

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

September 1, 2009

Mr. James H. Haddox Chief Financial Officer, Quanta Services, Inc. 1360 Post Oak Blvd., Suite 2100 Houston, TX 77056

Re: Quanta Services, Inc.

Form 10-Q for the quarter ended June 30, 2009

File No. 1-13831

Dear Mr. Haddox:

We have reviewed your response to our letter dated July 13, 2009 and the above noted filings and have the following comment. Where indicated, we think you should revise your document in response to this comment. If you disagree, 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. We may ask you to provide us with supplemental 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-Q for the period ended June 30, 2009

Notes to the Consolidated Financial Statements

Note 9. Segment Information, page 23

We have reviewed your response to our previous comment one in our letter dated July 13, 2009 as well as the disclosures in your Form 10-Q for the period ended June 30, 2009 and have the following additional comments:

Mr. James H. Haddox Quanta Services, Inc. September 1, 2009 Page 2

- With a view towards future disclosure, please provide us with a detailed analysis to support your conclusion that aggregation of your operating units based on your divisional structure is appropriate taking into consideration paragraph 17 of SFAS 131. We remind you that operating segments can only be aggregated if they are economically similar historically and exhibit similar long-term trends, and thus can be expected to have similar prospects in the future. It appears to us that your different industries may not be exhibiting similar short-term trends as to number, size and duration of contracts. We ask that you please provide this analysis in a timely manner prior to filing your Form 10-Q for the period ending September 30, 2009.
- In future filings please enhance your discussion regarding how your business is managed to include information you have previously provided to us such as:
 - o Each operating unit reports to one of two managers below the CODM;
 - Operating units may compete against each other for a particular job and an entrepreneurial sprit is encouraged in the individual operating units; however, staff and other resources may be shared among operating units on particular jobs or contracts;
 - Operating units may serve customers in multiple industries but are grouped into divisions based on their predominant of type of contracts and customers;
 - Work may be allocated among operating units and divisions by the division Presidents working together;
 - o Metrics in addition to revenues, gross margin, operating income that are used to evaluate performance, and;
 - How you determine compensation and what factors the compensation committee may utilize.
- We note your disclosure that the predominant type of work by an individual operating unit can change as the operating unit may expand its service capabilities or develop market opportunities for different types of work. In future filings please clearly explain and quantify, if meaningful, the changes in predominant work by operating units to help the reader better understand any changes in your segment results.
- We note your discussion of various factors that can influence gross margins. Please revise future filings to include a more specific and comprehensive discussion regarding how changes in these factors impact changes in your operating results. Please ensure that you provide quantified information where practicable.
- We note your disclosure that differences in margins in certain of your services contributed to changes in your gross profit. Please revise future filings to quantify the impact of these margin differences where practicable.
- We note that revenues in the electric power services segment were impacted by a decrease in revenues from emergency restoration services. In future filings please further explain why this type of variance occurred by specifically discussing the underlying events that led to the emergency restoration services.

With regard to the above comments, please provide us with your proposed future disclosures.

Mr. James H. Haddox Quanta Services, Inc. September 1, 2009 Page 3

As appropriate, 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 supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding this comment, please direct them to Mindy Hooker, Staff Accountant, at (202) 551-3732, Tricia Armelin, Senior Staff Accountant, at (202) 551-3747, or to the undersigned at (202) 551-3768.

Sincerely,

John Cash Branch Chief