



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

October 27, 2009

Zsolt Rummy
Chairman of the Board,
President and Chief Executive Officer
Zoltek Companies, Inc.
3101 McKelvey Road
St. Louis, Missouri 63044

**Re: Zoltek Companies, Inc.
Form 10-K for the fiscal year September 30, 2008
Letter Dated September 24, 2009
File No. 0-20600**

Dear Mr. Rummy:

We have reviewed your letter and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended September 30, 2008

Item 1. Business, page 3

1. We note your response to prior comment 1. Please expand your response to address:
 - where you filed as an exhibit your agreement with DeWind Incorporated;
 - the specific size of the agreements with Vestas Wind Systems and Gamesa Group, as we note the disclosure on page 5 that Vestas Wind Systems and

and Gamesa Group were the only customers that represented over 10% of net sales the last three years and Vestas Wind Systems accounted for 40% of net sales in the last year;

- the extent to which you rely on Vestas Wind Systems and Gamesa Group agreements, as we note your response that you are “pursuing multiple wind energy business of similar or greater size” and you entered into the two agreements when you were expanding to meet “anticipated demand;” and
 - the authority on which you rely to conclude that the Vestas Wind Systems and Gamesa Group agreements need not be filed since you did not believe that your viability as an ongoing entity would have been “permanently precluded or imperiled if either agreement were terminated.”
2. We note the third sentence of your response to prior comment 1. In future filings, disclose the material terms, such as the minimum purchase requirements, of your agreements with Vestas Wind Systems, Gamesa Group and DeWind Incorporated. Also, expand your Management’s Discussion and Analysis section to describe how your new material agreements will affect the trends shown in your historic results, whether by amount of revenues, margins or otherwise.

Item 11. Executive Compensation Disclosure, page 60

3. We note your response to prior comment 8. To the extent that you set any performance targets related to compensation, please confirm that you will disclose all such performance targets in your future filings.

Form 10-Q for the fiscal quarter ended June 30, 2009

4. We note your response to prior comment 15. Please amend the Forms 10-Q filed for the quarters ending December 31, 2008, March 31, 2009 and June 30, 2009, respectively, to disclose your officers’ conclusions regarding the effectiveness of your disclosure controls and procedures.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

Zsolt Romy
Zoltek Companies, Inc.
October 27, 2009
Page 3

You may contact Tom Jones at (202) 551-3602 or me at (202) 551-3314 if you have any questions.

Sincerely,

Daniel Morris
Special Counsel