



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

August 31, 2010

Mr. Michael Barth
Chief Financial Officer
Acorn Energy, Inc.
4 West Rockland Road
Montchanin, Delaware 19710

RE: Acorn Energy, Inc.
Form 10-K for the Year Ended December 31, 2009
Forms 10-Q for the Periods Ended March 31, 2010 and June 30, 2010
File No. 1-33886

Dear Mr. Barth:

We have reviewed your response letter dated July 28, 2010 and have the following comment. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-K for the Year Ended December 31, 2009

General

1. In connection with responding to our comments, please provide, in writing, a statement acknowledging that:
 - the company is responsible for the adequacy and accuracy of the disclosure in their 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 filing; and

Mr. Michael Barth
Acorn Energy, Inc.
August 31, 2010
Page 2

- 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.

You may contact Ernest Greene, Staff Accountant at (202) 551-3733 or me at (202) 551-3689 if you have questions regarding comments on the financial statements and related matters. Please contact Dorine Miller, Financial Analyst at (202) 551-3711 or Jay Ingram, Legal Branch Chief at (202) 551-3397 with any other questions.

Sincerely,

John Hartz
Senior Assistant
Chief Accountant