue MTI Micro's operations before the end of the third quarter of 2011.

Our ownership position in MTI Micro has been reduced as a result of external financing for MTI Micro's operations, which could limit our ability to control the operations.

As of June 30, 2011, we owned approximately 48.4% of MTI Micro's common stock issued. On February 9, 2011, MTI Micro entered into Amendment No. 1 to Common Stock and Warrant Purchase Agreement (the "Amendment") with Counter Point. The Amendment allowed MTI Micro to draw down \$450 in exchange for 6,428,574 shares of MTI Micro Common Stock at a purchase price per share of \$0.07, and 1,285,715 warrants to purchase shares of Micro Common Stock equal to 20% of the shares of Micro Common Stock purchased under the Purchase Agreement at an exercise price of \$0.07 per share. The funds were available through monthly "Closings", with the final drawdown occurring in August of \$105 thousand. Dr. Robb and Counter Point beneficially held approximately 47.2% of the outstanding common shares of MTI Micro of December 31, 2010, and as of June 30, 2011 hold 49.4% of the outstanding common shares of MTI Micro. After the final drawdown and sale of the 6,428,574 shares under the Amendment that occurred in August, the Company holds an aggregate of 48.0% of the outstanding common shares. Further dilution could occur if the outstanding warrants or options were exercised.

In addition, we do not currently expect to advance additional long-term resources to MTI Micro to fund its continued direct methanol fuel cell development and commercialization programs. Instead, MTI Micro will seek additional capital from external sources to fund future development and operations. Depending on the valuation of MTI Micro at the time of future financings, if any, our ownership position could be substantially diluted, and we may no longer have sufficient equity to control the operations of MTI Micro. If MTI Micro is unable to secure the necessary additional external financing, we may be forced to substantially downsize or eliminate its operations.

We may experience an ownership change which would result in a limitation of the use of our net operating losses.

As of June 30, 2011, it is estimated that MTI has net operating loss carryforwards of approximately \$51.1 million and MTI Micro has net operating loss carryforwards of approximately \$16.3 million. As a result of the conversion of the bridge notes in December 2009, MTI no longer maintained an 80% or greater ownership in MTI Micro. Thus, MTI Micro is no longer included in Mechanical Technology, Inc. and Subsidiaries' consolidated federal and combined New York State tax returns, effective December 9, 2009. Also as a result of the conversion of the bridge note, MTI Micro may have experienced a Section 382 ownership change, which would further reduce their NOLs by an estimated \$6.69 million. Our ability to utilize both the MTI and MTI Micro NOL carryforwards, including any future NOL carryforwards that may arise, may be limited by Section 382 of the Internal Revenue Code of 1986, as amended, if we or MTI Micro undergo any further "ownership changes" as a result of subsequent changes in the ownership of our outstanding common stock pursuant to the exercise of the warrants, the conversion of the MTI Micro's bridge notes, or otherwise. A corporation generally undergoes an "ownership change" when the ownership of its stock, by value, changes by more than 50 percentage points over any three-year testing period. In the event of an ownership change, Section 382 imposes an annual limitation on the amount of post-ownership change taxable income a corporation may offset with pre-ownership change NOL carryforwards and certain recognized built-in losses.



Acting Chief Financial Officer