

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

Mail Stop 3720

September 25, 2009

Via U.S. Mail and Fax (914.993.1293)

Mr. Joseph Ciavarella Chief Financial Officer AboveNet, Inc. 360 Hamilton Avenue White Plains, NY 10601

RE: AboveNet, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2008

Form 10-O for the Fiscal Ouarters Ended March 31, 2009 and June 30,

2009

File No. 000-23269

Dear Mr. Ciavarella:

We have reviewed the above referenced filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please comply with the following comments in future filings. Confirm in writing that you will do so and explain to us how you intend to comply. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future 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 or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the Fiscal Year Ended December 31, 2008

Note 2: Basis of Presentation and Significant Accounting Policies, page 43

1. Refer to your discussion of property and equipment on page 45 and in your footnote on page 51. It appears that transmission equipment inventory was impaired during 2007 and 2008. Please tell us, and expand your disclosure in future filings to discuss, what triggers or factors the company considers in determining whether an impairment test is necessary. Your discussion should explain what led to your impairment of transmission equipment and how these factors might also effect potential impairment of other property and equipment (i.e., network infrastructure assets).

Revenue Recognition, page 44

2. Please clarify for us, and revise your disclosure in future filings to clarify, whether you amortize revenue related to installation services over the related contract term, or the estimated term of the related customer relationship.

Note 4: Property and Equipment, page 51

3. We note from your discussion of property and equipment on page 45 that construction in progress is included within your network infrastructure assets balance. Please tell us, and to the extent that it is material, disclose in future filings, the portion of your balance that is attributable to construction in progress.

Note 8: Income Taxes, page 52

4. Refer to your table of deferred income taxes. It appears that you have recognized \$93.3 million and \$101.5 million in deferred tax liabilities related to deferred revenue at December 31, 2008 and December 31, 2007, respectively. It appears, however, that you only had deferred revenues of \$115 million and 112.5 million at December 31, 2008 and December 31, 2007, respectively. Please tell us how you calculated your deferred tax liability related to deferred revenue.

Note 9: Discontinued Operations and Dispositions, page 53

5. We note that the company recognized a \$10.3 million gain, related to the reversal of currency translation adjustments, as other income on the consolidated statement of operations for the year ended December 31, 2007. It appears that this adjustment related to discontinued operations. Please explain why the adjustment was not classified within results from discontinued operations.

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Item 9A. Controls and Procedures, page 65

Management's Report on Internal Control Over Financial Reporting, page 65

6. In your discussion of material weaknesses identified as of December 31, 2008, you state that the company did not have sufficient processes in place to ensure the timely recording of "accrued obligations relating to property and equipment, including inventory". Please tell us the nature of the obligations to which you are referring.

* * * *

Please respond to our comments via correspondence over EDGAR within 10 business days or tell us when you will provide us with a response. 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 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.

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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 filings or in response to our comments on your filings.

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You may contact Kenya Wright Gumbs, Staff Accountant, at (202) 551-3373 or Carlos Pacho, Senior Assistant Chief Accountant, at (202) 551-3835 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spirgel Assistant Director