

Mail Stop 3561

September 15, 2009

William D. Harvey
Chairman and Chief Executive Officer
Alliant Energy Corporation
4902 N. Biltmore Lane
Madison, Wisconsin 53718

**Re: Alliant Energy Corporation
Interstate Power and Light Company
Wisconsin Power and Light Company
Forms 10-K for the Fiscal Year Ended December 31, 2008
Filed February 27, 2009
File Nos. 001-09894; 001-04117; 000-00337**

**Alliant Energy Corporation
Form 8-K
Filed April 30, 2009
File No. 001-09894**

Dear Mr. Harvey:

We have reviewed your filings and have the following comments. You should comply with the comments in all future filings, if applicable. Please confirm in writing that you will do so and also explain to us in sufficient detail how you intend to comply by providing us with your proposed revisions. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please also apply our comments as applicable to the financial statements and related disclosures of Interstate Power and Light Company and Wisconsin Power and Light Company.

Form 10-K for Fiscal Year Ended December 31, 2008

Item 8. Financial Statements and Supplemental Data, page 94

Management's Annual Report on Internal Control Over Financial Reporting, page 96

2. Please revise management's conclusion regarding the effectiveness of your internal control over financial reporting to definitively state whether or not internal control over financial reporting is effective. Refer to Item 308(a)(3) of Regulation S-K.

Note (7) Common and Preferred Stock, page 127

(a) Common Stock

3. Please tell us the amounts of restricted net assets of IPL and WPL as defined in Rule 4-08(e)(3) of Regulation S-X as of the end of the most recently completed year and how you compute the amounts. If restricted net assets of IPL and WPL together with your equity in undistributed earnings of equity method investees exceed 25 percent of consolidated net assets please disclose the amount of restricted net assets as of the end of the most recent year. In addition, please disclose the amount of consolidated retained earnings which represents undistributed retained earnings of equity method investees as required by Rule 4-08(e)(2) of Regulation S-X. Further, please disclose the amount of retained earnings or net income of IPL and WPL restricted or free of restrictions or tell us why this disclosure is not applicable under the circumstances. Refer to Rule 4-08(e)(1) of Regulation S-X. Finally, please file Schedule I as required by Rule 5-04 of Regulation S-X or tell us why you believe Schedule I is not required.

Part IV, page 194

Item 15. Exhibits, Financial Statement Schedules, page 194

4. Please file all exhibits, schedules and appendices to your material agreements. For example, we note that the exhibits and schedules to Exhibits 4.1, 4.3 and 4.9, Second Amended and Restated Five Year Credit Agreement, dated Nov. 7, 2006, were not included with your original filings. Refer to Rule 601(b)(10) of Regulation S-K. We also note that it appears you have filed each of these agreements pursuant to Rule 601(b)(4) of Regulation S-K. Considering that it

does not appear any securities, including indentures, were issued as part of these agreements, please discuss why you did not file these agreements pursuant to Rule 601(b)(10) of Regulation S-K or revise your Exhibit numbers accordingly.

Definitive Proxy Statement on Schedule 14A

Corporate Governance, page 9

Ethical and Legal Compliance Policy, page 11

5. We note that you make reference to your “Code of Conduct” in this section although page 191 of your Form 10-K indicates that your “code of ethics” is incorporated by reference to your proxy statement. Please advise.

Form 8-K Filed April 30, 2009

6. Segment earnings per share data represent non-GAAP financial measures. As such, please provide the disclosures required by Item 10(e)(1)(i) of Regulation S-X in future filings whenever one or more non-GAAP financial measures are included in a filing on Form 8-K. Please also clarify the reasons why management believes that presentation of segment and total earnings per share excluding non-recurring state income tax impacts provides useful information to investors. Refer to Section 202.04 of Financial Reporting Codification and Question 11 of Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures.

* * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the adequacy and accuracy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Ta Tanisha Meadows, Staff Accountant, at (202) 551-3322, or in her absence, William Thompson, Accounting Branch Chief, at (202) 551-3344 if you have questions regarding comments on the financial statements and related matters. Please contact Chris Chase, Attorney-Advisor, at (202) 551-3485, or me at (202) 551-3725 with any other questions.

Sincerely,

H. Christopher Owings
Assistant Director