

Mail Stop 6010

May 15, 2007

Noah Berkowitz, M.D., Ph.D.
President and Chief Executive Officer
Alteon Inc.
221 W. Grand Avenue
Montvale, New Jersey 07645

**Re: Alteon Inc.
Preliminary Proxy Statement on Schedule 14A
Filed April 19, 2007
File No. 1-16043**

Dear Dr. Berkowitz:

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 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. 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.

SCHEDULE 14A

Letter to Shareholders

Financing Proposed – Your Vote is Very Important

1. In the second sentence on this page, you refer to the “significant financing transaction.” Please also disclose in this sentence that the transaction will cause a change of control. We note from page iv of the filing that upon completion of the

transaction, the purchasers will hold approximately 40 percent of your voting power, and if they convert all of their preferred shares, they will hold approximately 83 percent of your voting power.

2. You state in this section that you are “sending along with this proxy statement [your] 2006 annual report.” You state in the Incorporation by Reference section on page 42 that you are enclosing with the proxy statement a copy of the Form 10-K. Are you planning to send to shareholders both a copy of the annual report to shareholders and a copy of the Form 10-K? If not, please revise this section and the Incorporation by Reference section to clarify.

Questions and Answers About the Financing and the Annual Meeting, page iii

Q: Why did you send me this proxy statement? page iii

3. We note that your 2006 annual report, which includes your financial statements, is “not part of this proxy statement.” Although this is a true statement, we note from page 42 that you are incorporating by reference some information from your Form 10-K, and much of the 10-K information, such as the financial statements, is identical to the corresponding information in the annual report. Please revise this discussion so it is clear that much of the same information found in the annual report is incorporated by reference into the proxy statement. Also, please identify the portions of the 10-K that are incorporated by reference.

Q: Why are we seeking approval for the issuance . . . , page iii

4. Please state the number of shares of common stock you currently have outstanding.
5. Please identify the purchasers. You should identify the natural persons who will beneficially own the preferred shares as well as the names of the institutions that will hold the shares of record.

Q: What are the terms of the Series B Preferred Stock . . . , page iv

6. Please state the approximate amount of funds you plan to raise through the financing.
7. Please state the floor and ceiling caps on the price per share of Series B Preferred Stock. Also state the price at which your stock closed on the day preceding the financing agreement.

8. Please identify the lenders of the Senior Convertible Secured Promissory Notes. Identify both the institutions and the natural persons who control them.
9. Where you discuss the registration rights, please disclose that due to the 50% share price to purchasers, 1:1 conversion ratio, anti-dilution rights, and registration rights that will facilitate the shares being sold into the market, there is a possibility that your share price will decrease.

How many authorized but unissued shares of Alteon common stock . . . , page v

10. Please expand the second Q&A on page v to give a comprehensive view of the effect of the proposals on the capital structure. State the number of shares of common and preferred stock authorized, issued, authorized and reserved but unissued, and authorized but unreserved and unissued:
 - Prior to the meeting;
 - As a result of the vote to approve the issuance;
 - As a result of the vote to approve both the issuance and increase the authorized shares; and
 - As a result of the votes to approve the issuance, the authorization, and the reverse stock split (assuming the number of authorized shares is not reduced proportionately).
11. Please state clearly the number of shares of both preferred and common you have authorized now and how many you will have if the authorization amendment is approved.

Q: Why are we seeking approval for the reverse stock split? page v

12. Please disclose your current stock price and AMEX's minimum required stock price. Also, identify any other listing standards with which you are not in compliance and briefly discuss how the reverse split will cause you to be in compliance.
13. Please disclose that although the stock split is designed to raise the stock price, there is no guarantee that the share price will rise proportionately to the reverse stock split, so the end result could be a loss of value.

Management, page 3

14. We note you are not making any nominations to fill the two board seats being vacated by Ms. Breslow and Mr. Moore, and the purchasers will have the right to designate two directors. Please disclose in your document the process you

anticipate following to fill these two positions. Also, explain to us supplementally how the process will comply with state law and your governing instruments.

15. Please state whether the purchasers have selected two people to serve as board members. If they have, identify the individuals and provide the information described in Item 401 of Regulation S-K.

Compensation Discussion and Analysis

Base Salary, page 7

16. We note you believe executives' "base salaries should generally target the average, or 50%, calculation of the range of salaries for executives in similar positions and responsibilities" at similar companies. Please state what that average currently is for each of the positions included in the Summary Compensation Table, and state which companies your calculations are based on. If they are based on the approximately 30 companies described in the third paragraph on page 6, state that fact.

Annual Cash Bonus, page 8

17. Please identify the "specific individual non-financial performance objectives" applicable to each named executive officer.
18. We note that "[i]n its discretion, the Compensation Committee may . . . award bonus payments to our executive officers above or below the amounts specified in their respective offer letters, depending on the achievement by the executive officers of performance goals as set and determined by the Committee." Are these performance goals different from the "specific individual non-financial performance objectives" mentioned near the beginning of this discussion? If so, please identify them. Also, state whether the Committee can use its discretion to grant bonuses even if these goals are not met.
19. Please identify the specific goals that Dr. Berkowitz, Dr. MacNab, and Ms. Phelan, all of whom received bonuses for 2006, met and did not meet during 2006.

Certain Relationships and Related Transactions, page 20

20. Please state the price at which your stock closed on the day preceding Ms. Tanner's purchase in September 2006.

Proposal 1, page 21

21. Please disclose, as stated in section 4.14 of the financing agreement, that this proposal is required by the financing agreement.

Proposal 2, page 25

22. Please explain how you came into contact with the purchasers. State whether any of the purchasers previously had any relationship with your company or any of your officers or directors.
23. Please state the potential ownership each of the purchasers will have of your company.
24. Please tell us supplementally the Securities Act exemption the company will rely on for the financing transaction and the relevant facts that make that exemption available.
25. On page 26, under “Anti-Dilution Protection” or on page 34, please explain the mechanics of how the conversion ratio would rise above 1:1 if shares are sold at a price below the sale of shares in the Financing.

Structure of the Financing, page 27

26. Please discuss the floor and ceiling caps.

Factors Considered by the Board of Directors in Recommending the Financing, page 27

27. If you keep the reference to the financial advisor in your document, please identify the financial advisor, describe the analyses the advisor performed, and disclose the fees you paid them and the amount, if any, that was contingent on the financing being completed, and include their report as an annex to the proxy statement.

Conditions to the Completion of the Financing, page 28

28. We note the purchasers will have registration rights. Please disclose in the “Effect of Financing on Current Stockholders” section on page 26 that the stock price might decrease substantially as the purchasers sell their shares.

Interest of Alteon’s Executive Officers and Directors in the Financing, page 30

29. The caption for this section does not appear to be related to the text. That is, the text does not discuss any special interests the directors and officers have in the financing. If there are interests other than those that are identical to other shareholders, please disclose them. Alternatively, please confirm that there are no such interests.

Board Membership and New Directors Following the Financing, page 30

30. This section seems to suggest that the designees will be appointed, not just nominated by the purchasers and elected by shareholders. Please clarify whether or not the shareholders will be able to vote for those slots. Provide similar disclosure in the Q&As.

Use of Proceeds, page 30

31. We note you plan to use the proceeds for “working capital and general corporate purposes, including the development of our technologies towards regulatory approval and marketing of our product candidates.” Please describe with more specificity the uses currently described as “working capital and general corporate purposes.” Ensure that you have listed all of the material planned uses of the proceeds. You should be as specific as possible, including by identifying the product candidates you plan to develop with the proceeds and where in the development process you expect the funds to carry each. Finally, after you have prepared this list of uses, please state an approximate amount for each one. See Item 11(c) of Schedule 14A.

Votes Required to Approve the Adjournment of the Annual Meeting, page 31

32. This paragraph and the legend below it, which states the board’s recommendation to vote to approve the adjournment, contain more information about proposal 5 than you include in the discussion of proposal 5 on page 35. Please put this information in the discussion of proposal 5.

Proposal 3, page 32

33. Please unbundle into separate proposals each of the amendments covered by this proposal: increase the number of authorized common shares, increase the number of authorized preferred shares, authorization of Series B Preferred Stock, name change, indemnification provisions, and elimination of certain preferred stock classes. Also, unbundle these amendments whenever you refer to them in the disclosure throughout the prospectus. For example, on page viii in the paragraph after the Proposal 6 disclosure, you state that you cannot complete the Financing unless the shareholders approve the amendments. Are you referring to the

authorization of additional common and preferred, authorization of Series B Preferred Stock, indemnification, some of them or all the amendments as a package?

34. We note that “it is a condition to closing of the Financing that the Amended and Restated Certificate of Incorporation be filed with the Secretary of State.” Please state whether the financing agreement requires all of the amendments discussed in this proposal. If it does not, identify the specific amendments it requires and does not require.

Series B Preferred Stock, page 33

35. We note that “up to 500,000,000 shares of Series B Preferred Stock may be issued and outstanding.” Please clearly state the number of authorized common and preferred shares after passage of the amendments.

Other Changes, page 34

36. Please describe both the current and the proposed indemnification provisions. Explain how the proposed provisions differ from the current ones.
37. Regarding the indemnification provision, please state whether the management is currently aware of any proceedings or threatened proceedings and whether any of such threatened or current proceedings could be covered under the indemnification provisions that are proposed.

Proposal 4 and 5, page 35

Purpose, page 35

38. We note that one purpose of the reverse split is to avoid delisting of Alteon common stock from AMEX. Often companies effect reverse splits to increase their share price, and it is intuitive how a reverse split can cause such an increase. However, the three AMEX listing standards with which you are violating, as listed at the bottom of page 35, relate to your aggregate shareholder’s equity and losses from continuing operations, not to your share price. Therefore, please clarify how you believe the reverse split will enable you to avoid delisting on AMEX.

Principal Effects of the Reverse Stock Split, page 36

39. Since you are cashing out fractional shareholders, please address the issue of whether this will result in the number of shareholders falling below 300, which would enable the company to deregister under Section 12 of the 1934 Act.

Federal Income Tax Consequences of the Reverse Stock Split, page 38

40. Please delete the word “certain” from the first sentence of this section, as well as the disclaimer that it is “included for general information only.”

Forward-Looking Statements and Cautionary Statements, page 42

41. Your stock appears to be penny stock. As such, the safe harbor provided by Section 21E of the Securities Exchange Act does not apply to your company. Please remove the reference to this section and to the Private Securities Litigation Reform Act of 1995.

Incorporation by Reference, page 42

42. Please include in your filing, either directly or through incorporation by reference, the information required by Item 302 of Regulation S-K. See Item 13(a)(2) of Schedule 14A.
43. Please state the filing date of your Form 10-K and the item numbers for the sections you are incorporating by reference.

* * *

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and 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 investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Noah Berkowitz, M.D., Ph.D.
Alteon Inc.
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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.

Please contact Greg Belliston at (202) 551-3861 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: William T. Whelan
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C.
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