

Mail Stop 6010

April 30, 2007

By U.S. Mail and Facsimile to (315) 331-6182

Mr. Robert W. Fishback
Chief Financial Officer
Ultralife Batteries, Inc.
2000 Technology Parkway
Newark, New York

**RE: Ultralife Batteries, Inc.
Form 10-K for the year ended December 31, 2006
File No. 0-20852**

Dear Mr. Fishback:

We have reviewed your filings and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your future documents 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. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 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 year ended December 31, 2006

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 27

Results of Operations, page 28

1. We note your presentation of multiple non-GAAP financial measures of adjusted cost of products sold, adjusted gross margin, adjusted operating expenses and adjusted operating income, however, we do not see where you have provided all of the information required by Item 10(e) of Regulation S-K. Please revise future filings to address the following for each of the non-GAAP financial measures presented:

- Disclose the reasons why management believes the presentation of each of the non-GAAP financial measures provides useful information to investors regarding your financial condition and results of operations.
- Disclose, to the extent material, the additional purposes, if any, for which management uses each of the non-GAAP financial measures.
- Describe the specific manner in which management uses the non-GAAP measures to conduct or evaluate its business.
- Explain the economic substance behind management's decision to use the measures.
- Discuss the material limitations associated with the use of the non-GAAP measures as compared to the use of the most directly comparable GAAP measures and the manner in which management compensates for these limitations when using the non-GAAP measures.

In responding to this comment, please refer to Item 10(e) of Regulation S-K, Question 8 of Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003 and SAB Topic 14G. Please provide us with a sample of your proposed revised disclosure. Please note we may have additional comment upon reviewing your response.

Mr. Robert W. Fishback
Ultralife Batteries, Inc.
April 30, 2007
Page 3

Note 2 – Acquisitions, page 57

ABLE New Energy Co. Ltd., page 57

2. We note your disclosure that you are engaging a third party valuation firm to independently value certain tangible and intangible assets acquired in the ABLE acquisition. Please revise future filings, beginning with your next 10-Q, to name the independent valuation firm. In addition, please note that if you intend to incorporate your Form 10-K by reference into any registration statement, you will be required to identify the appraisal firm in the “Experts” section and include its consent in the registration statement.

Note 8 – Shareholders’ Equity, page 68

Stock Options, page 69

3. We see that during fiscal year 2006 you used a combination of historical and implied volatility, while in 2005 you relied solely on historical volatility. Please explain to us why you concluded your revised method for determining volatility is a better indicator of expected volatility. Discuss why you changed your method of determining estimated volatility and why you now use a combination of historical volatility and implied volatility. Discuss your evaluation of the factors listed in Questions 2 and 3 of SAB Topic 14.D.1.
4. Further to the above, please revise future filings to provide the disclosures in Question 5 of SAB Topic 14.D.1. As applicable, please also expand your disclosures in the Critical Accounting Policies section to address your use of a blended volatility.

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 that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed decision. Since the company and its management are in

Mr. Robert W. Fishback
Ultralife Batteries, Inc.
April 30, 2007
Page 4

possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3643 regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact, Martin James, Senior Assistant Chief Accountant at (202) 551-3671 with any other questions.

Sincerely,

Kevin L. Vaughn
Branch Chief