FORM 51-102F3
MATERIAL CHANGE REPORT

Item 1. Name and Address of Reporting Issuer

Uranium One Inc.
Suite 900, 1285 West Pender Street
Vancouver, British Columbia, V6E 4B1

Item 2. Date of Material Change

December 27, 2010

Item 3. Press Release

Date of Issuance: December 27, 2010
Place of Issuance: Vancouver, British Columbia and Johannesburg, South Africa
Disseminated through: Canada NewsWire

Item 4. Summary of Material Change

Uranium One Inc. ("**Uranium One**") completed the second closing of its transaction with JSC Atomredmetzoloto ("**ARMZ**"), comprising the issuance of 178,127,164 new common shares of Uranium One to ARMZ in return for ARMZ's 50% interest in the Akbastau uranium mine and 49.67% interest in the Zarechnoye uranium mine in Kazakhstan. ARMZ currently holds 492,217,929 common shares of Uranium One, representing 51.4% of the outstanding common shares of Uranium One.

Item 5. Full Description of Material Change

Uranium One completed the second closing of its transaction with ARMZ, comprising the issuance of 178,127,164 new common shares of Uranium One to ARMZ in return for ARMZ's 50% interest in the Akbastau uranium mine and 49.67% interest in the Zarechnoye uranium mine in Kazakhstan. As a result of this transaction, and earlier transactions with ARMZ and its subsidiaries, ARMZ currently holds, through wholly-owned subsidiaries, 492,217,929 common shares of Uranium One, representing 51.4% of the outstanding common shares of Uranium One.

This completed the ARMZ transaction previously announced on June 8, 2010, under which Uranium One acquired ARMZ's interests in the Akbastau and Zarechnoye mines and ARMZ contributed US$610 million in cash to Uranium One in return for 356 million new common shares of Uranium One pursuant to a definitive purchase and subscription agreement with ARMZ.

In addition, on December 29, 2010, Uranium One repurchased and cancelled the CDN$269,100,000 aggregate principal amount 3% convertible unsecured debenture which was issued by Uranium One to Japan Uranium Management Inc. on January 5, 2010, for a payment of $275,794,323.29.

Item 6. Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7. Omitted Information

Not applicable.

Item 8. Executive Officer

Chris Sattler
Executive Vice President, Corporate Development and Investor Relations
Telephone: 416-350-3657
Facsimile: 416-363-6806

Item 9. Date of Report

January 4, 2011

SCHEDULE “A”

News Release

December 27, 2010

Uranium One Completes ARMZ Transaction

Vancouver, British Columbia and Johannesburg, South Africa – Uranium One Inc. ("Uranium One") is today pleased to announce that it has completed the second closing of its transaction with JSC Atomredmetzoloto ("ARMZ"), comprising the issuance of 178,127,164 new common shares of Uranium One to ARMZ in return for ARMZ's 50% interest in the Akbastau Uranium Mine and 49.67% interest in the Zarechnoye Uranium Mine. ARMZ currently holds 492,217,929 common shares, representing 51.4% of the outstanding common shares.

This completes the ARMZ transaction previously announced on June 8, 2010, under which Uranium One acquired ARMZ's interests in the Akbastau and Zarechnoye mines and ARMZ contributed US$610 million in cash to Uranium One in return for 356 million new common shares of Uranium One pursuant to a definitive purchase and subscription agreement with ARMZ.

2010 Debentures

For the information of debentureholders, this is to confirm that at the opening of trading on Friday, December 31, 2010, the Toronto Stock Exchange will re-commence quoting the 7.5% (re-set to 5%) convertible unsecured subordinated debentures of the Company due March 13, 2015 on an "accrued interest" basis.

About Uranium One

Uranium One is one of the world's largest publicly traded uranium producers with a globally diversified portfolio of assets located in Kazakhstan, the United States and Australia.

For further information, please contact:

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Cautionary Statement

No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein.

For further information about Uranium One, please visit www.uranium1.com.