

Uranium One Inc.
390 Bay Street, Suite 1610
Toronto, Ontario M5H 2Y2

Trading Symbols: UUU - Toronto Stock Exchange, JSE Limited (Johannesburg Stock Exchange)

NEWS RELEASE

February 21, 2008

Uranium One Announces New Senior Management Appointments, Revised Production Guidance and Updated Resource Estimate at Dominion

Toronto, Ontario and Johannesburg, South Africa – Uranium One Inc. (“Uranium One”) today announced new senior management appointments effective immediately and revised U₃O₈ production guidance, as well as an updated resource estimate at the Dominion property.

New Senior Management Appointments

Jean Nortier, Executive Vice President, Business Development, has been appointed interim Chief Executive Officer. Mr. Nortier, who served as the Company’s Chief Financial Officer prior to April 2007, succeeds Neal Froneman, who has tendered his resignation with effect from today. Mr. Froneman will continue as CEO and director of Aflase Gold Limited.

David Hodgson, a non-executive director of the Company, has been appointed acting Chief Operating Officer. Mr. Hodgson is a qualified civil and mining engineer who joined the Board of Uranium One in 2006 following a distinguished 30 year career in the mining industry. He has had extensive operational experience both in South Africa and internationally, including as Chief Operating Officer of AngloGold Ashanti where he was responsible for 22 mining operations around the world.

Ian Telfer, Chairman of Uranium One, commented - “I look forward to working with Jean as he leads the Company through the next stage in its development. I am grateful to David for taking on the role of acting COO and I know the Company will benefit from his operational and technical expertise, particularly at Dominion. On behalf of the Board, I would also like to extend our appreciation to Neal Froneman for his contributions to the Company over the past five years.”

2007 Production

Attributable production from the Company’s Kazakhstan and South African operations in 2007 totalled 2,037,800 pounds of U₃O₈, comprising 1,827,200 pounds U₃O₈ from Akdala, 171,000 pounds U₃O₈ from Dominion and 39,600 pounds U₃O₈ from South Inkai.

Revised Production Guidance: 2008 – 2009

Production guidance for 2008 has been revised downwards from previously published guidance by 32% to 3.15 million pounds of U₃O₈, detailed as follows:

Operation	2008 Attributable Production Guidance <i>(lbs of U₃O₈)</i>
Akdala	1,800,000
Dominion	590,000
South Inkai	500,000
Kharasan	220,000
Honeymoon	0
Hobson	35,000
Total	3,145,000

For 2009, production guidance has been revised downwards by 15% from previously published guidance to 6.8 million pounds of U₃O₈.

The revisions to the Company's anticipated production result primarily from slower than expected rates of underground development at Dominion. Development has been adversely affected by a number of factors, including disruption in electrical power supply and equipment breakdowns. Production for the 2008 year was also impacted by higher than expected leaching of near-surface uranium resources, higher than expected mining dilution and lower than expected grade for the surface tailings material currently being processed through the plant.

While feed constraints are dictating a slower ramp-up to full production than originally projected, the resource base remains robust as detailed below and in the Appendix attached hereto.

Dominion Update

Underground mining, and associated close-spaced sampling, has been undertaken at the Rietkuil section of the mine to allow for quantitative reconciliations between in-situ grades currently being mined and grades from the resource estimation based on exploration drilling. This reconciliation has indicated that in-situ grades encountered underground closely approximate the forecast from the exploration model. At Dominion, there has not been sufficient sampling below the leached area to complete a quantitative reconciliation to the existing resource models.

The commissioning of the pressure leach circuit at the plant was completed in December 2007. Due to the slower than expected rate of underground development, ore and tailings material are currently being processed through one autoclave, and the other autoclave is on standby. An additional 40 tonne/hour boiler is scheduled to be commissioned in September 2008, to allow both autoclaves to be operated together at design capacity and also to facilitate expansion. A combination of both ore and tailings material will continue to be treated in 2008 and 2009; plant recoveries are expected to increase as underground ore displaces tailings material. Current plant performance is in line with expectations.

Since November 2007, Dominion has been subject to electrical load shedding arising from the current South African electrical power crisis. Diesel generators have been ordered to ensure back-up power for underground development is available during periods of load shedding. Additional trackless equipment has been purchased to ensure planned development is achieved.

Updated Dominion Resource Estimate

The updated mineral resource estimate shows indicated resources of 81.1 million tonnes at a grade of 0.63 kg/tonne, containing 112.4 million pounds of U₃O₈. This includes the current Dominion Phase 1 section (including the existing Dominion 1 and 2 and Rietkuil declines) and

represents a 73% increase in contained U₃O₈ in the indicated category from the indicated resource estimated in January 2007 (36.4 million tonnes at a grade of 0.81 kg/tonne, containing 64.9 million pounds of U₃O₈) as reported by SRK Consulting in its March 2007 independent technical report (available at www.sedar.com).

Compared to the January 2007 resource estimate, which focused primarily on higher grade ore-shoots or channels, the current indicated resources consider both higher grade ore-shoots, as well as lower grade inter-channel areas. In addition, the channels intersected in both the Dominion strike extension areas and the Rietkuil down-dip extensions comprise thicker reef packages relative to those intersected in the current decline areas. As a result, total uranium content across total reef widths is similar; however, associated U₃O₈ and gold grades of the indicated resources decrease.

Inferred uranium resources are now 174.8 million tonnes at a grade of 0.36 kg/tonne, containing 138.4 million pounds of U₃O₈. This represents a 25% decrease in contained U₃O₈ in the inferred category from the inferred resource estimated in January 2007 (219.4 million tonnes at a grade of 0.38 kg/tonne, containing 183.6 million pounds of U₃O₈) as more of the resource is converted to a higher category.

Indicated gold resources are now 81.1 million tonnes at a grade of 0.76 g/tonne, containing 1.99 million ounces, compared to January 2007 indicated gold resources of 36.4 million tonnes at a grade of 0.91 g/tonne, containing 1.06 million ounces (an 88% increase). Inferred gold resources are now 174.8 million tonnes at a grade of 0.63 g/tonne, containing 3.5 million ounces, compared to January 2007 indicated gold resources of 219.4 million tonnes grading 0.67 g/tonne, containing 4.8 million ounces (a 27% decrease).

In addition to the underground resources, the updated mineral resource estimate shows an indicated resource for surface tailings material of 2.95 million tonnes at a grade of 0.14 kg/tonne U₃O₈ and 0.52 g/tonne gold, containing 0.9 million pounds of U₃O₈ and 49,700 ounces of gold, respectively. This represents a minor decrease in the January 2007 mineral resource as a result of depletion from the mining and processing of this material to December 31, 2007.

The revised resource estimate for the Dominion property has been audited by SRK Consulting and will be contained in an independent technical report being prepared by SRK for filing in accordance with the requirements of NI 43-101. Further details of the updated mineral resource statement are set out in Appendix A attached hereto.

About Uranium One

Uranium One Inc. is a Canadian-based uranium producing company with a primary listing on the Toronto Stock Exchange and a secondary listing on the JSE Limited (the Johannesburg stock exchange). The Corporation owns 70% of the operating Akdala Uranium Mine in Kazakhstan and is also developing the South Inkai and Kharasan Uranium Projects in Kazakhstan. Uranium One owns the Dominion Uranium Project in South Africa, as well as the Honeymoon Uranium Project in South Australia. In the United States, Uranium One has extensive property holdings in Wyoming, Texas, Utah and New Mexico, including the Shootaring Canyon Mill and the Hobson ISR facility. Uranium One is also engaged in uranium exploration activities in the United States, the Athabasca Basin of Saskatchewan, South Africa, Australia and the Kyrgyz Republic.

For further information, please contact:

Jean Nortier
Interim Chief Executive Officer
Tel: + 27 11 482 3605

Chris Sattler
Senior Vice President, Investor Relations
Tel: + 1 416 350 3657

Cautionary Statement

No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein and in Appendix A attached hereto (and which forms part hereof).

Forward-looking statements: This press release and Appendix A contain certain forward-looking statements. Forward-looking statements include but are not limited to those with respect to the price of uranium and gold, the estimation of mineral resources and reserves, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage and the timing and possible outcome of pending litigation. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes" or variations of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Uranium One to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the actual results of current exploration activities, conclusions of economic evaluations, changes in project parameters as plans continue to be refined, possible variations in grade and ore densities or recovery rates, failure of plant, equipment or processes to operate as anticipated, accidents, labour disputes or other risks of the mining industry, delays in obtaining government approvals or financing or in completion of development or construction activities, risks relating to the integration of acquisitions, to international operations, to prices of uranium and gold as well as those factors referred to in the section entitled "Risk factors" in Uranium One's Annual Information Form for the year ended December 31, 2006, the Annual Information Form of UrAsia Energy Ltd. for the year ended July 31, 2006 and in the Annual Information Form of Energy Metals Corporation for the year ended June 30, 2006, each of which are available on SEDAR at www.sedar.com, and which should be reviewed in conjunction with this document. Although Uranium One has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Uranium One expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except in accordance with applicable securities laws.

In addition, this news release and Appendix A use the terms "indicated resources" and "inferred resources" as defined in accordance with the SAMREC Code (South African Code for Reporting of Mineral Resources and Mineral Reserves prepared by the South African Mineral Resource Committee) ("SAMREC") under the auspices of the South African Institute of Mining and Metallurgy effective March 2000 or as amended from time to time. A mineral resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity. An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited exploration and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. Mineral resources which are not mineral reserves do not have demonstrated economic viability.

The indicated and inferred resource estimates provided herein and Appendix A in accordance with SAMREC will be reconciled to the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Mineral Reserves, adopted by CIM Council on August 20, 2000, as may be amended from time to time by the CIM, in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects, ("NI 43-101") in the technical report being prepared for filing in accordance with the requirements of NI 43-101.

For the purposes of NI 43-101, Mr. M.H.G. Heyns, Pr.SCI.Nat. (SACNASP), MSAIMM, MGSSA, Senior Vice President of Uranium One Inc., is the qualified person who prepared or supervised the preparation of the information that forms the basis of the scientific and technical disclosure contained in this press release and Appendix A.

Investors are cautioned not to assume that all or any part of the mineral deposits in the measured and indicated resource categories will ever be converted into reserves. In addition, "inferred resources" have a great amount of uncertainty as to their existence and economic and legal feasibility. It cannot be assumed that all or any part of an Inferred mineral resource will be ever be upgraded to a higher category. Under South African rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except under conditions noted in SAMREC. Under Canadian rules, estimates of Inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for preliminary assessments as defined under NI 43-101. Investors are cautioned not to assume that all or any part of an Inferred resource exists or is economically or legally mineable.

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

Appendix A

Dominion Reefs Uranium Mine Resource Statement (December 31, 2007)^(1,2,3)

Indicated Mineral Resources and Inferred Mineral Resources

Reef	Tonnes (kt)	Average Width (cm)	U ₃ O ₈ Grade (kg/tonne)	U ₃ O ₈ Content ('000 lbs)	Gold Grade (g/tonne)	Contained Gold ('000 ozs)
Indicated mineral resources						
Dominion Upper	18,963	149	0.62	26,072	0.55	338
Dominion Lower	11,740	122	0.89	22,963	1.13	427
Rietkuil Upper	38,004	131	0.59	49,043	0.69	838
Rietkuil Lower	12,372	130	0.53	14,338	0.97	386
Total	81,080	134	0.63	112,416	0.76	1,989
Inferred mineral resources						
Dominion Upper	59,728	152	0.31	40,320	0.47	893
Dominion Lower	37,123	187	0.23	18,529	0.78	937
Rietkuil Upper	37,047	151	0.50	40,492	0.66	782
Rietkuil Lower	40,896	182	0.43	39,010	0.70	922
Total	174,795	166	0.36	138,351	0.63	3,534

Notes:

1. Mineral resource estimated by Dr. Carina Lemmer of Geological & Geostatistical Services and reported to a cut-off of 30 cm.kg/tonne U₃O₈ for Dominion and Rietkuil, and 0.00 g/tonne gold.
2. Mineral resources are reported in accordance with the classification criteria of the South African Code for Reporting Mineral Resources and Mineral Reserves (SAMREC).
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

Estimation Techniques

The estimation techniques employed consider ordinary kriging in all indicated resource areas. Over the much larger portion of the resource that was classified as inferred, stationarity was considered sufficient to apply simple kriging in a few cases at the Dominion section where there was a paucity of data; otherwise, ordinary kriging was also applied. Mean values for panels of 240m x 240m were kriged in the indicated resource areas. In areas of dense data from underground sampling, mean values for panels of 30m x 30m were kriged, allowing for higher resolution blocks to facilitate mine planning. For both the indicated and inferred resources, a minimum mining width of 100 cm is considered. Where the channel width of the reef is less than 100cm, these grades and associated tonnages are reported over a 100cm width at diluted grades. In the indicated resource areas, selective cut (vertical cuts) mining is employed where the reef is thick and the majority of the metal content is accumulated near the reef contact. Selective mining cuts of 100cm, 160cm, 180cm and 220cm were considered in different geological domains dictated by the content distribution and geological facies. In the areas classified as inferred

resources, the minimum width of 100 cm was also applied; however no maximum width was applied, with a resultant diluted grade relative to that of the indicated areas.

Cut-off Values

The cut-off values employed in the estimate are unchanged from the values employed in the January 2007 resource estimate (US\$46.50/lb for U₃O₈ and US\$580/oz for gold). The influence of the co-product gold values was also considered in the cut-off determination. Resource classification was largely based on data quality, density and statistical parameters.

Surface Tailings Indicated Mineral Resources (December 31, 2007) ^(1,2,3,4)

	Tonnes (kt)	U₃O₈ Grade (kg/tonne)	U₃O₈ Content (’000 lbs)	Gold Grade (g/tonne)	Contained Gold (’000 ozs)
Total Indicated	2,953	0.14	899	0.52	49.7

Notes:

1. The surface tailings material is reported at 0 cm.kg/tonne cut-off and are inclusive of the entire surface tailings material, i.e. zero selectivity.
2. Mineral resources are reported in accordance with SAMREC.
3. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
4. Depletion of the mineral resource due to mining activities during 2007 has been calculated by Dr. Richard Stewart, PhD, Pr.Sci. Nat, of Uranium One.

Qualified Persons

The revised resource estimate for the Dominion property was prepared by Dr. Carina Lemmer of Geological and Geostatistical Services, independent geoscience consultants to Uranium One; underlying geological modeling was prepared by Dr. Richard Stewart, Pr.Sci.Nat. (SACNASP), MGSSA, Vice President, Exploration and Geology, Uranium One. Both are qualified persons for the purposes of NI 43-101. The data for the resource estimate was verified by Dr. Richard Stewart and Mr. Stephan Stander, Exploration Manager, Uranium One. Analytical verification was completed through analysis of certified reference materials, duplicate sample and barren sample analysis. Geological and assay data is obtained from a central exploration database, where logging, sampling and data entry procedures are checked and verified.

The revised resource estimate for the Dominion property has been audited by SRK Consulting and will be contained in an independent technical report being prepared by SRK for filing in accordance with the requirements of NI 43-101.