



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

April 19, 2017

Zamir Rauf
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, 2016
Filed February 10, 2017
File No. 001-12079**

Dear Mr. Rauf:

We have limited our review of your filing to the financial statements and related disclosures 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.

Form 10-K for the Fiscal Year Ended December 31, 2016

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

Adjusted EBITDA, page 58

1. We note that you exclude major maintenance expense from Adjusted EBITDA. Please explain to us why this is not a normal, recurring, cash operating expense necessary to operate your business. See Question 100.01 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.
2. We note you add back contract amortization to arrive at Adjusted EBITDA. Please clarify for us why this adjustment was not initially reflected in amortization expense and therefore already captured within EBITDA. Further, please explain to us why you make this adjustment and how you considered the guidance in Question 100.04 of the

Compliance and Disclosure Interpretation on non-GAAP measures issued May 17, 2016 that specifically states that non-GAAP measures that substitute individually tailored recognition and measurement methods for any financial statement line item for those of GAAP could violate Rule 100(b) of Regulation G.

Item 8. Financial Statements and Supplementary Data

Consolidated Balance Sheets, page 95

3. Please revise to comply with ASC 350-20-45-1 and ASC 350-30-45-1. We note that your balance sheet includes several line items with smaller balances than either goodwill or other intangible assets.

Notes to the Consolidated Financial Statements

3. Acquisitions and Divestitures, page 109

4. We note your goodwill balance increased due to the acquisition of Calpine Solutions. Further, we note you disclosed on page 110, "For the goodwill acquired, we allocated \$68 million to our West segment, \$15 million to our Texas segment and \$79 million to our East segment." As this disclosure does not fully comply with ASC 350-20-50-1, please confirm you will disclose in future filings a rollforward of the changes in your goodwill in total and for each reportable segment.

Form 8-K Filed on February 10, 2017

Exhibit 99.1

Regulation G Reconciliations, page 18

5. Your disclosures indicate that the non-GAAP measure Adjusted Free Cash Flow is a performance measure; however, the nature of the adjustments and the naming of the measure appear to represent a liquidity measure. Please explain to us in detail why you believe that Adjusted Free Cash Flow is useful as a performance measure and why the measure is titled Adjusted Free Cash Flow if it is not intended to be a liquidity measure.

Net Income (Loss), As Adjusted Reconciliation, page 19

6. We note your GAAP effective income tax rate for fiscal 2016 was 34.3%, and your adjustments to arrive at net income (loss), as adjusted, assumed a zero percent effective tax rate. Please explain to us why the adjustments assumed a zero percent effective tax rate. See Question 102.11 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.

Commodity Margin Reconciliation, page 19

7. Please revise to begin your commodity margin reconciliations with GAAP results, such as income (loss) from operations. See Question 102.10 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Robert Babula, Staff Accountant at (202) 551-3339 or me at (202) 551-3737 with any questions.

Sincerely,

/s/ Jennifer Thompson

Jennifer Thompson
Accounting Branch Chief
Office of Consumer Products