



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

May 12, 2010

Via U.S. mail and facsimile

Mr. Alan L. Boeckmann
Chairman of the Board and Chief Executive Officer
Fluor Corporation
6700 Las Colinas Boulevard
Irving, TX 75039

**RE: Form 10-K for the fiscal year ended December 31, 2009
Form 10-Q for the period ended March 31, 2010
Definitive Proxy Statement on Schedule 14A filed March 15, 2010
File No. 001-16129**

Dear Mr. Boeckmann:

We have reviewed your filings and have the following comments. If you disagree with a comment, we will consider your explanation as to why our comment is 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 or may not 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 filing. 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.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2009

Cover Page

1. In future filings, please revise your cover page to reflect that your common stock is registered pursuant to Section 12(b) of the Exchange Act.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Segment Operations, page 31

2. In future filings, where there is more than one reason for a change between periods, please revise your segment MD&A for the periods presented to quantify the extent to which each reason contributed to the overall change in the segment line item. For example, we note on page 32 that segment profit margins for the Industrial & Infrastructure segment were negatively impacted by a large mining project in which the segment reports all of the joint venture's revenue, but only the segment's share of the joint venture's profit. The overall impact of this situation on the segment's profit and profit margin is unclear. Please show us supplementally what your revised disclosure will look like.

Item 15. Exhibits and Financial Statement Schedules, page 50

3. It appears that you have omitted the schedules and exhibits referenced in your Amended and Restated Credit Agreement dated September 7, 2006. Please file with your next periodic or current report, a complete copy of this credit agreement, including all schedules and exhibits referenced therein. See Item 601(b)(10) of Regulation S-K.
4. We note your disclosure in third full paragraph on page two that "letters of credit...are critical to [y]our business." Please file with your next periodic or current report your \$500 million letter of credit as referred to on page 41, which should include all schedules and exhibits referenced therein, or explain to us why you believe this agreement need not be filed. Please refer to Item 601(b)(10) of Regulation S-K.

Consolidated Financial Statements

Note 1 – Major Accounting Policies, page F-7

5. In future filings, please revise your engineering and construction contracts accounting policy disclosure to clarify if you also record profit on claims and unapproved change orders at the time you recognize revenue. Please also revise to disclose if your cost of revenue includes an allocation of depreciation and amortization.

Note 4 – Retirement Benefits, page F-17

6. Please tell us how you considered ASC 715-20-50-4 in deciding to aggregate your disclosures about pension plans and other postretirement benefit plans outside the United States with those for the plans inside the United States.

Note 13 – Variable Interest Entities, page F-35

7. You indicate on page F-35 that you identified a number of partnerships and joint ventures to be variable interest entities, however, most did not meet the consolidation requirements of ASC 810 and therefore were unconsolidated. You disclose on page 15 of your Form 10-Q for the period ended March 31, 2010 that the adoption of SFAS 167 (codified in ASC 810-10) had no impact on your financial position, results of operations or cash flows. Please specifically tell us how you determined that you were not the primary beneficiary of GeneSYS and Fluor-Transurban and therefore, they did not need to be consolidated as of March 31, 2010.

DEFINITIVE PROXY STATEMENT ON SCHEDULE 14A FILED MARCH 15, 2010

Executive Compensation

Compensation Discussion and Analysis, page 22

Establishing Executive Compensation, page 23

8. We note that you benchmark your executive compensation against the 50th percentile of the peer group data you collect. In future filings, please indicate where actual executive compensation amounts fall relative to benchmarked levels. In addition, to the extent amounts fall significantly above or below those targeted amounts, you should discuss the reasons for such variance.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. 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 reviewed by the staff to be certain that they have provided all information investors require for an informed decision. 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.

Mr. Alan L. Boeckmann
Fluor Corporation
May 12, 2010
Page 4

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

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- 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 filing or in response to our comments on your filing.

You may contact Hagen Ganem, Staff Attorney, at (202) 551-3330 or, in his absence, Pamela Long, Assistant Director, at (202) 551-3765 if you have any questions regarding legal matters. Please contact Lisa Haynes, Staff Accountant, at (202) 551-3424 or, in her absence, the undersigned, at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker
Accounting Branch Chief