



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

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

April 27, 2007

via U.S. Mail

Mr. Thomas H. Ehrlich
Secretary
Uranium Resources, Inc.
650 S. Edmonds, Suite 108
Lewisville, Texas 75067

**Re: Uranium Resources, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed April 18, 2007
File No. 01-33404**

**Post-Effective Amendment No. 1 to Form S-1 on Form S-3
Filed April 11, 2007
File No. 333-133960**

**Form 10-K for the Fiscal Year Ended December 31, 2006
Filed March 30, 2007
File No. 0-17171**

Dear Mr. Ehrlich:

We have limited our review of the above filings to only the areas upon which we have issued comments. Where indicated, we think you should revise your documents in response to these comments. 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. In some of our comments, we may ask you to provide us with supplemental 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 filings. 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.

Preliminary Proxy Statement on Schedule 14A

Approval of 2007 Restricted Stock Plan, page 19

1. Please provide an equity compensation plan table pursuant to Item 10 of Schedule 14A.

Approval of Amendments to 2004 Directors Stock Option Plan, page 21

2. Please provide further details about the amendments to your 2004 Directors Stock Option Plan. For instance, please explain why you want the Compensation Committee to grant options in their discretion at any time and in any amounts to non-employee directors. Also, briefly discuss the criteria the Compensation Committee will use to determine the when to grant these options and how the amounts will be decided.

Post-Effective Amendment No. 1 to Form S-1 on Form S-3

General

3. Please note that we will not be in a position to declare the pending post-effective amendment effective until the comments below have been addressed.
4. Please add a risk factor regarding your officers' conclusion that your disclosure controls and procedures and internal controls over financial reporting were not effective as of the year ended December 31, 2006.

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

Controls and Procedures, page 31

3. We note that your certifying officers concluded that your disclosure controls and procedures were not effective as of the end of the period covered by the report. Please substantially revise your disclosure in this section to provide a more detailed explanation of the ineffectiveness of your disclosure controls and procedures. For example:
 - Disclose the precise date at which your certifying officers reviewed your disclosure controls and procedures and identified them as needing improvement.
 - Specifically describe the problems the officers identified as a result of their review. Simply disclosing that your "financial and accounting organization lacked an adequate amount of resources" is too vague in this regard.

- Identify the date when each problem arose and the person who identified the problem.
- Further describe the steps you took and are taking to remediate the situation. Ensure that this discussion specifies in sufficient detail the nature of any changes. Also, explain how you intend the changes to resolve the identified problems.

We may issue further comments after reviewing your response.

4. Please disclose management's conclusion as to the effectiveness of the company's internal controls over financial reporting as of the end of the fiscal year. When a company identifies a material weakness, and such material weakness has not been remediated prior to its fiscal year-end, it must conclude that its internal control over financial reporting is ineffective.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

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

Mr. Thomas H. Ehrlich
Uranium Resources, Inc.
April 27, 2007
Page 4

- the company 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Jason Wynn at (202) 551-3756 or, in his absence, me, at (202) 551-3611 with any questions. Direct all correspondence to the following ZIP code: 20549-7010.

Sincerely,

Anne Nguyen Parker
Branch Chief

cc: J. Wynn

via facsimile
Alfred C. Chidester
Baker & Hostetler LLP
(303) 861-2307