



DIVISION OF
CORPORATION FINANCE

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

September 30, 2010

Jack A. Fusco
President and Chief Executive Officer
Calpine Corporation
717 Texas Avenue
Suite 1000
Houston, Texas 77002

**Re: Calpine Corporation
Form 10-K for the period ended December 31, 2009
Filed February 25, 2010
Definitive Proxy Statement on Schedule 14A
Filed April 5, 2010
File No. 001-12079**

Dear Mr. Fusco:

We have reviewed your filings 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. You should comply with the comments in all future filings, as applicable. Please confirm in writing that you will do so, and also explain to us in sufficient detail for an understanding of the disclosure how you intend to comply by providing us with your proposed revisions.

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 any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for period ended December 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations,
page 22

1. Please revise your disclosure to separately discuss the changes from period to period with respect to commodity revenue and commodity expense, as you seem to present these collectively. Where you identify intermediate causes of changes in your

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operating results, please describe the reasons underlying such causes. See Item 303(a) of Regulation S-K and SEC Release No. 33-8350.

Exhibit Index, page 212

2. Please file complete copies of material agreements, including all exhibits, schedules and attachments. See Item 601(b)(10) of Regulation S-K. As an example only, we note that you have not provided schedules and/or exhibits to the material agreements filed as Exhibit 10.1.7, the Amended and Restated Credit Agreement, dated as of November 24, 2009. While Item 601(b)(2) of Regulation S-K permits you to provide omitted information supplementally, there is not a similar provision in Item 601(b)(10) of Regulation S-K. Please review your material agreements and re-file complete agreements.

Proxy Statement on Schedule 14A filed April 5, 2010

Corporate Governance Matters, page 11

3. Please ensure that your disclosure explains why you have determined that your leadership structure is appropriate given your particular circumstances. You state that you believe shareholders are best served by separating the two roles, however, you do not explain why. Please revise. Refer to Item 407(h) of Regulation S-K.

Business relationships and Related Party Transaction Policy, page 13

4. Please describe the registrant's policies for review, approval or ratification of any transaction required to be reported under Item 404(a) of Regulation S-K. Specifically, please disclose the standards to be applied pursuant to such policies and procedures. See Item 404(b)(1)(ii) of Regulation S-K.

Compensation Discussion and Analysis, page 20

Determining Executive Compensation, page 21

5. We note your indication that Towers Watson reviewed three sources of data related to executive compensation "that provide summarized data on levels of base salary, target annual incentives and stock-based and other long-term incentives." It is not clear, however, why Towers Watson reviewed these additional sources, how they were used and what, if any, findings Towers Watson made as a result of the review. Please revise.

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Equity Compensation, page 26

6. Please clarify how you determine the amount of equity compensation to award to each named executive officer. Refer to Item 402(b)(1)(v) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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
- 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.

Please contact Mara L. Ransom, Legal Branch Chief at 202-551-3264 or me at 202-551-3720 if you have any questions.

Sincerely,

H. Christopher Owings
Assistant Director