#### Via Federal Express

Ms. Hanna T. Teshome Special Counsel U.S. Securities and Exchange Commission 450 Fifth Street, N.W. Washington, DC 20549-0609

> Re: Texas Instruments Incorporated Definitive 14A Filed March 9, 2007 SEC File No. 001-03761

Dear Ms. Teshome:

I am writing in response to your letter dated August 29, 2007, to Texas Instruments Incorporated (the "company" or "TI") containing comments on our Definitive 14A filed on Marcy 9, 2007 ("2007 Proxy Statement"). TI will address your comments in future filings as discussed below. In addition, we draw your attention below to selected portions of our 2007 Proxy Statement where we feel they are relevant to the comment.

## Compensation Discussion and Analysis, page 16

#### What are the objectives of our compensation program, page 17

COMMENT 1: You state that the committee judges performance-based on three specific measures one of which is "total shareholder return." Without further insight into what this term means, how it is determined, and how it impacts bonus awards, your disclosure is not easily understood. Please revise your disclosure to clarify what constitutes total shareholder return.

RESPONSE 1: As used in the Compensation Discussion and Analysis section ("CD&A") of TI's 2007 Proxy Statement, one- and three-year "total shareholder return" ("TSR") refers to the percentage change in the value of a stockholder's investment in a company over a one-year and a three-year period, as determined by dividends paid and the change in the company's share price during the period. To the extent the Committee continues to use TSR as a performance measure in determining compensation for the named executive officers, TI will include a definition of TSR in its future filings.

## Analysis of Compensation Determinations for 2006, page 21

COMMENT 2: Please expand your disclosure to address the committee's analysis of "total compensation" and how the evaluation of this data resulted in specific awards for 2006 or modifications to the manner in which you implement your compensation program.

RESPONSE 2: In future filings, TI will expand the discussion of total compensation to include, to the extent applicable, the impact that the Committee's evaluation of total compensation had on the level and form of compensation awarded by the Committee to the named executive officer in the reporting year. For example, if the Committee lowers the amount of equity compensation from targeted levels as a result of its review of an officer's total compensation, TI will note that fact in the CD&A. If the review of total compensation results in no change to the officer's compensation, TI will include a statement to that effect.

COMMENT 3: Please revise the compensation discussion and analysis to discuss material differences in compensation policies with respect to individual named executive officers in accordance with Section II.B.1. of Commission Release No. 33-8732A. Refer to the disparity between Mr. Templeton's salary, the compensation awarded to him under the performance bonus and profit sharing programs and the TI Executive Officer Performance Corporate Incentive Plan, and the equity awards made on January 19, 2006. Provide a more detailed discussion of how and why Mr. Templeton's compensation differs from that of the other named executive officers. If policies or decisions relating to a named executive officer are materially different than the other officers, please discuss this on an individualized basis.

RESPONSE 3: In preparing the CD&A for its 2007 Proxy Statement ("2007 CD&A"), TI considered whether there were material differences in its compensation policies with respect to the named executive officers and concluded that there were no material differences. (For TI's chairman, the Compensation Committee used a different methodology to set base salary, bonus and equity compensation than for the other named executive officers, because of limited peer group data on executive chairmen. For a description of this methodology, please see the 2007 Proxy Statement at pages 21, 22 and 27.) The differences between the named executive officers' levels of compensation did not result from any formula used to achieve those differences. Instead, the elements of compensation were determined separately for each officer applying the factors described in the 2007 CD&A. In future filings, if there are material differences in the compensation policies used by the Committee in setting the compensation of specific named executive officers, TI will describe them; or if there are no such differences, TI will clarify that there are none. In addition, TI will disclose any multiples or other set differentials that are applied to derive the officers' compensation, or clarify that they did not play a role in the determinations.

#### Assessment of 2006 Company Performance, page 23

COMMENT 4: You provide little discussion and analysis of the effect of individual performance on performance based compensation despite disclosure suggesting it is a significant factor considered by the committee. Please provide additional detail and an analysis of how individual performance contributed to actual compensation for the named executive officers. For example, disclose the elements of individual performance, both quantitative and qualitative, and specific contributions the compensation committee considered in its evaluation, and if applicable, how the committee weighted and factored them into specific compensation decisions. Please refer to Item 402(b)(2)(vii) of Regulation S-K.

RESPONSE 4: Please note that in the discussion of the bonus determinations for 2006 (page 24 of the 2007 Proxy Statement), TI stated that the individual performance assessment for each officer "was based primarily on the financial performance of the business operation for which the officer was responsible

and the strategic progress of the organization for which the officer was responsible." Elsewhere in the 2007 CD&A, TI noted that the company's relative performance as compared to that of competitors is "[m]ost crucial" in the Compensation Committee's assessment of performance. (Please see the 2007 Proxy Statement at page 17.) In future filings, TI will specify more clearly the relative importance of individual performance as compared to other factors such as company-level performance and peer group compensation data in the determination of base salary, long-term compensation and bonus, as applicable. In addition, to the extent individual performance is a significant consideration, TI will confirm that individual performance evaluations are based primarily on the performance of the organization for which the officer is responsible, or it will identify such other principal factors as may apply.

COMMENT 5: Please disclose the necessary targets or performance measures to be achieved in order for your named executive officers to earn their incentive compensation. To the extent you believe that such disclosure would result in competitive harm such that you may exclude it under Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed supplemental analysis supporting your conclusions and disclose how difficult or likely it would be for the company or the named executive officers to meet those goals. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the target levels or other factors, please provide as much detail as necessary without providing information that would result in competitive harm. Provide appropriate insight into the factors you considered in setting performance related objectives such as assessments of historical incentive practice and the incentive parameters set for the relevant fiscal period.

RESPONSE 5: In the 2007 CD&A, TI disclosed the material aspects of all necessary targets and performance measures to be achieved with respect to incentive compensation for 2006. Please see pages 17, 19 and 23 of the 2007 Proxy Statement. Equity compensation awarded in 2006 was not subject to targets or performance measures. For profit sharing, there was a performance threshold of 10 percent annual operating margin. The bonus plan for executive officers (the Texas Instruments Executive Officers Performance Plan) provides that executive officers can be paid a cash bonus under the plan equal to 0.5 percent of the company's consolidated income as defined in the plan, subject to the discretion of the Compensation Committee to set bonuses at a lower level. TI stockholders approved the plan, including the 0.5 percent formula, in 2002. In exercising its discretion, the Committee has followed a policy of setting total cash compensation at a level above the market median if the company performed better than competitors, and below the market median if the company performed worse than competitors. The Committee makes this performance assessment at the end of the year, focusing on the company's relative performance on specific measures that TI identified in the CD&A. TI "believe[s] this approach is important, as our industry changes rapidly and thresholds that appear challenging at the beginning of a year could prove to be irrelevant by year-end." (2007 Proxy Statement at page 17.)

## Decisions on 2006 Performance Bonuses, page 24

COMMENT 6: Please provide additional analysis about how you determined the amount of compensation paid under the profit sharing program and the Executive Officer Performance Plan. See Item 402(b)(1)(v) of Regulation S-K. Provide a more focused discussion that not only sets forth the amount of compensation awarded under these programs but also provides substantive analysis and insight regarding the extent to which you achieved target or maximum levels of performance and how achievement of the corporate performance objectives and individual goals resulted in specific payouts for 2006. To the extent the committee exercised its discretion in making awards under these programs, as your disclosure on page 23 indicates, please disclose the specific exercises of discretion in accordance with Item 402(b)(2)(vi) of Regulation S-K.

RESPONSE 6: Please see the response to Comment 5 above. In future filings, TI will provide more detail concerning the calculation of profit sharing for the reporting year and explain the role of discretion, if any, in the payment of profit sharing to the named executive officers. In addition, TI will explain more clearly the relationship between profit sharing and the level of bonus paid to the named executive officers. With respect to the Executive Officer Performance Plan, there are no minimum or maximum levels of performance or payout formulas, except that the plan provides for a payment to each officer equal to 0.5 percent of the company's consolidated income and the Compensation Committee has the discretion under the plan to lower the bonus amount to such level, including \$0, as it considers appropriate. As noted in Response 5 above, the Committee in exercising its discretion has focused on the company's relative performance, specifically how the company's performance compared with that of named competitors on certain performance measures that TI identified in the CD&A. If the company's performance on those measures was superior to competitors on those measures, the Committee's policy has been to set total cash compensation above the market median. If the company's performance is inferior to competitors on those measures, the Committee's policy has been to set total cash below the market median. In the 2007 CD&A, TI stated the Committee's assessment of the company's relative performance on each of the performance measures and the Committee's conclusion that overall performance was above median. See 2007 Proxy Statement at pages 23-25. In future filings, TI will provide a more focused discussion of bonus that relates the Committee's performance, TI will disclose them as required by the SEC's rules.

COMMENT 7: Please discuss and analyze how the compensation committee determined the actual number of shares underlying the stock option and restricted stock unit awards and describe the reasons why you allocated these awards in the proportions reflected in columns (i) and (j) of the Grants of Plan Based Award table. Please concisely set forth the rationale for the variances of these awards among the named executive officers. Please refer to Items 402(b)(1)(v) and 402(b)(2)(iii) of Regulation S-K.

RESPONSE 7: In future filings, TI will expand the discussion and analysis of equity compensation to state more clearly the relative importance of the factors considered in setting the equity compensation levels of the named executive officers for the reporting year. In addition, TI will discuss and analyze in greater detail why the share amounts were allocated as they were between the forms of equity compensation awarded to those officers.

## Potential Payments Upon Termination or Change in Control, page 38

COMMENT 8: Please describe and explain how you determine the appropriate payment and benefit levels under the various circumstances that trigger payments or provision of benefits under the termination or change in control arrangements. Also, discuss how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements and the rationale for decisions made in connection with these arrangements. See paragraphs (b)(1)(v) and (j)(3) of Item 402 of Regulation S-K.

RESPONSE 8: TI will include in its Item 402(j) narrative a description and explanation of how the payment and benefits levels were determined, or, if appropriate, TI will provide cross-references to other portions of the proxy statement where the benefit is described and explained (e.g., the CD&A and the narrative or notes relating to the Pension Benefits and Nonqualified Deferred Compensation tables). Similarly, in the Item 402(j) narrative, TI will explain the rationale for TI's termination and change in control arrangements and describe how they fit into the objectives of TI's executive compensation program, or cross-reference to explanations and descriptions provided elsewhere in the proxy statement. For example, TI will describe and explain how the termination provisions of TI's equity compensation were determined and how they fit into TI's overall compensation objectives. To the extent the termination and change in control benefits discussed in the narrative affect the determination of other compensation awarded in the reporting year, TI will describe the effect or state that they had no effect in the reporting year.

# COMMENT 9: Please consider aggregating the amounts payable for each situation that would generate a payout.

RESPONSE 9: In future filings, TI will aggregate the amounts payable for each situation that would generate a payout.

In connection with this response to your comments regarding our Definitive 14A filed on March 9, 2007, TI acknowledges that:

- · TI is responsible for the adequacy and accuracy of the disclosure in the filing;
- · staff comments or changes to our disclosures in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- · TI 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.

We trust that the above information will be sufficient for your purposes. If you have any questions, please call Daniel M. Drory (972-917-5449) or Cynthia H. Haynes (972-917-5434) of Texas Instruments.

Very truly yours,

/s/ Joseph F, Hubach

Joseph F, Hubach

Senior Vice President, Secretary and General Counsel

cc: Richard K. Templeton, President and Chief Executive Officer