



DIVISION OF
CORPORATION FINANCE

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

April 14, 2011

Via U.S. Mail and Fax (617-375-7575)

Mr. Thomas A. Bartlett
Chief Financial Officer
American Tower Corporation
116 Huntington Avenue
Boston, MA 02116

**RE: American Tower Corporation
Form 10-K for the fiscal year ended December 31, 2010
Filed February 28, 2011
File No. 001-14195**

Dear Mr. Bartlett:

We have reviewed the above mentioned filing 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. Where indicated, we think you should revise your documents in response to our 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 our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing your response, 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.

Form 10-K for the Fiscal Year Ended December 31, 2010

General

1. Please explain to us the consideration you have given to Alcatel-Lucent's lightRadio and/or similar technologies and the potential impact they may have on your business. Also, tell us if you have considered whether this technology will

affect your impairment analysis with regard to your towers and related assets in the near term, and if so, explain how.

Financial Statements

11. Income Taxes

2. We note you disclose that your deferred tax assets as of December 31, 2010 do not include \$122.1 million of excess tax benefits from the exercises of employee stock options that are a component of net operating losses. Please explain this disclosure to us, including the nature of this asset, your basis for not recognizing the tax benefit as of year-end, and the accounting literature that supports your policy.
3. In addition, we note you state that total stockholders' equity will be increased if and when any such excess tax benefits are ultimately realized. With a view towards expanded footnote and MD&A disclosure, explain to us what must occur in order for the benefits to be realized. Also, clarify in future filings whether this benefit will impact your results of operations and disclose the anticipated timing of realization, if known.

* * * *

Please respond to our comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter, via EDGAR, that keys your responses to our comments and provides any requested supplemental information. 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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

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- 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.

You may contact Kenya Wright Gumbs, Staff Accountant, at (202) 551-3373, or Robert S. Littlepage Jr., Accountant Branch Chief, at (202) 551-3361 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,

/s/ Robert Littlepage for

Larry Spigel
Assistant Director