



DIVISION OF
CORPORATION FINANCE

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

December 10, 2010

Thomas H. Ehrlich
Vice President and Chief Financial Officer
Uranium Resources, Inc.
405 State Highway 121 Bypass
Building A, Suite 110
Lewisville, Texas 75067

Re: Uranium Resources, Inc.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed March 16, 2010
Schedule 14A Definitive Proxy Statement
Filed April 27, 2010
File No. 1-33404

Dear Mr. Ehrlich:

We have reviewed your response letter dated September 29, 2010, and we have the following comment.

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 comments apply 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 these comments, we may have additional comments.

General

1. We note the prospectus supplement pursuant to Rule 424(b)(5) dated November 1, 2010. We are unable to locate an unqualified legality opinion for this offering of 7,150,000 shares of your common stock covered by the shelf registration statement filed on Form S-3, file number 333-166647, declared effective on May 21, 2010. Please file the unqualified opinion in a Form 8-K or by post-effective amendment, or advise. For guidance, please refer to Question 212.05 of the Securities Act Rules Compliance and Disclosure Interpretations, available on our website at: <http://www.sec.gov/divisions/corpfin/cfguidance.shtml>. Also refer to comment 1 in our letter dated August 4, 2010.

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Closing 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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

Please contact Tracey L. McNeil at (202) 551-3392, Alexandra M. Ledbetter at (202) 551-3317, or me at (202) 551-3740 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director