



DIVISION OF
CORPORATION FINANCE

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

December 30, 2011

Via Facsimile

James C. Shay
Chief Financial Officer
Great Plains Energy Incorporated
1200 Main Street
Kansas City, MO 64105

**Re: Great Plains Energy Incorporated and Kansas City Power & Light Company
Form 10-K for the Fiscal Year Ended December 31, 2010
Filed February 25, 2011
File Nos. 001-32206 and 000-51873**

Dear Mr. Shay:

We have reviewed your filing 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.

Financial Statements and Supplementary Data, page 53

7. Goodwill and Intangible Assets, page 83

1. We note that your regulated electric utility operations are considered a reporting unit for assessment of impairment of goodwill as they are included within the same operating segment and have similar economic characteristics. Please tell us the operating segments identified in accordance with ASC 280-10-50-1 through 9 and the components within your operating segments. Given that a reporting unit is defined in ASC 350-20-35 as an operating segment or one level below an operating segment, please tell us in detail your basis in GAAP for aggregating utility operations into a single reporting unit for purposes of goodwill impairment testing. Please discuss the guidance in paragraphs 33 through 38 of ASC 350-20-35 to the extent necessary.

15. Commitments and Contingencies, page 103
Remediation, page 111

2. We note that you accrued estimated losses for environmental remediation expenses at a former KCP&L MGP site and for the future investigation and remediation of certain GMO MGP sites, PCB sites and retained liabilities. We also note that your estimate related to GMO MGP sites, PCB sites and retained liabilities could change materially after further investigation, and could also be affected by the actions of environmental agencies and the financial viability of other potentially responsible parties. Please tell us your consideration of disclosing an estimate of the possible loss or range of loss in excess of amounts accrued for these matters or that such an estimate cannot be made. Refer to ASC 450-20-50-4.

16. Legal Proceedings, page 114

3. We note your disclosure that you are unable to predict the outcome of the Iatan Levee litigation. Please tell us your consideration of disclosing an estimate of the possible loss or range of loss or that such an estimate cannot be made. Refer to ASC 450-20-50-4.

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.

James C. Shay
Great Plains Energy Incorporated
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You may contact Anthony Watson, Staff Accountant, at (202) 551-3318 or me at (202) 551-3344 if you have any questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson
Accounting Branch Chief