



DIVISION OF
CORPORATION FINANCE

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

via fax (206) 701-2254

August 10, 2010

Brian C. Henry
Chief Financial Officer and
Executive Vice President
Cray Inc.
901 Fifth Avenue, Suite 1000
Seattle, WA 98164

**Re: Cray Inc.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed March 16, 2010
Form 10-Q for Fiscal Quarter Ended June 30, 2010
Filed August 6, 2010
File No. 000-26820**

Dear Mr. Henry:

We have reviewed your letter dated July 16, 2010 in connection with the above-referenced filings and have the following comments. In our comment, 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 amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated June 21, 2010.

Form 10-K for Fiscal Year Ended December 31, 2009

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

Key Performance Indicators, page 31

1. We note from your response to prior comment 1 that due to the nature and size of your contracts, backlog can fluctuate significantly from one period to the next, and therefore you believe backlog it is not a meaningful indicator of future business prospects. We

further note that many of your orders from the U.S. government are not funded at the time of contract signing and are subject to fiscal funding risk and therefore, do not constitute firm backlog. Please tell us your consideration to disclose (a) amounts that are funded and otherwise firm as backlog pursuant to Item 101(c)(1)(viii) and (b) those amounts under contract that have yet to be funded or are not firm as unfunded backlog, with related discussion regarding the fluctuations period over period and fluctuations anticipated in the future as part of your results of operations and future business prospects disclosures. In this regard we note your discussion of bookings and backlog as part of your earnings call for the quarter ended March 31, 2010, which seems to suggest disclosure of such amounts and related analysis are important in providing investors with insight as to how management views the business.

Part III (Incorporated by reference from the Definitive Proxy Statement filed on April 22, 2010)

Compensation of the Executive Officers

Annual Cash Incentive Compensation Plan

Individual Balanced Scorecards, page 28

2. We note your response to prior comment 7. Item 402(b) of Regulation S-K requires disclosure of the material elements of a named executive officer's compensation. As Dr. Williams' product development and engineering budget management goals constituted 60% of her bonus scorecard, a brief description of these goals, as well as disclosure of any related qualitative or quantitative targets, appears warranted. Refer to Item 402(b)(vii) of Regulation S-K. Similarly, since the Cray CX1 system revenue targets constituted 30% of Mr. Miller's scorecard, disclosure of these targets also appears to be required. Please provide this information in your response letter. Alternatively, if you believe, as you indicate in your response letter, that disclosure of Dr. Williams and Mr. Miller's performance targets is not required pursuant to Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed supplemental analysis that explains how disclosure of such targets would cause you competitive harm.

Form 10-Q for Fiscal Quarter Ended June 30, 2010

Note 1. Basis of Presentation and Summary of Significant Accounting Policies

Revenue Recognition, page 6

3. We note your response to prior comment 8 regarding the various methodologies used to determine the estimated selling price for each deliverable in your multiple element arrangements. In an effort to understand the significance of these methodologies, please tell us how frequently the company is able to determine the best estimate of selling price based on VSOE versus how often you rely on estimated selling price (ESP). If a

Brian Henry
Cray, Inc.
August 10, 2010
Page 3

significant number of your arrangements require the use of ESP, please explain further the factors you noted in determining the estimated selling price for your deliverables and discuss how those factors and other inputs are used in the estimation process and what other trends and techniques are incorporated into the analysis.

You may contact Melissa Kindelan, Staff Accountant at (202) 551-3564 or the undersigned at (202) 551-3499 if you have questions regarding comments on the financial statements and related matters. Please contact Matthew Crispino, Staff Attorney at (202) 551-3456 or David Orlic, Staff Attorney at (202) 551-3503 with any other questions.

Sincerely,

Kathleen Collins
Accounting Branch Chief