MECHANICAL TECHNOLOGY INC Form 10-Q November 15, 2010

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 10-Q

| X                            | QUARTERLY REPORT PURSUANT TO SECTION 13 OF ACT OF 1934 FOR THE QUARTERLY PERIOD ENDED September 30, 20 OR |                                    |
|------------------------------|---|------------------------------------|
| 0                            | TRANSITION REPORT PURSUANT TO SECTION 13 OF ACT OF 1934   | 2 15(d) OF THE SECURITIES EXCHANGE |
|                              | FOR THE TRANSITION PERIOD FROM  | TO                                 |
|                              | Mechanical Technology, Inc. (Exact name of registrant as specified in its                                 | •                                  |
|                              |   |                                    |
| New York                     | 0-6890  | 14-1462255                         |
| (State or Other Jurisdiction | (Commission File Number)  | (IRS Employer                      |
| of Incorporation)            |   | Identification No.)                |
|                              | 431 New Karner Road, Albany, New Yor  | rk 12205                           |
|                              | (Address of registrant's principal executive  | office)                            |
|                              | (518) 533-2200  |                                    |

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 x No o

(Registrant's telephone number, including area code)

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 o No o

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 o Accelerated filer o Non-accelerated filer o Smaller reporting company x (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 o No x

The number of shares of common stock, par value of \$0.01 per share, outstanding as of November 12, 2010 was 4,771,658.

## $\label{eq:mechanical} \mbox{MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES} \\ \mbox{INDEX}$

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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, 2009 and September 30, 2010 (Unaudited)

| (Dollars in thousands)   | Decer<br>2009 | mber 31,  | Septe | mber 30,  |
|--|---------------|-----------|-------|-----------|
| Assets   |               |           |       |           |
| Current Assets:  |               |           |       |           |
| Cash and cash equivalents  | \$            | 785       | \$    | 574       |
| Accounts receivable, less allowance for doubtful accounts (\$92 in 2009 and \$0 in 2010) |               | 1,142     |       | 1,017     |
| Inventories, net   |               | 789       |       | 890       |
| Prepaid expenses and other current assets  |               | 166       |       | 274       |
| Total Current Assets   |               | 2,882     |       | 2,755     |
| Property, plant and equipment, net:  |               | 859       |       | 519       |
| Total Assets   | \$            | 3,741     | \$    | 3,274     |
| Liabilities and Stockholder's Equity (Deficit) Current Liabilities:                      |               |           |       |           |
| Accounts payable   | \$            | 323       | \$    | 410       |
| Accrued liabilities  |               | 1,290     |       | 1,184     |
| Deferred revenue   |               | 16        |       | 18        |
| Income taxes payable   |               | 20        |       | 20        |
| Total Current Liabilities  |               | 1,649     |       | 1,632     |
| Long-Term Liabilities:   |               |           |       |           |
| Derivative liability   |               | 70        |       | 56        |
| Total Long-Term-Liabilities  |               | 70        |       | 56        |
| Total Liabilities  |               | 1,719     |       | 1,688     |
| Stockholders' Equity (Deficit):  |               |           |       |           |
| Common stock, par value \$0.01 per share, authorized 75,000,000; 5,776,750 issued in     |               |           |       |           |
| both 2009 and 2010   |               | 58        |       | 58        |
| Paid-in-capital  |               | 133,286   |       | 134,629   |
| Accumulated deficit  |               | (120,724) |       | (122,761) |
| Common stock in treasury, at cost, 1,005,092 shares in both 2009 and 2010                |               | (13,754)  |       | (13,754)  |
| Total MTI stockholders' deficit  |               | (1,134)   |       | (1,828)   |
| Noncontrolling interest  |               | 3,156     |       | 3,414     |
| Total Equity   |               | 2,022     |       | 1,586     |
| Total Liabilities and Stockholders' Equity   | \$            | 3,741     | \$    | 3,274     |

#### Mechanical Technology, Incorporated and Subsidiaries Condensed Consolidated Statements of Operations (Unaudited) For the Three and Nine Months Ended September 30, 2009 and 2010

| (Dollars in thousands, except per share)              | Sep | Three Months Ended<br>September 30, |     | Nine Months End<br>September 30, |     |         |     |         |
|---|-----|-------------------------------------|-----|----------------------------------|-----|---------|-----|---------|
|   | 200 | 9                                   | 201 | 0                                | 200 | 9       | 201 | 0       |
| Product revenue                                       | \$  | 1,439                               | \$  | 1,646                            | \$  | 4,298   | \$  | 4,541   |
| Funded research and development revenue               |     | 526                                 |     | 334                              |     | 1,584   |     | 1,109   |
| Total revenue   |     | 1,965                               |     | 1,980                            |     | 5,882   |     | 5,650   |
| Operating costs and expenses:                         |     |                                     |     |                                  |     |         |     |         |
| Cost of product revenue                               |     | 584                                 |     | 662                              |     | 1,877   |     | 1,933   |
| Research and product development expenses:            |     |                                     |     |                                  |     |         |     |         |
| Funded research and product development               |     | 1,054                               |     | 537                              |     | 3,176   |     | 2,134   |
| Unfunded research and product development             |     | 292                                 |     | 292                              |     | 1,028   |     | 998     |
| Total research and product development expenses       |     | 1,346                               |     | 829                              |     | 4,204   |     | 3,132   |
| Selling, general and administrative expenses          |     | 698                                 |     | 1,169                            |     | 2,343   |     | 3,874   |
| Operating loss  |     | (663)                               |     | (680)                            |     | (2,542) |     | (3,289) |
| Interest expense                                      |     | (69)                                |     | _                                |     | (171)   |     |         |
| (Gain) Loss on derivatives                            |     | (150)                               |     | (4)                              |     | (118)   |     | 14      |
| Other (expense) income, net                           |     | (20)                                |     | (21)                             |     | 4       |     | (50)    |
| Loss before income taxes and non-controlling interest |     | (902)                               |     | (705)                            |     | (2,827) |     | (3,325) |
| Income tax benefit                                    |     | _                                   |     | _                                |     | 199     |     |         |
| Net loss, net of tax                                  |     | (902)                               |     | (705)                            |     | (2,628) |     | (3,325) |
| Plus: Net loss attributed to noncontrolling interest  |     | 18                                  |     | 339                              |     | 56      |     | 1,288   |
| Net loss attributed to MTI                            | \$  | (884)                               | \$  | (366)                            | \$  | (2,572) | \$  | (2,037) |
|   |     |                                     |     |                                  |     |         |     |         |
| Loss per Share attributed to MTI (Basic and Diluted): |     |                                     |     |                                  |     |         |     |         |
| Loss per share attributed to MTI                      | \$  | (.19)                               | \$  | (.08)                            | \$  | (.54)   | \$  | (.43)   |

#### MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES

Condensed Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Loss (Unaudited) For the Nine Months Ended September 30, 2009 and 2010

| (Dollars in thousands)               | Nine Months Ended<br>September 30,<br>2009 |           | 2010 |           |
|--------------------------------------|--|-----------|------|-----------|
| Common Stock                         |  |           |      |           |
| Balance, beginning                   | \$   | 58        | \$   | 58        |
| Balance, ending                      | \$   | 58        | \$   | 58        |
|                                      |  |           |      |           |
| Paid-In Capital                      | ф  | 122 701   | Ф    | 100.007   |
| Balance, beginning                   | \$   | 132,781   | \$   | 133,286   |
| Stock-based compensation             |  | 440       |      | 1,343     |
| Balance, ending                      | \$   | 133,221   | \$   | 134,629   |
| Accumulated Deficit                  |  |           |      |           |
| Balance, beginning                   | \$   | (117,570) | \$   | (120,724) |
| Net loss                             | Ť  | (2,572)   | *    | (2,037)   |
| Balance, ending                      | \$   | (120,142) | \$   | (122,761) |
|                                      | ,  | (,- :-)   | · ·  | (===,:==) |
| Treasury Stock                       |  |           |      |           |
| Balance, beginning                   | \$   | (13,754)  | \$   | (13,754)  |
| Balance, ending                      | \$   | (13,754)  | \$   | (13,754)  |
|                                      |  |           |      |           |
| Noncontrolling Interest (NCI)        |  |           |      |           |
| Balance, beginning                   | \$   | 11        | \$   | 3,156     |
| Equity contribution                  |  | _         |      | 1,546     |
| Net loss attributed to NCI           |  | (56)      |      | (1,288)   |
| Balance, ending                      | \$   | (45)      | \$   | 3,414     |
|                                      |  |           |      |           |
| Total Stockholders' Equity (deficit) |  |           |      |           |
| Balance, ending                      | \$   | (662)     | \$   | (1,828)   |
|                                      |  |           |      |           |
| Total Comprehensive (Loss)           |  |           |      |           |
| Net loss                             | \$   | (2,572)   | \$   | (2,037)   |
| Other comprehensive (loss)           |  | _         |      | <u>—</u>  |
| Total comprehensive (loss)           | \$   | (2,572)   | \$   | (2,037)   |

#### MECHANICAL TECHNOLOGY, INCORPORATED AND SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows (Unaudited) For the Nine Months Ended September 30, 2009 and 2010

| (Dollars in thousands)  | Nine Months Ended September 30, |         |      |         |
|---|---------------------------------|---------|------|---------|
|   | 2009                            |         | 2010 |         |
| Operating Activities  |                                 |         |      |         |
| Net loss  | \$                              | (2,628) | \$   | (3,325) |
| Adjustments to reconcile net loss to net cash used by operating activities: |                                 |         |      |         |
| (Gain) loss on derivatives  |                                 | 118     |      | (14)    |
| Depreciation and amortization   |                                 | 486     |      | 371     |
| Stock based compensation  |                                 | 440     |      | 1,343   |
| Changes in operating assets and liabilities:                                |                                 |         |      |         |
| Accounts receivable   |                                 | (128)   |      | 125     |
| Inventories   |                                 | 442     |      | (101)   |
| Prepaid expenses and other current assets                                   |                                 | (32)    |      | (108)   |
| Accounts payable  |                                 | 35      |      | 87      |
| Income taxes payable  |                                 | (216)   |      | _       |
| Deferred revenue  |                                 | 2       |      | 2       |
| Accrued liabilities – related parties                                       |                                 | (314)   |      | _       |
| Accrued liabilities   |                                 | 171     |      | (106)   |
| Net cash used by operating activities                                       |                                 | (1,624) |      | (1,726) |
|   |                                 |         |      |         |
| Investing Activities  |                                 |         |      |         |
| Purchases of property, plant and equipment                                  |                                 | _       |      | (31)    |
| Net cash used by investing activities                                       |                                 | _       |      | (31)    |
|   |                                 |         |      |         |
| Financing Activities  |                                 |         |      |         |
| Net borrowings on related party debt  |                                 | 1,210   |      |         |
| Proceeds from capital raise and warrants issued                             |                                 | _       |      | 1,546   |
| Net cash used in financing activities                                       |                                 | 1,210   |      | 1,546   |
| Increase (Decrease) in cash and cash equivalents                            |                                 | (414)   |      | (211)   |
| Cash and cash equivalents - beginning of period                             |                                 | 1,662   |      | 785     |
| Cash and cash equivalents - end of period                                   | \$                              | 1,248   | \$   | 574     |

## 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 New Energy segment, which is conducted through MTI MicroFuel Cells Inc. ("MTI Micro"), a majority owned subsidiary, and the Test and Measurement Instrumentation segment, which is conducted through MTI Instruments, Inc. ("MTI Instruments"), a wholly owned subsidiary.

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 and addressing the multi-billion dollar portable electronics market. As of September 30, 2010, the Company owned approximately 52.29% of MTI Micro's outstanding common stock.

MTI Instruments was incorporated in New York on March 8, 2000. MTI Instruments 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. Our 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; and engine vibration analysis systems for both military and commercial aircraft.

#### 2. Liquidity and Going Concern

The Company has incurred significant losses as it continued to fund the direct methanol fuel cell product development and commercialization programs of its majority owned subsidiary, MTI Micro, and had a consolidated accumulated deficit of \$123 million and working capital of \$1,123 thousand at September 30, 2010. Because of these losses, limited current cash and cash equivalents, negative cash flows and accumulated deficit, there is 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.

At present, the Company does not expect to continue to fund MTI Micro on a long-term basis. 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 \$574 thousand at September 30, 2010. Management believes that MTI Instruments will continue to generate positive cash flows and be able to fund its current operations. However, no assurance can be provided regarding MTI and MTI Instrument's ability to continue as a going concern given the level of uncertainty involved with the parent company's operations.

Since the Company will no longer fund MTI Micro on a long-term basis, the subsidiary 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. General Electric Pension Trust, an employee benefit plan trust, is a passive limited partner in Counter Point. 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. Through September 30, 2010, \$1.55 million has been drawn against this Purchase Agreement. See Note 9 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. As of September 30, 2010, the entire grant has been billed and paid by the DOE. 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, of which \$548 thousand has been billed and \$46 thousand remains.

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 \$204 thousand for work performed to date. No funds have been received to date.

On October 26, 2010, MTI Micro was awarded a 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 is expected to provide an additional \$100 thousand in revenues for MTI Micro in the fourth quarter of 2010.

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 of the Company's direct methanol fuel cell research, development, manufacturing readiness and commercialization;
- 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 as of September 30, 2010 of \$142 thousand. Subsequent to September 30, 2010, MTI Micro has drawn down an additional \$340 thousand under the Purchase Agreement with an additional \$113 thousand of available borrowing capacity through the Purchase Agreement. In addition, subsequent to September 30, 2010, MTI Micro received \$35 thousand from the DOE for billings relative to work performed through September 30, 2010, and has an additional \$46 thousand under the extension as work is performed. In order to conserve cash and extend operations while we pursue any additional necessary financing, we reduced operating expenses in the first quarter of 2010. Without other resources, management currently believes it will have adequate funds to operate MTI Micro through the end of 2010.

#### 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. These financial statements include the accounts of MTI and its subsidiaries, including MTI Micro. All intercompany transactions and balances have been eliminated in the accompanying financial statements. 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, 2009.

The information presented in the accompanying condensed consolidated balance sheet as of December 31, 2009 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 and nine months ended September 30, 2010.

#### 5. Accounts Receivable and Allowance for Doubtful Accounts

Receivable balances consist of the following at:

| (Dollars in thousands)                |       |       | Test ar         | ıd     |              |       |
|---------------------------------------|-------|-------|-----------------|--------|--------------|-------|
|                                       |       |       | Measu           | rement | Consolidated |       |
|                                       | New E | nergy | Instrumentation |        | Totals       |       |
| December 31, 2009                     |       |       |                 |        |              |       |
| U.S. and State Government             | \$    | 143   | \$              | _      | \$           | 143   |
| Commercial                            |       | _     |                 | 1,091  |              | 1,091 |
| Total Accounts Receivable             |       | 143   |                 | 1,091  |              | 1,234 |
| Less: Allowance for Doubtful Accounts |       | _     |                 | (92)   |              | (92)  |
| Total                                 | \$    | 143   | \$              | 999    | \$           | 1,142 |
|                                       |       |       |                 |        |              |       |
| September 30, 2010                    |       |       |                 |        |              |       |
| U.S. and State Government             | \$    | 239   | \$              | 53     | \$           | 292   |
| Commercial                            |       | _     |                 | 725    |              | 725   |
| Total Accounts Receivable             |       | 239   |                 | 778    |              | 1,017 |
| Less: Allowance for Doubtful Accounts |       | _     |                 | _      |              | _     |
| Total                                 | \$    | 239   | \$              | 778    | \$           | 1,017 |

For the nine months ended September 30, 2009 and 2010, a single commercial customer represented 12.5% and 8.5%, respectively, and a U.S. governmental agency represented 16.9% and 18.4%, respectively, of the Company's instrumentation segment product revenue. As of December 31, 2009 and September 30, 2010, the largest commercial customer represented 0.0% and 12.3%, respectively, and the U.S. governmental agency represented 0.0% and 6.8%, respectively, of the Company's instrumentation segment accounts receivable.

As of December 31, 2009 and September 30, 2010, 100% and 15% of the accounts receivable of the new energy segment is due from a U.S. governmental agency. As of December 31, 2009 and September 30, 2010, 85% of the accounts receivable is due from a New York State Agency.

#### 6. Inventories, net

Inventories, net consist of the following at:

| (Dollars in thousands) | December |     | Sep | tember |
|------------------------|----------|-----|-----|--------|
|                        | 31, 2009 |     | 30, | 2010   |
| Finished goods         | \$       | 465 | \$  | 259    |
| Work in process        |          | 193 |     | 262    |
| Raw materials, net     |          | 131 |     | 369    |
|                        | \$       | 789 | \$  | 890    |

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#### 7. Income Taxes

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

|   | Three Mon<br>September |         | Nine Mont<br>September |         |
|---|------------------------|---------|------------------------|---------|
|   | 2009                   | 2010    | 2009                   | 2010    |
| Federal statutory tax rate                            | 34.00%                 | 34.00%  | 34.00%                 | 34.00%  |
| State taxes, net of federal tax effect                | 5.00                   | 5.97    | 5.77                   | 6.04    |
| Change in valuation allowance                         | (33.37)                | (39.78) | (38.34)                | (40.18) |
| Minimum State Income Tax YTD – Estimated              | _                      | _       | .12                    |         |
| Reversal of Uncertain Tax Position for NYS Settlement | _                      | _       | 6.86                   | _       |
| Permanent tax difference on derivative valuation      | (5.65)                 | (.19)   | (1.42)                 | .14     |
| Other, net  | .02                    | _       | .05                    | _       |
| Tax rate  | 0.00%                  | 0.00%   | 7.04%                  | 0.00%   |

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

| (Dollars in thousands)                    | Three Months<br>Ended |          |      | Nine Months<br>Ended |       |   |
|---|-----------------------|----------|------|----------------------|-------|---|
|   | Septer                | nber 30, | Se   | ptembe               | r 30, |   |
|   | 2009                  | 2010     | 20   | 09                   | 2010  |   |
| Operations before noncontrolling interest |                       |          |      |                      |       |   |
| Federal                                   | \$                    | — \$     | \$   | _                    | - \$  |   |
| State                                     |                       | _        | —    | 199                  |       |   |
| Total                                     | \$                    | — \$     | _ \$ | 199                  | \$    | _ |

The valuation allowance at December 31, 2009 and September 30, 2010 was \$26.4 million and \$27.7 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 September 30, 2010, the Company had unused Federal net operating loss carry forwards of approximately \$67 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 September 30, 2010. The Federal net operating loss carry forwards, if unused, will begin to expire in 2010.

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 losses. As of September 30, 2010, 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.

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 carry forwards to MTI, for an amount equivalent to its built in loss amount in MTI's investment in MTI Micro's stock.

As the 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 carry forwards at the time of 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 operating losses will expire prior to utilization.

As of September 30, 2010, it is estimated that MTI has net operating loss carryforwards of approximately \$52.3 million and MTI Micro has net operating loss carryforwards of approximately \$14.7 million (with a portion, as noted above, being subject to IRC Section 382 limitation).

On February 2, 2009, the New York State Department of Taxation and Finance notified the Company that it was no longer going to pursue the issue associated with potentially not permitting the Company to file combined tax returns for the period 2002 through 2004. The Company had recorded a \$213 thousand long-term liability for this issue. In settlement of this issue, the Company paid New York State approximately \$19 thousand, and recognized the benefit of the reversal of this liability of \$194 thousand in the first quarter of 2009.

#### 8. Stockholders' Equity (Deficit)

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

| Common Shares      | Year Ended<br>December 31, 2009 | Nine Months Ended<br>September 30, 2010 |
|--------------------|---------------------------------|---|
|                    |                                 |   |
| Balance, beginning | 5,776,750                       | 5,776,750                               |
| Balance, ending    | 5,776,750                       | 5,776,750                               |
| Treasury Stock     |                                 |   |
| Balance, beginning | 1,005,092                       | 1,005,092                               |
| Balance, ending    | 1,005,092                       | 1,005,092                               |

#### Warrants/ Derivatives

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, which expire in December 2011.

The Company held or has outstanding the following derivative financial instruments:

| Derivatives issued:   | December 31, 2009 | September 30,<br>2010 | Expiration |
|---|-------------------|-----------------------|------------|
| Warrants, exercisable beginning June 20, 2007, to purchase the Company's  |                   |                       |            |
| common stock issued to three investors at a purchase price of \$18.16 per |                   |                       |            |
| share   | 378,472           | 378,472               | 12/19/2011 |

The estimated fair value of this warrant at time of issue was determined using a Black-Scholes Option Pricing model and assumptions similar to those used for valuing the Company's employee stock-based compensation.

On January 1, 2009, we adopted a newly issued accounting standard regarding disclosure of derivative instruments. 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, | September 30, |
|--|--------------|---------------|
|  | 2009         | 2010          |
| Expected life of option (number of days) | 730          | 456           |
| Risk-free interest rate                  | 1.14%        | 0.42%         |
| Expected volatility of stock             | 162.7%       | 206.6%        |
| Expected dividend yield                  | None         | None          |

The fair value of the warrants at December 31, 2009 and September 30, 2010 was \$70 thousand and \$56 thousand, respectively. Gains and losses on derivatives are included in "(Gain) loss on derivatives" in the Consolidated Statement of Operations. During the nine month periods ending September 30, 2009 and 2010 the Company recognized a (gain) loss on derivatives of \$(118) thousand and \$14 thousand, respectively.

The Company accounts for derivative instruments and embedded derivative instruments in accordance with Accounting Standards Codification 815, Derivatives and Hedging. The standard 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.

#### Reservation of Shares

The Company has reserved common shares for future issuance as of September 30, 2010 as follows:

| Stock options outstanding            | 897,208   |
|--------------------------------------|-----------|
| Stock options available for issuance | 119,341   |
| Warrants outstanding                 | 378,472   |
| Number of common shares reserved     | 1,395,021 |

On September 19, 2009, the Company amended its 2006 Equity Incentive Plan to increase the shares authorized for issuance by 350,000 shares.

#### Loss per Share

The following table sets forth the reconciliation of the numerators and denominators of the basic and diluted per share computations for the three and nine months ended September 30:

| (Dollars in thousands, except shares)              | Three Months Ended September 30, 2009 2010 |       |      |        | Months Endember 30, | ded<br>2010 |      |          |
|--|--|-------|------|--------|---------------------|-------------|------|----------|
| Numerator:   | 2009                                       |       | 2010 |        | 2005                | ,           | 2010 | ,        |
| Net loss   | \$   | (884) | \$   | (366)  | \$                  | (2,572)     | \$   | (2,037)  |
| Denominator:                                       |  |       |      |        |                     |             |      |          |
| Basic EPS:   |  |       |      |        |                     |             |      |          |
| Common shares outstanding, beginning of period     | 4,77                                       | 1,658 | 4,7  | 71,658 | 4,                  | 771,658     | 4    | ,771,658 |
| Less Weighted average non-vested restricted stock  |  |       |      | _      |                     | _           |      | _        |
| Denominator for basic earnings per common shares – |  |       |      |        |                     |             |      |          |
| Weighted average common shares                     | 4,77                                       | 1,658 | 4,7  | 71,658 | 4,                  | 771,658     | 4.   | ,771,658 |

| Diluted EPS:   |           |           |           |           |
|--|-----------|-----------|-----------|-----------|
| Common shares outstanding, beginning of period                 | 4,771,658 | 4,771,658 | 4,771,658 | 4,771,658 |
| Less weighted average non-vested restricted stock due to anti- |           |           |           |           |
| dilutive effect  | _         |           | _         |           |
| Denominator for diluted earnings per common shares –           |           |           |           |           |
| Weighted average common shares                                 | 4,771,658 | 4,771,658 | 4,771,658 | 4,771,658 |
|  |           |           |           |           |
|  | 11        |           |           |           |
|  |           |           |           |           |

Not included in the computation of earnings per share, assuming dilution for the three and nine months ended September, 2009, were options to purchase 751,663 shares of the Company's common stock, warrants to purchase 378,472 shares of the Company's common stock, and options to purchase 17,939 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 nine months ended September 30, 2010, were options to purchase 897,208 shares of the Company's common stock, warrants to purchase 378,472 shares of the Company's common stock, and options to purchase 33,050,720 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.

#### 9. Issuance of Stock, Warrants and Stock Options by Subsidiary

#### Common Stock Issued - MTI Micro

MTI Micro was formed on March 26, 2001, and as of September 30, 2010, the Company owned approximately 52.3% of MTI Micro's outstanding common stock, or 75,049,937 shares, and 58.1% on a fully diluted basis, which includes 32,904,136 warrants outstanding in addition to the outstanding shares of common stock.

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. Dr. Robb and Counter Point beneficially held approximately 29.5% of the fully-diluted common stock of MTI Micro as of December 31, 2009, and as of September 30, 2010 hold an aggregate of approximately 39.6% of the fully-diluted common stock of MTI Micro.

Pursuant to the Purchase Agreement, MTI Micro may issue and sell to Counter Point up to 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 shall occur over multiple closings (each, a "Closing"). Seven Closings occurred through September 30, 2010, with MTI Micro raising \$1.55 million from the sale of 22,095,243 shares of Micro Common Stock and Warrants to purchase 4,419,048 shares of Micro Common Stock to Counter Point. Subsequent Closings may occur thereafter at MTI Micro's sole discretion during the Closing Periods upon delivery of written notice by MTI Micro to Counter Point of its desire to consummate a Closing, and Counter Point's acceptance of such offer under the Purchase Agreement on the terms agreed upon with MTI Micro. In the event the terms and conditions of the Purchase Agreement no longer reflect current market conditions or otherwise, either party may elect not to participate in a Subsequent Closing(s) or the parties may amend the Purchase Agreement on mutually agreeable terms with respect to such Subsequent Closing(s). If MTI Micro was to issue and sell the remainder of the 28,571,429 shares under the Purchase Agreement, and the remainder of the 5,714,286 warrants under the Purchase Agreement were exercised, as well as all warrants currently outstanding as detailed below, the Company would continue to hold an aggregate of 55.8% of the fully-diluted capital stock of MTI Micro. Further dilution to the Company's ownership percentage could occur if and when MTI Micro Stock Options are exercised.

The following table represents all MTI Micro common stock shares issued.

|   |     |       | MTI        |           | Non Controll |           |              |
|---|-----|-------|------------|-----------|--------------|-----------|--------------|
|   | Av  | erage |            | Ownership |              | Ownership |              |
|   | Pri | ice   | Shares     | %         | Shares       | %         | Total Shares |
| Balance at 12/31/2007                         |     |       | 46,030,453 | 96.3      | 1,750,345    | 3.7       | 47,780,798   |
|   |     |       |            |           |              |           |              |
| Stock issued for MTI Options to MFC Employees | \$  | 0.45  | 31,469     |           |              |           | 31,469       |
|   |     |       |            |           |              |           |              |
| Transfer of Plug Power securities to MFC      | \$  | 0.35  | 7,319,181  |           |              |           | 7,319,181    |
| Ü   |     |       |            |           |              |           |              |
| Conversion of Loan Receivable                 | \$  | 0.24  | 10,416,667 |           |              |           | 10,416,667   |
|   | ·   |       | ., .,      |           |              |           | , ,,,,,,,,   |
| Balance at 12/31/08                           |     |       | 63,797,770 | 97.3      | 1,750,345    | 2.7       | 65,548,115   |
|   |     |       | J-,,,,,,   | ,         | -, 0,0 10    |           | 52,210,110   |
| Stock issued for MTI Options to MFC Employees | \$  | 0.14  | 10,501     |           |              |           | 10,501       |
| Stock issued for MTT Options to MFC Employees | \$  | 0.14  | 10,501     |           |              |           | 10,501       |

| 0.07 | 11,241,666 |                                  | 44,622,759                                  |  | 55,864,425   |
|------|------------|----------------------------------|---|--|--|
|      | 75,049,937 | 61.8                             | 46,373,104                                  | 38.2   | 121,423,041  |
| 0.07 |            |                                  | 22,095,243                                  |  | 22,095,243   |
|      | 75,049,937 | 52.29                            | 68,468,347                                  | 47.71  | 143,518,284  |
| 2    |            |                                  |   |  |  |
| (    | ).07       | 75,049,937<br>0.07<br>75,049,937 | 75,049,937 61.8<br>0.07<br>75,049,937 52.29 | 75,049,937 61.8 46,373,104<br>0.07 22,095,243<br>75,049,937 52.29 68,468,347 | 75,049,937 61.8 46,373,104 38.2<br>22,095,243<br>75,049,937 52.29 68,468,347 47.71 |

#### 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 become exercisable on December 9, 2010 and expire on December 8, 2017. The warrants have been accounted for as an equity distribution of \$2,030 thousand, including warrants to the Company with a value of \$1,974 thousand 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.

On January 11, February 11, March 4, and May 12, July 19, August 26 and September 9, 2010, MTI Micro issued warrants to Counter Point to purchase 471,429, 471,429, 942,857, 942,857, 628,572, 314,286, and 647,620 shares, respectively, of MTI Micro Stock at an exercise price of \$0.07 per share, under the Purchase Agreement. The warrants become 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.

#### Stock Based Compensation

On September 15, 2010, MTI Micro granted 6,330,520 options to its employees from the 2009 Micro Stock Option Plan. The options vest 50% on the grant date and 50% ratably on a quarterly basis over the next three years. The fair value of these stock options granted was estimated at the date of grant using a Black-Scholes Option Pricing model consistent with the accounting standards.

The key inputs and assumptions used to estimate the fair value of these stock options were as follows:

| Option term                   | 5 years |
|-------------------------------|---------|
| Volatility                    | 115%    |
| Risk-free interest rate       | 1.46%   |
| Dividend yield                | 0%      |
| Fair value per option granted | \$ 0.07 |

The amount of expense recognized for this grant was \$173 thousand for the three and nine month periods ending September 30, 2010. Share-based compensation expense recognized in the Consolidated Statement of Operations is based on awards ultimately expected to vest, therefore, awards are reduced for estimated forfeitures. The accounting standard requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company has assumed a forfeiture rate of 5% for this grant.

On February 10, 2010, MTI Micro granted 28,296,800 options to its employees from the 2009 Micro Stock Option Plan. The options vest 50% on the grant date and 50% ratably on a quarterly basis over the next three years. The fair value of these stock options granted was estimated at the date of grant using a Black-Scholes Option Pricing model consistent with the accounting standards.

The key inputs and assumptions used to estimate the fair value of these stock options were as follows:

| Option term                   | 5 years |
|-------------------------------|---------|
| Volatility                    | 115%    |
| Risk-free interest rate       | 2.39%   |
| Dividend yield                | 0%      |
| Fair value per option granted | \$ 0.07 |

The amount of expense recognized for this grant was \$1.01 million for the nine month period ending September 30, 2010. Share-based compensation expense recognized in the Consolidated Statement of Operations is based on awards ultimately expected to vest, therefore, awards are reduced for estimated forfeitures. The accounting standard requires forfeitures to be estimated at the time of grant and revised, if necessary,

in subsequent periods if actual forfeitures differ from those estimates. The Company has assumed a forfeiture rate of 5% for this grant.

#### 10. 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 | 2 Lo | evel 3 | Sept. 30<br>2010 |    |
|---------------------------------|-------|---|---------|------|--------|------------------|----|
| Financial Liabilities:          |       |   |         |      |        |                  |    |
| Derivative liability            | \$    | _ | \$      | - \$ | 56     | \$               | 56 |
| Total fair value of liabilities | \$    | _ | \$      | - \$ | 56     | \$               | 56 |

The following is a rollforward of Level 3 fair value instruments for the twelve months ended December 31, 2009:

(Dollars in thousands)

|                           |                 |    | Total    | \     |                    |   |                 |    |
|---------------------------|-----------------|----|----------|-------|--------------------|---|-----------------|----|
|                           | ъ.              |    | (Gains   |       | D I                |   | г "             |    |
|                           | Beginning       |    | Losses   |       | Purchases,         |   | Ending          |    |
|                           | Balance as      |    | Realized |       | Issuances,         |   | Balance as      |    |
|                           | of              |    | and      |       | Sales              |   | of              |    |
| Instrument                | Jan. 1,<br>2009 |    | Unrea    | lized | and<br>Settlements | s | Dec. 31<br>2009 | ,  |
| Derivative liability      | \$              | 41 | \$       | 29    | \$                 | _ | \$              | 70 |
| Total Level 3 instruments | \$              | 41 | \$       | 29    | \$                 | _ | \$              | 70 |

The following is a rollforward of Level 3 fair value instruments for the nine months ended September 30, 2010:

(Dollars in thousands)

|            | Total (Gains) |            |            |
|------------|---------------|------------|------------|
| Beginning  | Losses        | Purchases, | Ending     |
| Balance as |               | Issuances, | Balance as |
| of         | Realized and  | Sales      | of         |

|                           | Jan. 1, |    |     |         | and         | Sept. 3 | 30, |
|---------------------------|---------|----|-----|---------|-------------|---------|-----|
| Instrument                | 2010    |    | Unr | ealized | Settlements | 2010    |     |
| Derivative liability      | \$      | 70 | \$  | (14)    | \$          | _ \$    | 56  |
| Total Level 3 instruments | \$      | 70 | \$  | (14)    | \$          | — \$    | 56  |

#### 11. 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.

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 noncontrolling interests in a consolidated subsidiary. In addition, segments' non-cash items include any depreciation and amortization in reported profit or loss.

| (Dollars in thousands)                           | Ne | w Energy | Me | Test and<br>Measurement<br>Instrumentation Other |    | er           | Reconciling<br>Items |       |    | ndensed<br>nsolidated<br>als |
|--|----|----------|----|--|----|--------------|----------------------|-------|----|------------------------------|
| Three months ended September 30, 2009            | ф  |          | ф  | 1 420  | ф  |              | Φ.                   |       | ф  | 1 120                        |
| Product revenue                                  | \$ |          | \$ | 1,439  | \$ | _            | \$                   | _     | \$ | 1,439                        |
| Funded research and development revenue          |    | 526      |    |  |    | _            |                      | _     |    | 526                          |
| Research and product development expenses        |    | 1,129    |    | 217  |    |              |                      | _     |    | 1,346                        |
| Selling, general and administrative expenses     |    | (35)     |    | 384  |    | 349          |                      | _     |    | 698                          |
| Segment loss from operations before income taxes |    |          |    |  |    |              |                      |       |    |                              |
| and noncontrolling interest                      |    | (688)    |    | 130  |    | (344)        |                      | _     |    | (902)                        |
| Segment (loss) profit                            |    | (688)    |    | 130  |    | (344)        |                      | 18    |    | (884)                        |
| Total assets                                     |    | 1,704    |    | 1,783  |    | 1,616        |                      | (774) |    | 4,329                        |
| Depreciation and amortization                    |    | 116      |    | 25   |    | 10           |                      | _     |    | 151                          |
| Three months ended September 30, 2010            |    |          |    |  |    |              |                      |       |    |                              |
| Product revenue                                  | \$ | _        |    | 1,646  |    | _            |                      | _     |    | 1,646                        |
| Funded research and development revenue          |    | 334      |    | _  |    | _            |                      | _     |    | 334                          |
| Research and product development expenses        |    | 605      |    | 224  |    | _            |                      | _     |    | 829                          |
| Selling, general and administrative expenses     |    | 439      |    | 476  |    | 254          |                      | _     |    | 1,169                        |
| Segment (loss) / profit from operations before   |    |          |    |  |    |              |                      |       |    | ,                            |
| income taxes and noncontrolling interest         |    | (719)    |    | 179  |    | (164)        |                      | _     |    | (704)                        |
| Segment (loss) profit                            |    | (719)    |    | 179  |    | (164)        |                      | 338   |    | (366)                        |
| Total assets                                     |    | 866      |    | 1,814  |    | 594          |                      | _     |    | 3,274                        |
| Capital expenditures                             |    | _        |    | 5  |    | _            |                      | _     |    | 5                            |
| Depreciation and amortization                    |    | 94       |    | 18   |    | 3            |                      | _     |    | 115                          |
| Nine months ended September 30, 2009             |    |          |    |  |    |              |                      |       |    |                              |
| Product revenue                                  | \$ |          | \$ | 4,298  | \$ |              | \$                   |       | \$ | 4,298                        |
| Funded research and development revenue          | φ  | 1,584    | φ  | 4,290  | φ  | <del>_</del> | φ                    | _     | φ  | 1,584                        |
| Research and product development expenses        |    | 3,451    |    | 753  |    |              |                      |       |    | 4,204                        |
| Selling, general and administrative expenses     |    | 2        |    | 1,254  |    | 1,087        |                      | _     |    | 2,343                        |
| Segment (loss) / profit from operations before   |    | 2        |    | 1,234  |    | 1,007        |                      |       |    | 2,343                        |
| income taxes and noncontrolling interest         |    | (0.107)  |    | 105  |    | (905)        |                      |       |    | (2.927)                      |
|  |    | (2,127)  |    | 105  |    | (805)        |                      | =     |    | (2,827)                      |
| Segment (loss) profit                            |    | (2,127)  |    | 105  |    | (606)        |                      | 56    |    | (2,572)                      |
| Total assets                                     |    | 1,704    |    | 1,783  |    | 1,616        |                      | (774) |    | 4,329                        |
| Depreciation and amortization                    |    | 372      |    | 79   |    | 35           |                      | _     |    | 486                          |
| Nine months ended September 30, 2010             |    |          |    |  |    |              |                      |       |    |                              |
| Product revenue                                  | \$ | _        |    | 4,541  |    | _            |                      | _     |    | 4,541                        |
| Funded research and development revenue          |    | 1,108    |    | _  |    | _            |                      | _     |    | 1,108                        |

| Research and product development expenses      | 2,404   | 728   | _     | _     | 3,132   |
|--|---------|-------|-------|-------|---------|
| Selling, general and administrative expenses   | 1,612   | 1,454 | 809   | _     | 3,875   |
| Segment (loss) / profit from operations before |         |       |       |       |         |
| income taxes and noncontrolling interest       | (2,945) | 93    | (473) | _     | (3,325) |
| Segment (loss) profit                          | (2,945) | 93    | (473) | 1,288 | (2,037) |
| Total assets                                   | 866     | 1,814 | 594   | _     | 3,274   |
| Capital expenditures                           | _       | 31    |       | _     | 31      |
| Depreciation and amortization                  | 296     | 63    | 12    | _     | 371     |
|  |         |       |       |       |         |
|  | 15      |       |       |       |         |
|  |         |       |       |       |         |

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

| (Dollars in thousands)                 | Three Months Ended September 30, |       |      |       | Nine Months Ended<br>September 30, |       |      |       |
|--|----------------------------------|-------|------|-------|------------------------------------|-------|------|-------|
|  | 2009                             |       | 2010 |       | 2009                               |       | 2010 |       |
| Corporate and other (expenses) income: |                                  |       |      |       |                                    |       |      |       |
| Depreciation and amortization          | \$                               | (10)  | \$   | (3)   | \$                                 | (35)  | \$   | (12)  |
| Interest income                        |                                  | 18    |      | _     |                                    | 54    |      |       |
| (Gain) loss on derivatives             |                                  | (150) |      | (4)   |                                    | (118) |      | 14    |
| Income tax (expense) benefit           |                                  | _     |      |       |                                    | 199   |      |       |
| Other expense, net                     |                                  | (202) |      | (157) |                                    | (706) |      | (475) |
| Total income (expense)                 | \$                               | (344) | \$   | (164) | \$                                 | (606) | \$   | (473) |

#### 12. 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): \$136 remaining in 2010, \$321 in 2011 and \$273 in 2012 and \$283 in 2013 and \$270 for 2014 and thereafter.

#### Warranties

Below is a reconciliation of changes in product warranty liabilities:

| (Dollars in thousands)                | Nine Mont | Nine Months Ended |      |      |  |  |
|---------------------------------------|-----------|-------------------|------|------|--|--|
|                                       | September | September 30,     |      |      |  |  |
|                                       | 2009      |                   | 2010 |      |  |  |
| Balance, January 1                    | \$        | 31                | \$   | 21   |  |  |
| Accruals for warranties issued        |           | 21                |      | 23   |  |  |
| Settlements made (in cash or in kind) |           | (12)              |      | (17) |  |  |
| Balance, end of period                | \$        | 40                | \$   | 27   |  |  |

#### 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 September 30, 2010, the Company's potential minimum cash obligation to these employees was approximately \$687 thousand.

As of September 30, 2010, MTI and their subsidiaries had an accrual on their books for the 2010-11 bonus payment to Peng Lim, MTI CEO and President, of \$58 thousand.

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#### 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 Micro" refers to MTI MicroFuel Cells Inc., a Delaware corporation and our majority owned subsidiary, and "MTI Instruments" refers to MTI Instruments, Inc., a New York corporation and our wholly owned subsidiary. We have 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, 2009 contained in our 2009 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, as well as those risk factors in our 2009 Annual Report on Form 10-K.

#### Overview

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

New Energy Segment - MTI Micro is developing and commercializing off-the-grid power solutions for various portable electronic devices. Our patented proprietary direct methanol fuel cell technology platform, called Mobion, converts 100% methanol fuel to usable electricity capable of providing continuous power as long as necessary fuel flows are maintained. Our proprietary fuel cell power solution consists of two primary components integrated in an easily manufactured device: the direct methanol fuel cell power engine, which we refer to as our Mobion Chip, and methanol fuel cartridges. The methanol used by the technology is fully biodegradable. We have demonstrated power density of over 84 mW/cm 2, while producing more than 1,800 Wh/kg or 1.4 Wh/cc of fuel from its direct methanol fuel feed. For these reasons, we believe our technology offers a superior power solution compared to current lithium-ion and similar rechargeable battery systems currently used by original equipment manufacturers and branded partners, or OEMs, in many handheld electronic devices, such as smart phones, mobile phone accessories, digital cameras, portable gaming devices, e-readers and other portable devices. We believe our 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, and can be implemented as three different product options: a handheld power generator for consumer electronic devices, a snap-on or attached power accessory, or an embedded fuel cell in handheld devices.

Our Mobion technology is protected by a patent portfolio that includes 57 patents and 65 active U.S. patent applications 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.

We currently have 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 have 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 second half of 2010, we have deployed production ready units for evaluation and field testing with ten leading OEMs and seven governmental agencies, including multiple agencies within the Department of Defense. If the field testing is successful, we believe our OEMs and governmental agencies may sign supply agreements or product customization contracts with MTI Micro for final production of our Mobion platform.

Test and Measurement Segment – MTI Instruments is a worldwide supplier of metrology, portable balancing equipment and inspection systems for semiconductor wafers. Our 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. We are continuously working on ways to expand our sales reach, including more sales coverage in Europe and the Far East, as well as a focus on internet marketing. We have industry recognized customer service and have worked with hundreds of companies worldwide.

Our test and measurement segment has three product groups: general dimensional gauging, semiconductor/solar and aviation. Our products consist of electronic, computerized gauging instruments for position, displacement and vibration applications for the design, manufacturing and test markets; metrology tools for wafer characterization of semiconductor and solar wafers; and engine balancing and vibration analysis systems for both military and commercial aircraft.

#### Liquidity

Our cash requirements depend on numerous factors, including completion of our portable power source products development activities, our ability to commercialize our portable power source products, market acceptance of our portable power source products, and other factors.

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

|   | Nine Months Ended |           |      |         |  |  |
|---|-------------------|-----------|------|---------|--|--|
| (Dollars in thousands)                    | Sept              | ember 30, |      |         |  |  |
|   | 2009              | )         | 2010 |         |  |  |
| Cash and cash equivalents                 | \$                | 1,248     | \$   | 574     |  |  |
| Working capital (deficit)                 |                   | (1,545)   |      | 1,123   |  |  |
| Net loss attributed to MTI                |                   | (2,572)   |      | (2,037) |  |  |
| Net cash used in operating activities     |                   | (1,624)   |      | (1,726) |  |  |
| Purchase of property, plant and equipment |                   | _         |      | 31      |  |  |

From inception through September 30, 2010, we have incurred an accumulated deficit of \$123 million, and we expect to incur losses for the foreseeable future as we continue micro fuel cell product development and commercialization programs. We expect that losses will fluctuate from year to year and that such fluctuations may be substantial as a result of, among other factors, our 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 fund over the long-term MTI Micro's development and commercialization of its portable power source products. MTI Micro had cash and cash equivalents as of September 30, 2010 of \$142 thousand.

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. Dr. Robb and Counter Point beneficially held approximately 29.5% of the fully-diluted common stock of MTI Micro of December 31, 2009, and as of September 30, 2010 hold an aggregate of approximately 39.6% of the fully-diluted common stock of MTI Micro.

Pursuant to the Purchase Agreement, MTI Micro may issue and sell to Counter Point up to 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 shall occur over multiple closings (each, a "Closing"). Seven Closings have occurred through September 30, 2010, with MTI Micro raising \$1.55 million from the sale of 22,095,243 shares of Micro Common Stock and Warrants to purchase 4,419,048 shares of Micro Common Stock to Counter Point. Subsequent Closings may occur thereafter at MTI Micro's sole discretion during the Closing Periods upon delivery of written notice by MTI Micro to Counter Point of its desire to consummate a Closing, and Counter Point's acceptance of such offer under the Purchase Agreement on the terms agreed upon with MTI Micro. In the event the terms and conditions of the Purchase Agreement no longer reflect current market conditions or otherwise, either party may elect not to participate in a Subsequent Closing(s) or the parties may amend the Purchase Agreement on mutually agreeable terms with respect to such Subsequent Closing(s). If MTI Micro were to issue and sell the remainder of the 28,571,429 shares under the Purchase Agreement, the Company would continue to hold an aggregate of 50.4% of the outstanding capital stock of MTI Micro, or 55.8% of the fully-diluted capital stock of MTI Micro.

Subsequent to September 30, 2010, MTI Micro has drawn down an additional \$340 thousand under the Purchase Agreement with an additional \$113 thousand of available borrowing capacity through the Purchase Agreement. It is expected that this final draw down will occur in December 2010. In addition, subsequent to September 30, 2010, MTI Micro received \$35 thousand from the DOE for billings relative to work performed through September 30, 2010, and has an additional \$46 thousand under the extension as work is performed. MTI Micro was also awarded a grant from NYSERDA for \$296 thousand on July 28, 2010, for which billings of \$204 thousand have occurred, but not yet been received. 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.

As part of a cash conservation program at MTI Micro, all MTI Micro employee salaries were reduced by 20% from April 12, through August 13, 2010, when they returned to 100%. Peng Lim, the CEO of MTI Micro, whose total monthly salary of \$29,167 is allocated among the three entities, voluntarily reduced his total monthly salary that is allocated to MTI Micro from \$9,722.22 to \$2,430.56, representing a 75% savings for MTI Micro, and in an effort to focus on commercialization, MTI Micro further streamlined its organization. However, MTI Micro continues to seek additional financing. There is no assurance that funds raised in any such a 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 our business. During the twenty four months ended September 30, 2010, MTI Micro has raised \$4.4 million in external debt and equity financing. If MTI Micro raises 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 or delay, 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 have adequate funds through the end of 2010.

Management currently believes that MTI Instruments will continue to generate positive cash flow and would be able to fund its current operations. However, no assurances can be provided on this subsidiary's or our ability to continue as a going concern given the level of uncertainty involved with the parent company's operations.

#### **Results of Segment Operations**

Results of Operations for the Three and Nine Months Ended September 30, 2010 Compared to the Three and Nine Months Ended September 30, 2009.

#### Test and Measurement Instrumentation Business

Product Revenue. Product revenue in our test and measurement instrumentation business for the three months ended September 30, 2010 increased in comparison to the same period in 2009 by \$207 thousand, or 14.4%, to \$1.65 million. This increase in revenue was attributed to an overall increase in US Air Force activity under existing multi-year contracts (see table below). For the third quarter of 2010, the US Air Force was the top customer for the segment; accounting for \$231 thousand, or 14.0%, of the quarterly revenue, as compared to \$120 thousand, or 8.3%, of the third quarter revenue in 2009. The segment's top commercial customer for the third quarter of 2010 accounted for \$150 thousand, or 9.1%, of the quarterly revenue, as compared to the top commercial customer last year accounting for \$388 thousand, or 27.0%, of the third quarter revenue in 2009.

Product revenue in our test and measurement instrumentation business for the nine months ended September 30, 2010 rose by \$243 thousand, or 5.7%, in comparison to the same period in 2009, to \$4.54 million. For the nine months ended September 30, 2010, the US Air Force was the top customer for the segment; accounting for \$834 thousand, or 18.4%, of the year-to-date revenue, as compared to \$726 thousand, or 16.9%, of the year-to-date revenue on September 30, 2009. The segment's top commercial customer for the nine months ended September 30, 2010 accounted for \$387 thousand, or 8.5%, of the year-to-date revenue, as compared to the top commercial customer last year accounting for \$618 thousand, or 14.4%, of the year-to-date revenue on September 30, 2009.

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

| (Dolla | ırs in | thousands) |
|--------|--------|------------|
|--------|--------|------------|

|   |                | Revenues f                           |      | ed  |              | enue<br>tract to | Ord                 | tract<br>ers<br>eived |
|---|----------------|--------------------------------------|------|-----|--------------|------------------|---------------------|-----------------------|
|   |                | Sept. 30,                            |      |     | Date<br>Sept | e<br>t. 30,      | to Date<br>Sept. 30 |                       |
| Contract (1)  | Expiration     | 2009                                 | 2010 | )   | 2010         | 0                | 201                 | 0                     |
| \$2.3 million Air Force New PBS-4100                            |                |                                      |      |     |              |                  |                     |                       |
| Systems   | 07/28/2010 (2) | \$ 57                                | \$   | 57  | \$           | 2,166            | \$                  | 2,166                 |
| \$8.8 million Air Force Retrofit and                            |                |                                      |      |     |              |                  |                     |                       |
| Maintenance of PBS-4100   |                |                                      |      |     |              |                  |                     |                       |
| Systems   | 06/19/2008 (3) | \$ _                                 | - \$ | _   | - \$         | 8,009            | \$                  | 8,009                 |
| \$6.5 million Air Force Retrofit and                            |                |                                      |      |     |              |                  |                     |                       |
| Maintenance of PBS-4100   |                |                                      |      |     |              |                  |                     |                       |
| Systems   | 09/27/2014 (4) | \$ _                                 | - \$ | 170 | \$           | 1,196            | \$                  | 1,657                 |
| (Dollars in thousands)  |                | Revenues f<br>Nine Mont<br>Sept. 30, |      | d   |              | enue<br>tract to | Ord                 | ers<br>eived          |
| Contract (1)  | Expiration     | 2009                                 | 2010 |     | Sept<br>201  | t. 30,           | Sep<br>201          | t. 30,                |
| \$2.3 million Air Force New PBS-4100                            | Expiration     | 2007                                 | 2010 |     | 201          | O .              | 201                 | O .                   |
| Systems   | 07/28/2010 (2) | \$ 513                               | \$   | 57  | \$           | 2,166            | \$                  | 2,166                 |
| \$8.8 million Air Force Retrofit and<br>Maintenance of PBS-4100 |                |                                      |      |     |              |                  |                     |                       |

06/19/2008 (3)

09/27/2014 (4)

\$ 50 \$

**—** \$ 757 \$

\$

-- \$

8,009

1,196

8,009

1,657

(1) Contract

Systems

Systems

\$6.5 million Air Force Retrofit and Maintenance of PBS-4100

values

represent

maximum

potential

values and

may not be representative

of actual

results.

(2) Date represents

expiration of

contract,

including all

three potential option

extensions.

Total

- (3) The contract expiration date has passed, however, one delivery order remains open under the contract.
- (4) 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 September 30, 2010 increased in comparison to the same period in 2009 by \$78 thousand, or 13.4%, to \$662 thousand. The increase corresponded to the 14.4% rise in product revenue for the quarter. Gross profit, as a percentage of product revenue, increased slightly to 60%, compared to 59% for the same period in 2009 due to a reduction in reserve expense for potentially obsolete and slow-moving inventory.

Cost of product revenue in our test and measurement instrumentation business for the nine months ended September 30, 2010 decreased in comparison to the same period in 2009 by \$56 thousand, or 3.0%, remaining at \$1.9 million in conjunction with the aforementioned 5.7% increase in product revenue. Gross profit, as a percentage of product revenue, increased one point to 57% for the nine months ended September 30, 2010 due to a reduction in reserve expense for potentially obsolete and slow-moving inventory.

Unfunded Research and Product Development Expenses. Unfunded research and product development expenses in our test and measurement instrumentation business increased by \$7 thousand or 3.2%, to \$224 thousand for the three months ended September 30, 2010 from \$217 thousand for the three months ended September 30, 2009. This increase is directly related to increased personnel costs, which included higher salaries and stock option expense, in the segment's engineering department during the current quarter.

Unfunded research and product development expenses in our test and measurement instrumentation business decreased by \$25 thousand, or 3.3%, to \$728 thousand for the nine months ended September 30, 2010 from \$753 thousand for the nine months ended September 30, 2009. This decrease is attributable to lower personnel costs in the segment's engineering department for the first nine months of the current year.

Selling, General and Administrative Expenses. Selling, general and administrative expenses in our test and measurement instrumentation business increased by \$92 thousand, or 24.5% to \$476 thousand for the three months ended September 30, 2010 from \$384 thousand for the three months ended September 30, 2009. This increase was primarily the result of the additional staffing in the test and measurement sales and business development departments.

Selling, general and administrative expenses in our test and measurement instrumentation business increased by \$200 thousand, or 16.0%, to \$1.5 million for the nine months ended September 30, 2010 from \$1.3 million for the nine months ended September 30, 2009. This increase was primarily the result of additional staffing in the segment's sales and business development departments.

#### New Energy Business

Funded Research and Development Revenue. Funded research and development revenue in our new energy business for the three months ended September 30, 2010 decreased in comparison to the same period in 2009 by \$192 thousand or 36.5%. This is a result of the majority of work under the DOE contract being performed in 2009.

Funded research and development revenue in our new energy business for the nine months ended September 30, 2010 decreased in comparison to the same period in 2009 by \$475 thousand, or 30.0%, to \$1.1 million. The decrease in revenue was primarily the result of the majority of work under the DOE contract being completed in 2009.

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

(Dollars in thousands)

|                        |                | Revenue<br>Nine    |           | Revenue<br>Nine    |           | Revenue           |
|------------------------|----------------|--------------------|-----------|--------------------|-----------|-------------------|
|                        |                | Months             |           | Months             |           | Contract to       |
|                        |                | Ended<br>Sept. 30, | % of 2009 | Ended<br>Sept. 30, | % of 2010 | Date<br>Sept. 30, |
| Contract               | Expiration (1) | 2009               | Total     | 2010               | Total     | 2010              |
| \$2.99 million DOE (2) | 12/31/10       | \$ 1,584           | 100%      | \$ 905             | 82%       | \$ 2,948          |
| \$296 thousand NYSERDA | 12/31/10       |                    |           | 204                | 18        | 204               |

(1) Dates represent expiration of

contract, not date of

final billing.

(2) The DOE contract is a cost share contract

Funded Research and Product Development Expenses. Funded research and product development expenses in our new energy business decreased by \$517 thousand or 49.0% for the three months ended September 30, 2010 in comparison to the same period in 2009. This is a result of the majority of the work being performed in 2009 for the DOE contract, as discussed in funded research and development revenue above.

Funded research and product development expenses in our new energy business decreased by \$1.0 million, or 32.8%, to \$2.1 million for the nine months ended September 30, 2010 in comparison to the same period in 2009. This change was the result of the majority of the work under the DOE contract being completed in 2009, as mentioned above in funded research and development revenue.

Unfunded Research and Product Development Expenses. Unfunded research and product development expenses in our new energy business decreased by \$7 thousand, or 9.3% to \$68 thousand for the three months ended September 30, 2010 from \$75 thousand for the three months ended September 30, 2009. This decrease is directly related to the reduction of billings to the DOE.

Unfunded research and product development expenses in our new energy business decreased by \$5 thousand, or 1.8%, to \$270 thousand for the nine months ended September 30, 2010 from \$275 thousand for the nine months ended September 30, 2009. This decrease is attributable to cost reductions instituted by management in the second quarter due to decreases in funding.

Selling, General and Administrative Expenses. Selling, general and administrative expenses in our new energy business increased by \$476 thousand, to \$439 thousand for the three months ended September 30, 2010 from \$(37) thousand for the three months ended September 30, 2009. This increase was primarily the result of the recognition of stock option expense in relation to options granted to MTI Micro employees of \$281 thousand for the third quarter, as well as the reduction in billable expenses to outside contracts.

Selling, general and administrative expenses in our new energy business increased by \$1.6 million, or 100%, to \$1.6 million for the nine months ended September 30, 2010. This increase was primarily the result of the recognition of stock option expenses related to the issuance of MTI Micro stock options in the first and third quarters of approximately \$1.3 million to date.

#### **Results of Consolidated Operations**

Operating Loss. Operating loss increased by \$17 thousand, or 2.6%, to \$680 thousand through the three months ended September 30, 2010 compared with the three months ended September 30, 2009 loss of \$663 thousand as a result of the factors noted above.

Operating loss increased by \$747 thousand, or 29.4%, to \$3.3 million for the nine months ended September 30, 2010 compared with the nine months ended September 30, 2009 as a result of the factors noted above.

Gain on Derivatives. Our gain on derivatives related to the freestanding warrants issued in conjunction with our December 2006 capital raise decreased by \$146 thousand, or 97.3%, to \$4 thousand for the three months ended September 30, 2010 compared with \$150 thousand for the three months ended September 30, 2009. The decrease in derivative gain was attributable to valuation changes of the underlying warrants using the Black-Scholes pricing model.

Our loss on derivative treatment of the freestanding warrants issued in conjunction with our December 2006 capital raise decreased by \$132 thousand, or 111.9%, to a \$14 thousand loss for the nine months ended September 30, 2010 compared with our gain of \$118 thousand for the nine months ended September 30, 2009. The decrease in derivative income was attributable to valuation changes of the underlying warrants using the Black-Scholes pricing model.

Income Tax (Expense) Benefit. Our effective income tax rate for the three months ended September 30, 2010 and 2009 was 0.0%. These tax rates were primarily the result of losses generated by operations, changes in the valuation allowance, and permanent differences for derivative valuations.

Our income tax rate for the nine months ended September 30, 2010 was 0.00% and our income tax rate for the nine months ended September 30, 2009 was 7.04%. These tax rates were primarily the result of losses generated by operations, changes in the valuation allowance, state true-ups, and permanent deductible differences for derivative. Additionally, the September 30, 2009 tax rate was impacted by the reversal of the uncertain tax position for the NYS settlement.

The valuation allowance against our deferred tax assets at September 30, 2010 was \$27.7 million and at December 31, 2009 was \$26.4 million. We determined that it was more likely than not that ultimate recognition of certain deferred tax assets would not be realized.

#### Capital Resources

Our working capital was \$1.1 million at September 30, 2010, comparable to \$1.2 million at December 31, 2009.

At September 30, 2010, our order backlog was \$2.0 million compared to \$419 thousand at December 31, 2009.

Our inventory turnover ratios and accounts receivable days sales outstanding for the trailing twelve month periods and their changes at September 30, 2009 and 2010 are as follows:

|  | 2009 | 2010 | Change |
|--|------|------|--------|
| Inventory turnover                                 | 1.7  | 3.1  | 1.4    |
| Average accounts receivable days sales outstanding | 38   | 41   | 3      |

The improvement in inventory turnover is attributed to a 40% decrease in average inventory balances on a 6% 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 when compared to the previous twelve months, increased by three days. The longer payment cycles are directly attributed to current revenue with large companies, who pay in 60 to 90 days.

Net cash used in operating activities was \$1.7 million for the nine months ended September 30, 2010 compared with \$1.6 million in 2009. This cash use increase of \$102 thousand is primarily attributed to a large increase in the accounts receivable balance from 2008 to 2009 of \$1.2 million, compared to a reduction of accounts receivable from 2009 to 2010 of \$201 thousand.

There were \$31 thousand in capital expenditures during the nine months ended September 30, 2010, with no capital expenditures in the same period for 2009. There were no outstanding commitments for capital expenditures as of September 30, 2010. 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 September 30, 2010. This table does not include contingencies.

|  | Less   |        |        | More<br>Than  |
|--|--------|--------|--------|---------------|
| Contractual Payment Obligations                          | Than 1 | 1-3    | 3-5    | 5             |
| (in thousands)   | Year   | Years  | Years  | Years Total   |
| Operating Leases / Total Contractual Payment Obligations | \$ 941 | \$ 568 | \$ 350 | \$ — \$ 1.859 |

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, 2009 includes a summary of our most significant accounting policies. There have been no material changes to the critical accounting policies previously disclosed in our 2009 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 sphrases, 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:

- our need to raise additional financing for our New Energy segment;
- 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 need to seek external financing for MTI Micro's operations:
- risks related to developing Mobion direct methanol fuel cells and whether we will ever successfully develop reliable and commercially viable Mobion fuel cell solutions;
- our portable power source products or our customers' products that utilize our portable power source products may not be accepted by the market;
- our inability to build and maintain relationships with our customers;
- our limited experience in manufacturing fuel cell systems on a commercial basis;

- our dependence on others for our production requirements for our portable power source products;
- our dependence on our manufacturing subcontractors to maintain high levels of productivity and satisfactory delivery schedules for our portable power source products;
- our dependence on third-party suppliers for most of the manufacturing equipment necessary to produce our portable power source products;
- our inability to obtain sufficient quantities of components and other materials, including platinum and ruthenium, necessary for the production of our portable power source products;
- our 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;
- our new technologies may not result in customer or market acceptance;
- our inability to commercialize our 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, 2009 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 September 30, 2010. 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 September 30, 2010, 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 September 30, 2010 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 12 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, 2009 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 2009 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 2009 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 losses, including net losses of \$2 million for the nine months ended September 30, 2010. As a result of ongoing operating losses, we had an accumulated deficit of \$123 million as of September 30, 2010. Subject to cash availability, we expect to continue to make significant expenditures and incur substantial expenses 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 as we execute our plan to commercialize our portable power source business and may never achieve or maintain profitability. We will be unable to satisfy our current obligations solely from cash generated from operations or become profitable until we successfully commercialize our portable power source business. If we continue to incur substantial losses and are unable to secure additional financing, 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 \$574 thousand at September 30, 2010, 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, the subsidiary 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 MTI Micro's 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 of the Company's direct methanol fuel cell research, development, manufacturing readiness and commercialization;
- 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 September 30, 2010 of \$142 thousand. Subsequent to September 30, 2010, MTI Micro has drawn down an additional \$340 thousand under the Purchase Agreement with an additional \$113 thousand of available borrowing capacity through the Agreement. Subsequent to September 30, 2010, MTI Micro received \$35 thousand from the DOE for billings relative to work performed through September 30, 2010, and has an additional \$46 thousand under the extension as work is performed. In addition, on July 28, 2010, MTI 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 \$204 thousand for work performed to date. No funds have been received to date for this grant.

In order to conserve cash and extend operations while we pursue any additional necessary financing, we made reductions to operating expenses in the first quarter of 2010 which continued through the middle of the third quarter. There is no assurance that funds raised in any such 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 our business. 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 in the next quarter, we may have to liquidate some or all of our assets or delay, reduce the scope of or eliminate some or all of our research and development programs, or discontinue our portable power source business. Management currently believes it will have adequate resources to fund its MTI Micro operations through the end of 2010; however, there can be no assurance that MTI Micro will not require funding before then to continue operations.

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

As of September 30, 2010, we owned approximately 52.3% or 58.1% on a fully-diluted basis. 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"). Pursuant to the Purchase Agreement, MTI Micro may issue and sell to Counter Point up to 28,571,429 shares of common stock of Micro at a purchase price per share of \$0.070, over a period of twelve 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. If MTI Micro was to issue and sell all of the 28,571,429 shares under the Purchase Agreement, the remainder of the 5,714,286 warrants under the Purchase Agreement were exercised, as well as all warrants currently outstanding were exercised, the Company would continue to hold an aggregate of 50.4% of the outstanding capital stock of MTI Micro, or 55.8% of the fully-diluted capital stock of MTI Micro.

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 continue to 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 in late 2010 or early 2011.

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

As of September 30, 2010, we had approximately \$67 million of net operating loss, or NOL, carryforwards. As a result of the conversion of the Bridge Notes, MTI no longer maintains an 80% or greater ownership of MTI Micro. Thus MTI Micro is no longer included in the MTI and subsidiaries consolidated federal and combined New York State tax returns, effective December 9, 2009. A reattribution of a portion of MTI Micro's NOLs was performed with the filing of the 2009 tax returns, which reduced MTI Micro's NOLs as of the date of the Bridge Conversion to approximately \$13 million, and MTI's balance of approximately \$52 million. 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 \$6.7 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 exercise of outstanding options, 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. As of September 30, 2010, it is estimated that MTI has NOL carryforwards of approximately \$52.3 million and MTI Micro has NOL carryforwards of approximately \$14.7 million, with a portion, as noted above, being subject to IRC Section 382 limitations.

#### Item 5. Other Information

None

#### Item 6. Exhibits

| Exhibit No. 31.1 | Description Rule 13a-14(a)/15d-14(a) Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, of Peng K. Lim                  |
|------------------|---|
| 31.2             | Rule 13a-14(a)/15d-14(a) Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, of Frederick W. Jones                       |
| 32.1             | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of Peng K. Lim        |
| 32.2             | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of Frederick W. Jones |

#### **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Mechanical Technology, Incorporated

Date: November 15, 2010 By: /S/ PENG K. LIM

Peng K. Lim

Chief Executive Officer

By: /S/ FREDERICK W. JONES

Frederick W. Jones

Acting Chief Financial Officer

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