



DIVISION OF
CORPORATION FINANCE

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

August 6, 2012

Via E-mail

John A. Moore
Chief Executive Officer
Acorn Energy, Inc.
4 West Rockland Road
Montchanin, DE 19710

**Re: Acorn Energy, Inc.
Form 10-K for the Year Ended December 31, 2011
Filed March 15, 2012
Response Letter dated July 26, 2012
File No. 1-33886**

Dear Mr. Moore:

We have reviewed your response and have the following comments. 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 comments apply to your facts and circumstances, please tell us why in your response.

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

Form 10-K for the Year Ended December 31, 2011

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 32

Critical Accounting Policies, page 37

1. We note your response to comment three from our letter dated July 10, 2012. We remain unclear as to how you determined your components, operating segments, and reporting units for purposes of goodwill impairment testing as of December 31, 2011. ASC 350-20-35 explains that a component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available and segment management (as defined in ASC 280-10-50-7) regularly reviews the operating results of that component. Please clarify if you consider the U.S. and Australian GridSense subsidiaries to

be two individual components of a single operating segment or two individual operating segments and explain in detail how you arrived at your conclusion. If you consider them to be two components of an operating segment that you aggregated into a single reporting unit, please describe in detail for us how you determined that your U.S. and Australian subsidiaries have similar economic characteristics and therefore were eligible to be aggregated. Your response should include an analysis comparing the gross margins and operating costs incurred by both the U.S. and Australian subsidiaries. If you consider the two subsidiaries to be their own individual operating segments, please explain how you determined they could be aggregated since reporting units are defined as operating segments or one level below an operating segment.

Results of Operations, page 41

2. We note your response to comment five from our letter dated July 10, 2012. As previously requested, please show us how you will revise your MD&A to discuss the business reasons for material changes in amounts presented in the “other” column on page 42. Please also revise your MD&A to discuss the business reasons for material changes in amounts presented in the line item titled “unallocated cost of corporate and DSIT headquarters” on page F-62. You could use your results for the year ended December 31, 2011 compared to December 31, 2010 as an example of what your revised disclosures would have looked like.

Audited Financial Statements

Note 2 – Summary of Significant Accounting Policies, page F-15

Revenue Recognition, page F-18

3. We note your response to comment nine from our letter dated July 10, 2012. Please show us how you will revise your future filings to include the disclosures required by Rule 5-02.3(c) and Rule 5-02.6(d) of Regulation S-X or tell us where they have been included in your financial statement disclosures.

You may contact Lisa Etheredge, Staff Accountant, at (202) 551-3424 or the undersigned at (202) 551-3769 if you have questions.

Sincerely,

/s/ Lisa Etheredge for Rufus Decker

Rufus Decker
Accounting Branch Chief