



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3561

June 1, 2016

Zamir Rauf  
Executive Vice President and Chief Financial Officer  
Calpine Corporation  
717 Texas Avenue  
Suite 1000  
Houston, Texas 77002

**Re: Calpine Corporation**  
**Form 10-K for the Fiscal Year Ended December 31, 2015**  
**Response dated May 20, 2016**  
**File No. 001-12079**

Dear Mr. Rauf:

We have reviewed your May 20, 2016 response to our comment letter 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our April 25, 2016 letter.

Form 10-K for the Fiscal Year Ended December 31, 2105

Financial Statements for the Year Ended December 31, 2015

Note 2. Summary of Significant Accounting Policies

Impairment Evaluation of Long-Lived Assets (Including Intangibles and Investments), page 112

1. We note your response to comment 6 that you perform your evaluation of impairment at the market Hub level. We have the following comments:

- Please tell us in more detail your rationale for concluding that grouping assets at the market Hub level, rather than the plant level, is consistent with the guidance in ASC 360-10-35-23. As part of your response, please explain to us which assets form the Hub Group for each of the CAISO NP15 Hub and the ERCOT Houston Hub. Also describe in more detail why the cash flows of each individual plant are not independent of the cash flows of other assets in the asset group and how the asset group is used to generate joint cash flows.
- Please revise your Critical Accounting Policy titled “Impairment Evaluation of Long-Lived Assets” to better explain the significant judgments made by management in performing impairment tests. Since the grouping of assets to determine the lowest level of identifiable cash flows requires considerable judgment, please disclose the level at which assets are grouped. Additionally, since it appears from your response that your Sutter Energy Center plant could be impaired if operations were suspended beyond 2016, please provide more detail to your investors about any significant assumptions made about this plant which, if reasonably likely changes occurred, could result in impairment of the plant or related asset group.

Note 3. Acquisitions and Divestitures, page 116

2. We note your response to comment 7 indicating that the pro forma incremental impact of the acquisition of Champion Energy was immaterial. We also note that the acquisition would have increased operating revenues by 15% and 12% in 2015 and 2014, respectively. Please provide us with an analysis of how you determined that the effect on operating revenues was immaterial to the Consolidated Financial Statements both quantitatively and qualitatively; otherwise, confirm you will provide the disclosures required by ASC 805-10-50-2h(3) and (4).

You may contact Melissa Blume, Staff Accountant at (202) 551-7128 or me at (202) 551-3737 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Jennifer Thompson

Jennifer Thompson  
Accounting Branch Chief  
Office of Consumer Products