

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

DIVISION OF CORPORATION FINANCE MAIL STOP 7010

February 29, 2008

By US Mail and Facsimile

Mr. Thomas H. Ehrlich Chief Financial Officer Uranium Resources, Inc. 650 S. Edmonds Lane, Suite 108 Lewisville, TX 75067

> Re: Uranium Resources, Inc. Form 10-K for the year ended December 31, 2006 Filed March 30, 2007 Response Letter Dated February 6, 2008 File No. 0-17171

Dear Mr. Ehrlich:

We have limited our review of your filings to those issues we have addressed in our comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may 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 comment or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Thomas H. Ehrlich Uranium Resources, Inc. February 29, 2008 Page 2

Form 10-K for the Year Ended December 31, 2006

- 1. We note your response to comment 9 and reissue it in part. You have identified non-financial goals but have omitted disclosure of the specific production targets, production cost targets, and budget targets used to determine compensation. To the extent you believe disclosing the targets would result in competitive harm such that the targets could be excluded properly under Instruction 4 to Item 402(b) of Regulation S-K, please provide on a supplemental basis a detailed explanation supporting your conclusion. Please also note that to the extent disclosure of the quantitative or qualitative performance-related factors would cause competitive harm, you are required to discuss how difficult it will be for you to achieve the target levels or other factors. Please see Instruction 4 to Item 402(b) of Regulation S-K.
- 2. We note your response to comment 17 and reissue it in part. In future filings, please disclose the aggregate number of stock awards and the aggregate number of option awards outstanding at fiscal year end held by each of those directors, as required in the Instruction to Item 402(k)(2)(iii) and (iv). In this regard, we note that the aggregate number of stock and option awards may be different than the amount of awards granted in 2006.
- 3. We note your response to comment 19 and reissue it in part. In future filings, please ensure consistency of disclosure between the notes to the financial statements and disclosure in the filing. We refer you to Note 7 to the financial statements in which you disclose a series of related party transactions. Item 13 should provide all of the disclosure required by Item 404 of Regulation S-K.

Form 10-Q for Quarter Ended September 30, 2007

Management Discussion & Analysis, page 15

4. We note your response to prior comment 28, stating that you propose to include the disclosures required by Item 10(e) of Regulation S-K in all future filings. Please submit a draft of the applicable disclosures that you intend to make; and advise us of any comparable disclosures that may presently appear in your annual report. Mr. Thomas H. Ehrlich Uranium Resources, Inc. February 29, 2008 Page 3

Closing Comments

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comment and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

You may contact Nasreen Mohammed at (202) 551-3773 or Karl Hiller at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Sean Donahue at (202) 551-3579 or, in his absence, Mellissa Duru at (202) 551-3757 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director