

**FORM 51-102F3**  
**Material Change Report**

**Item 1            Name and Address of Company**

Thermal Energy International Inc. (the "Company")  
36 Bentley Avenue  
Ottawa, Ontario K2E 6T8

**Item 2            Date of Material Change**

May 5, 2011

**Item 3            News Release**

News release attached as Schedule "A" was disseminated on May 5, 2011.

**Item 4            Summary of Material Change**

The Company announced that the TSX Venture Exchange has completed its review of the Company's affairs that commenced in March of 2009.

**Item 5            Full Description of Material Change**

See news release attached as Schedule "A".

**Item 6            Reliance on subsection 7.1(2) of National Instrument 51-102**

N/A

**Item 7            Omitted Information**

N/A

**Item 8            Executive Officer**

William Crossland, the Company's President and CEO, is knowledgeable about the material change and this report. His business telephone number is (613) 723-6776.

**Item 9            Date of Report**

May 5, 2011

## **SCHEDULE "A"**

### **TSX VENTURE EXCHANGE REVIEW OF THERMAL ENERGY COMPLETED**

Ottawa, ON – May 5, 2011 – At the request of the TSX Venture Exchange (the "Exchange") Thermal Energy International Inc. (TSX-V: TMG) ([www.thermalenergy.com](http://www.thermalenergy.com)) ("Thermal Energy" or the "Company") is pleased to announce that the Exchange has completed its review of the Company's affairs that commenced in March of 2009. This release is further to the Company's press release dated October 13, 2009 which disclosed information about the Exchange's review of the Company's affairs.

The Exchange had conducted a prior review of Thermal Energy's affairs which was completed in 2006. The Exchange determined during that prior review that the Company had contravened certain Exchange policies including but not limited to: the exercise of stock options without receipt of proper consideration; the issuance of private placement shares in lieu of debt; the issuance of shares without Exchange approval and the issuance of promotional and/or premature disclosure. At the time of the prior review the Company acknowledged the above contraventions, confirmed that such contraventions would not continue and implemented corporate governance policies and procedures designed to ensure the Exchange that such contraventions would not be repeated. As will be discussed below, the Exchange's review of the Company's affairs commenced in March of 2009 identified contraventions of Exchange requirements which are similar and/or identical to those identified under the prior review. In this regard the Company did not fulfill representations made to the Exchange under the prior review, in particular that the Ethics, Governance and Compliance Committee would provide oversight regarding the Company's compliance with Exchange policies and applicable securities laws.

As a result of the Company not fulfilling the representations to the Exchange made under the prior review, the recently completed Exchange review covered the period from May 31, 2006 (end of the prior review) to August 31, 2009.

The contraventions of Exchange policies and requirements identified by the Exchange and the actions taken by the Company in light of the Exchange's determinations are summarized below.

#### **Loans for Share Issuances**

Between November 2005 and June 2008 Thermal Energy loaned \$966,705 to certain current and former directors, officers, employees and shareholders to allow such individuals to acquire 5,513,515 shares of the Company contrary to Exchange policies as described below. Loaning funds to purchasers to allow them to acquire shares of the Company is not acceptable consideration pursuant to Exchange policies. Further, the Company did not provide the Exchange with notice of the loans or the fact that, in certain circumstances, they were related party transactions and did not issue a press release as required by Exchange policies. To the extent that any of the loans described below were outstanding as of a fiscal year end for the Company, the Company's audited annual financial statements for such period reflected the then current balance of such loans.

- (i) 828,485 shares were issued in connection with private placements in respect of which the Company loaned the subscription funds totaling \$192,600 to the purchasers.
- (ii) 3,993,000 stock options were permitted to be exercised with the Company providing loans totaling \$673,800 to the option holders to fund the exercise price. The terms of such loans limited the borrower's liability for such loans to the underlying value of the shares acquired on exercise of such options, meaning that if the value of the shares fell below the original issue price the Company might never be paid the full amount of the issue price.
- (iii) The Company extended loans to warrant holders totaling \$100,305 to enable the exercise of warrants to acquire 692,030 shares.

### **Improper Share Issuances**

The Company's policies and procedures for share issuances were lacking or, where policies existed, the Company had a poor record of following such policies prior to March 2009. During its review the Exchange determined that the Company had contravened certain Exchange policies in the following manner:

- (i) 4,680,000 shares were issued in 2007 and 2008 in connection with two private placements without the appropriate approvals from the Exchange;
- (ii) 212,500 shares were issued in 2007 and 2008 in satisfaction of \$71,250 in Company debt without the approval of the Exchange;
- (iii) 633,084 shares issued in connection with private placements that occurred in 2007 and 2008 were issued in satisfaction of \$114,043 in Company debt which is contrary to Exchange policy;
- (iv) 142,857 options were exercised and the Company permitted the option holder to set off \$30,000 in debt owed by the Company to the option holder in lieu of paying the exercise price in cash;
- (v) on five occasions in 2005, 2007 and 2008 an aggregate total of 1,275,000 options were exercised after their expiry date;
- (vi) 1,250,000 options were granted in 2008 without issuing an appropriate press release in accordance with Exchange policy;
- (vii) on multiple occasions in 2006, 2007 and 2008 an aggregate total of 8,568,000 shares were issued without the appropriate four month hold period legends affixed thereto; and
- (viii) the Company failed to obtain Exchange acceptance of its acquisition of the rights to Dry-Rex bio-energy technology from Mabarex Inc. in 2006 including the issuance of 250,000 shares at a price of \$0.16 per share.

## **Public and Investor Disclosure**

The Exchange identified a number of instances in which the Company's investor presentations or disclosure to the public contained information which the Exchange found (i) was promotional and/or premature in nature, (ii) had the potential to mislead or be misconstrued by the reader, (iii) failed to disclose all relevant terms and conditions of transactions or (iv) contained forward looking statements that were not compliant with the requirements of Exchange policies. The Exchange is also of the view that in certain of these circumstances the Company did not take adequate steps to prevent such disclosure or act quickly enough to correct the public record when it was determined or discovered that prior disclosure had been potentially misleading or confusing.

## **Personal Expenses**

From time to time the Company paid credit card bills of certain executives which included both personal and business expenses with the understanding that the individual would reimburse the Company for the personal portion of the bill. This practice was in contravention of the Company's policies for expense reimbursement. To the extent not repaid at the end of a particular fiscal quarter or fiscal year, the amounts owing to the Company by such individuals were disclosed in the Company's financial statements as amounts due to the Company. The amounts owing to the Company relating to personal expenses and included in the Company accounts receivable ranged from a balance of \$655.56 at May 31, 2006 to a high of \$25,475.94 at May 31, 2009. These balances were recovered by the Company in fiscal 2010 and the balance at May 31, 2010 was \$Nil.

The board of directors of the Company as a whole was not aware that this practice was taking place at the time and did not approve it. The board of directors of the Company became aware of the practice in early 2009 around the time the Exchange was commencing its recent review of the Company's affairs and had its auditors conduct a review and confirm the details. The auditors' review went back to 2005 and confirmed to the board of directors that the practice had been taking place and provided the details. This practice was not in the Company's best interest and would not have been approved by the board of directors had it been aware. This issue revealed a deficiency in the Company's controls and procedures and the Company has since taken steps to tighten such controls and procedures, including the adoption of a new Business Expense Policy as described below.

## **Actions Taken by the Company and required by the Exchange**

The Company has taken a number of steps in an effort to address the issues described above, including:

- (i) In respect of loans which were made to individuals, including certain current directors, to allow them to purchase shares or exercise options or warrants, it was determined during the Exchange review that there was not appropriate consideration for the issuance of such shares and therefore they were not validly issued. As a result, and pursuant to an

Exchange requirement, during 2010 and 2011 approximately 3.76 million shares were returned to treasury and cancelled and the corresponding loans were retracted. However, in order to deal with the remaining balance of these loans which stands at \$112,246, Thermal Energy requires the cooperation of the borrowers in order to properly document the cancellation of the shares/loans. Therefore, the likelihood or timing of cancellation of the remaining shares/loans is outside of the Company's control and is unknown to the Company at this time. Thermal Energy currently holds share certificates representing 396,667 shares issued in connection with such remaining loans as security. As the share certificates currently held by the Company are less than the number of shares issued from the outstanding loans, the Exchange required that the Company hold additional shares as security for these loans as long as the loans are outstanding. As a result, although he is not party to the loans, Thermal Energy's CEO, William Crossland, has voluntarily placed 287,639 shares of the Company from his personal holdings into escrow until such time as an equivalent number of shares issued pursuant to loans are either paid for in full or returned to the Company and cancelled.

- (ii) Thermal Energy has remedied filing deficiencies described above where possible by filing the required notice of transactions with the Exchange. The Company has now received Exchange approval with respect to all share transactions where there was a previous failure to file and obtain such approval.
- (iii) Thermal Energy has adopted a renewed and updated Ethics, Governance and Compliance Committee charter.
- (iv) Thermal Energy has adopted a treasury direction policy to help ensure that the proper processes and Exchange policies are strictly followed for future share issuances.
- (v) The Company has adopted a Stock Option Plan Administration Policy and a Prohibition Policy which require that, among other things, no option shall be exercised or share issued without full payment having been received by the Company, no option is deemed exercised unless and until the Company has received all paperwork and full payment prior to the expiry date of the option and no option may be granted without the issuance of any press release required by the Exchange policies.
- (vi) In addition to the foregoing, the Company has adopted a new Corporate Disclosure Policy, Board of Directors Mandate; Code of Business Conduct and Business Expense Policy.

### **Additional Exchange Requirements**

In addition to the remedial steps already taken by Thermal Energy and its board of directors, and required by the Exchange, the Exchange has imposed the following additional requirements:

- (i) Prior to February 15, 2012 each current director of Thermal Energy must take the Exchange's Rules and Tools Workshop and either of: (a) the Simon Fraser University Securities Program course "Public Companies: Financing, Governance and Compliance"

or (b) the Exchange's Venture Company Success Workshop Course, specifically the "Managing a Public Company: What You Need to Know" course. The Exchange will require the immediate resignation of any director who fails to take such courses within the prescribed time period from the Company and from any other Exchange issuers.

- (ii) The Company must add one new director to its board with satisfactory Exchange experience prior to June 29, 2011 and a second new director with satisfactory Exchange experience prior to October 31, 2011. The Company's continued listing on the Exchange is conditional upon satisfying this requirement.
- (iii) The Company has been placed on a Notice to Comply with Exchange Requirements. Any further violations of Exchange Requirements will result in a review of the acceptability of the current officers and directors of the Company to act as an officer or director, or perform any functions similar to those normally performed by an individual occupying the position of director or officer, or be an employee, agent or consultant of an Exchange listed company.

Thermal Energy is pleased that the Exchange has completed its review and the Company is eager to move forward with its continuing focus on growing its business.

#### **About Thermal Energy International Inc.**

With offices in Ottawa, Canada and Bristol UK, Thermal Energy International Inc. is an innovative clean technology company providing a variety of proprietary and proven energy efficiency, emission reduction, water efficiency and bioenergy products and solutions to the industrial, commercial and institutional markets worldwide. Thermal Energy's products include; **GEM®** - Steam traps and condensate return systems, **FLU-ACE®** - Direct contact condensing heat recovery, and **Dry Rex™** - Low temperature biomass drying systems. Thermal Energy International Inc. is also a fully accredited professional engineering firm, and offers advanced process and applications engineering services. FLU-ACE®, GEM®, DRY-REX®, THERMALONox®, and THERMAL AUD® are trademarks of Thermal Energy International Inc.

To find out more about Thermal Energy International Inc. (TSX-V: TMG), visit our website at <http://www.thermalenergy.com>.

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*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*