

Mail Stop 6010

May 25, 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 letter dated on May 14, 2007 and have the following 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 response to prior comment 1. Your proposed revisions do not provide all of the disclosures required by Item 10(e) of Regulation S-K for each non-GAAP financial measure presented in your Form 10-K. Specifically your proposed revisions do not provide disclosures related to adjusted cost of products sold, adjusted gross margin or adjusted operating expenses. Please revise future filings to remove these non-GAAP measures or provide the Item 10(e) disclosures for each measure listed. Alternatively, remove these non-GAAP measures and present only the non-GAAP measure described.

2. You state that in your view, adjusted operating income is a more relevant measure that ties your results more closely to the operating cash flows of the business. It appears that you view this non-GAAP measure as a liquidity measure. As such, please address the following:
 - Tell us why you believe operating income, which is generally viewed as a performance measure, is the most directly comparable GAAP measure.
 - Alternatively, revise future filings to reconcile the non-GAAP measure to the most directly comparable GAAP liquidity measure, such as cash flows from operations.
 - If you elect to continue to present the reconciliation to operating income and present the measure as a performance measure, revise to explain why you believe a measure that excludes compensation charges and technology amortization charges is "more relevant" than the GAAP measure that includes such charges.
 - Further to the bullet above, revise future filings to discuss in detail the material limitations of your non-GAAP measure, including, for example, a discussion of how your non-GAAP measure does not consider all of the costs associated with operating your business.

Refer to Item 10(e) of Regulation S-K and Question 8 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. Please provide us with a draft of your proposed revised disclosure.

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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.

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