

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

May 26, 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-K for the year ended December 31, 2007

Definitive Proxy Statement, April 18, 2008

Form 10-Q for the quarter ended September 30, 2008

File No. 1-13831

Dear Mr. Haddox:

We have reviewed your response to our letter dated April 20, 2009 and have the following comment. We ask that you respond within ten business days.

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 September 30, 2008

Notes to the Condensed Consolidated Financial Statements

Note 9. Segment Information, page 25

- 1. We have reviewed your response to our previous comment in our letter dated February 2, 2009 and appreciate the additional information you have provided. However, it continues to appear to us that you have not fully demonstrated how you determined it was appropriate to aggregate the 25 operating units that comprise your Infrastructure Services reportable segment. Therefore, please address the following items:
 - Please clarify for us what measure or group of measures is used by your CODM to evaluate the economic performance of your operating segments. In addition, please provide us with an analysis of these measures for each quarter in the past two fiscal years as well as the most recent interim period with an explanation of how you have considered the similarities and differences in these measures when determining it was appropriate to aggregate your operating segments.
 - Please further explain the statement contained in your response letter dated December 11, 2008 that, in determining that it was appropriate to aggregate the 25 operating

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segments into your Infrastructure Services reportable segment, you concluded that the economic characteristics will be similar over the long-term in the sense that they are expected to vary.

- Tell us how the geographic location of the operating units impacts the results of the
 operating unit by addressing the location of each unit, the impact that the difference
 in local labor costs may have on your units and the impact of the region on your
 revenue stream.
- Provide us with a quantified discussion regarding the degree to which your operating units earn revenue across industry lines. It appears that each of your operating units is concentrated in one predominant industry.
- Provide us with a more detailed explanation of how your Company bids on contracts.
 Tell us if the bidding is done at the operating unit level or at the corporate level. If the bidding is done at the operating unit level, tell us whether multiple operating units may compete against each other for bids. If the bidding is done at the corporate level, please explain to us how the contracts are allocated to the operating units.
- Tell us how you account for revenues and expenses at the operating unit level if support from one operating unit is lent to another. For example, please explain whether the revenue and costs remain with the original operating unit or transfers to the unit which was borrowed from.
- Provide us with a more specific and comprehensive discussion regarding the degree and frequency of the interchangeability of your labor. We note from your letter dated April 20, 2009 that individuals can be utilized on portions of work in other industries. It therefore appears that there may be limits on the interchangeability of your labor based on the skill sets of the individuals.
- Please provide to us your most recent organization chart.
- We note the reports you have provided to us. Please tell us what level of detail is provided to your board of directors.

As appropriate, please amend your filing and respond to these comments within ten business days or tell us when you will provide us with a response. Please provide us with a supplemental response letter that keys your responses to our comments and provides any requested supplemental information. Detailed letters greatly facilitate our review. Please file your supplemental response on EDGAR as a correspondence file. 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