Virginia Energy Resources, Inc. and Virginia Uranium, Inc.

Corporate Identity & Financial Disclosure Issues
Virginia Uranium, Inc: “Virginia-Owned, Virginia-Managed”?
In March of 2014, Walter Coles, CEO of Virginia Uranium, Inc., penned an editorial in the Richmond Times Dispatch to defend the humble beginnings and noble intentions of Virginia Uranium, Inc. and its investors.

“
My Fellow Americans…"

Virginia Uranium Inc. has made encouraging progress in advancing the Coles Hill project in Pittsylvania County over the past seven years. Unfortunately, recent veto threats by Gov. Terry McAuliffe caused us to take a step back and not pursue legislation in 2014 as we had hoped.

While we are disappointed, we are not deterred. We will move forward, committed to finding common-ground solutions that focus on safety, environmental stewardship, private property rights and private-sector job creation.

Every week we learn about new and outrageous examples of the assault by environmental groups, overzealous government regulators and fearmongers on the very lifeblood of the free enterprise system that has created and sustained our country’s prosperity.

To most citizens, these incidents are far-off abstractions. They were to me, too, until the day in 2006 when my neighbors and I agreed to form a company to develop the world-class uranium deposit that lies beneath our farmlands in Pittsylvania. In the spring of 2008, mining companies from around the world approached me and my neighbors to explain that our deposit was worth billions of dollars — and to offer us unimaginable sums of money so they could mine it.

As tempting as these offers were, our families decided there was a better way to protect the environment and preserve our rural, agricultural heritage. We formed our own company, Virginia Uranium Inc.
Among other things, Coles’ editorial claimed that VUI was created to *prevent* exploitation by foreign mining interests, that they have never asked for the Commonwealth of Virginia to bear *any* costs, and that no studies or reports found issues with their proposal.
“In the Spring of 2006, mining companies from around the world approached me and my neighbors to explain that our deposit was worth billions of dollars - and to offer us unimaginable sums of money so they could mine it. As tempting as these offers were, our families decided there was a better way to protect the environment and preserve our rural, agricultural heritage. We formed our own company, Virginia Uranium, Inc.”

– Richmond Times Dispatch Op-Ed by Walter Coles, CEO of Virginia Uranium, Inc.
Fact:
Virginia Uranium, Inc. is 100% owned by Virginia Energy Resources, Inc., a mining exploration company based in Vancouver, British Columbia.
Virginia Energy Resources, Inc - Organizational Chart

This organizational chart, found on the Virginia Energy Resources, Inc. website, outlines the North American holdings of the Canadian firm.
“Virginia Energy's most important asset is the 100% interest in the Coles Hill deposit in southern Virginia, USA, which is the largest undeveloped uranium deposit in the USA and one of the largest in the world. Virginia Energy's ownership in Coles Hill is held through its subsidiary, Virginia Uranium, Inc., which controls the mineral rights, surface rights, and leasehold development and operating rights on the Coles Hill property.”

–Virginia Energy Resources, Inc. website
www.virginiaenergyresources.com/s/ColesHill.asp
Virginia-Owned, Virginia-Managed?

This map from Virginia Energy Resources website shows the locations of their two projects, one in Quebec and one in Virginia. The black star on the west coast of Canada is their corporate headquarters, in Vancouver, BC.
A Google map search reveals that the drive from Virginia Energy Resources, Inc’s headquarters in Vancouver, BC to the Coles Hill Mine takes 43-44 hours, depending on Chicago traffic. That’s quite a commute.
This is Virginia Energy Resources, Inc.’s SEDAR profile showing the company’s clear Canadian roots. SEDAR is the official clearinghouse for filings and information on publicly traded Canadian companies. In fact, the only place where “Virginia” appears in the company’s SEDAR profile is in the name.
Where is Virginia Uranium spending money?
“As entrepreneurs who believe in the free enterprise system, we never asked for a dime of taxpayer money or preferential treatment.”

– Richmond Times Dispatch Op-Ed by Walter Coles, CEO of Virginia Uranium, Inc.
FACT:
Virginia Uranium, Inc spent $572,607 lobbying Virginia public officials last year.
That’s the most of any group in Virginia over the last five years, and nearly double that of Dominion Power, the number two spender.
Top Lobbying Spenders

Period: May 2012 – April 2013

Select Expense Type: Total Reported

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<tr>
<th>Rank</th>
<th>Amount</th>
<th>Client</th>
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<tr>
<td>1</td>
<td>$572,607</td>
<td>Va Uranium</td>
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<tr>
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<td>$299,753</td>
<td>Dominion</td>
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<td>3</td>
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<td>Altria</td>
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<td>Va Municipal League</td>
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<td>Transurban USA Inc</td>
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<td>Va Assn of Realtors</td>
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<td>12</td>
<td>$113,922</td>
<td>Bon Secours Health System (Virginia)</td>
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<td>13</td>
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<td>Nationwide Insurance Co</td>
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<tr>
<td>15</td>
<td>$109,248</td>
<td>Va Beer Wholesalers Assn</td>
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Mining company or marketing company?
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Beyond lobbying expenditures, company records show that the bulk of Virginia Uranium’s expenses over the past few years have gone to overhead, professional services, and “community outreach,” rather than geological studies or exploration of the Coles Hill property.
Mining company or marketing company?

More than 220 test holes have been drilled at Coles Hill since the discovery of the deposit, yet only 12 were dug by Virginia Uranium.
Expanding the bureaucracy - What is the regulatory burden to Virginia?
“As entrepreneurs who believe in the free enterprise system, we never asked for a dime of taxpayer money or preferential treatment.”

– Richmond Times Dispatch Op-Ed by Walter Coles, CEO of Virginia Uranium, Inc.
In August of 2009 the Virginia Coal and Energy Commission requested that the National Academy of Sciences conduct a study of the issues related to uranium mining in Virginia. That report, “Uranium Mining in Virginia”, was completed and published in December of 2011 thanks to funding provided by Virginia Uranium, Inc., the US subsidiary of Vancouver, Canada-based Virginia Energy Resources, Inc.
The report concluded that Virginia lacked the regulatory infrastructure necessary to permit uranium mining.
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“Because the Commonwealth of Virginia enacted a moratorium on uranium mining in 1982, the state has essentially no experience regulating uranium mining and there is no existing regulatory infrastructure specifically for uranium mining.”
Further, due to the uniquely wet conditions in Virginia, the federal government was similarly inexperienced and unprepared.
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“The U.S. federal government has only limited recent experience regulating conventional processing facilities. Because almost all uranium mining and processing to date has taken place in parts of the United States that have a negative water balance, federal agencies have limited experience applying laws and regulations in positive water balance situations.”
How much uranium are we talking about?
As recently as June 2013, VUI’s website contained the following: “Containing approximately 119 million pounds of uranium oxide, the deposit is estimated to be worth more than $7 billion.” VUI has since scrubbed the statement from all of its materials because speculation as to the value of a mineral resource in promotional materials is a violation of Canadian securities law. The damage, however, has already been done - this statement has become the accepted value of the project and widely reported in the media.
A closer examination of VUI’s Revised Preliminary Economic Assessment reveals that the company expects to produce just under 65,000,000 pounds of uranium over the 35 year life of the mine. A far cry from the 119,000,000 pounds touted on VUI’s website.

"Assuming a plant recovery rate of 85%, the total uranium ranges from 1,225,000 lbs to 2,646,000 lbs and averages 1,885,000 lbs U₃O₈/year."

A cash flow model was developed for a 3,000 tpd case that models annual periods of cash inflow and outflow, without the financing cost of capital. The project schedule, sequence of mining, mining rate and mining costs were used to develop the cash flow model. It is assumed that production commences one year after all mining permits and licenses have been received. The primary mining rates are 700,000 tons in year one, 1,050,000 tons from years two through four, 700,000 long tons per year for years five through twenty-five, and 467,000 tons per year from year twenty-six through year thirty-five. In addition to this production, mining pillars accounts for 350,000 tons per year for years five through twenty-five, and 233,000 tons per year from year twenty-six through year thirty-five. The predicted grade of production, which is based upon mine plans through the geologic model, appropriately diluted, show a range of grades from 0.079% to 0.126% U₃O₈, with an average of 0.0965% U₃O₈. Assuming a plant recovery of 85%, the total uranium production ranges from 1,225,000 lbs to 2,646,000 lbs, and averages 1,885,000 lbs U₃O₈/year. The mill design and recovery rate is based upon prior metallurgical studies, which have been augmented by recent testing.
False hopes, broken promises.

The Socioeconomic Impact of Uranium Mining in the Chatham Labor Shed, Virginia (Chmura, 2011), a study commissioned by the Virginia Coal and Energy Commission, cited a similar estimate of 63.3 million pounds of “minable” uranium at Coles Hill.
What is Uranium worth on the world market?
These charts show the most current information on the spot price for uranium on the world market (in both US$ and Euros). Currently, uranium is trading at less than $35 per pound.
Long-Term Contract Prices

This chart from Cameco, the world’s largest publicly traded uranium mining company, compares the declining trend in uranium spot prices to the similar path of long-term contract prices - currently at around $50 per pound and dropping.
Historical evidence shows that uranium price spikes above $60 per pound have not been sustained for even short periods of time—let alone for 30-to-35 years. In fact, prices have only been over $64 for 3 out of the last 18 years. This chart from the National Academy of Sciences report on Uranium Mining in Virginia (including both uranium and oil prices), goes back to 1974.
How does a depressed uranium market impact Virginia Uranium’s proposed Coles Hill project?
In January 2013, the British Columbia Securities Commission issued a report criticizing the mining industry for improper and misleading disclosure practices.
Eight months later, in August 2013, VERI responded with a “technical clarification” to their September 2012 43-101 Technical Report. This release acknowledged the price sensitivity issue and provided a formula to adjust the net present value according to current market conditions. No formula was provided to adjust the value of the uranium deposit or the economic impacts of the proposed mine based on the same price sensitivity.

“a change of US$5 per pound in uranium selling prices causes the project NPV to rise or fall by US$110 M”
Net Present Value (NPV)

Net present value is an approach to evaluating investments that assesses the difference between all the revenue the investment can be expected to achieve over its life, less all the costs involved, while accounting for inflation and discounting the future costs and revenue at an appropriate rate.
The economic analysis at a yellowcake price of $64/lb shows an internal rate of return of 36.3% before income taxes; at a discount rate of 7% the net present value is $427 million, including a 25% contingency. The economics indicate a project worthy of further consideration.

Despite announcing the addition of a formula to adjust VUI’s net present value in their press release, the “Revised Updated” PEA failed to apply that formula to the NPV calculation in the same report. Nor did they take the opportunity while revising the report to adjust the $64/lb price estimate to reflect realistic market conditions.
Had VUI taken the logical step of adjusting the information in their 43-101 Preliminary Economic Assessment to reflect market realities, the result would be quite difficult to sell to investors.

<table>
<thead>
<tr>
<th>$427,000,000</th>
<th>VUI’s Net Present Value (NPV) as stated in their 43-101 Preliminary Economic Assessment and based on a uranium price of $64 per pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>-$660,000,000</td>
<td>Adjustment to NPV based on current Uranium spot price of $35/lb according to the formula provided by VUI in their 43-101 Preliminary Economic Assessment - “a change of US$5 per pound in uranium selling prices causes the project NPV to rise or fall by US$110M”</td>
</tr>
<tr>
<td>$(233,000,000)</td>
<td>Application of VUI’s formula results in the Net Present Value of the project falling to reflect a loss of $233,000,000 over the life of the mine.</td>
</tr>
</tbody>
</table>
What is the Economic Impact for Virginia?
False hopes, broken promises.

In 2011, the Virginia Coal and Energy Commission paid for a socioeconomic study on the impacts of uranium mining in Southside Virginia. The results of that study have been highly touted by Virginia Uranium. In particular, they have focused on the anticipated “economic benefit” to the region anticipated by the proposed Coles Hill project.
“The price of uranium will have a significant effect on the profitability of the uranium mining and milling operations.”

Now rather outdated, the 2011 study forecasts stabilization in the uranium market in the $50-$60 per pound range “for the foreseeable future.” Given today’s uranium spot price of $35/lb, Chmura’s assumptions greatly exaggerate the profitability and economic benefit of the project. In fact, the current market price for uranium falls $10/lb short of Chmura’s low-end revenue model, as well as their operational cost estimates.
The Scoping Study indicates that should the average price VUI receives for its uranium fall below $45 per pound, then the net present value of the entire operation would approach zero.
“Additional unforeseen regulatory burdens - as well as a general bias among scoping studies to underestimate the initial capital costs - argue that VUI’s actual break-even point will be higher than $45 per pound.”

Unfortunately, Chmura’s uranium market price range of $75/lb, $60/lb, $45/lb doesn’t go low enough to give an accurate assessment of the economic benefit to the region at today’s uranium spot price of $35/lb. The study does, however, note that market prices below $45/lb will result in a project that is not, in fact, profitable.
5.9. Spending and Employment Impact of the cessation of Mining and Milling

5.9.1. Temporary Idling of Mining and Milling Operations

The temporary idling of mining and milling operations has been the norm in the industry since the price of uranium dropped in the early 1980s and remained below $20 per pound for nearly 25 years. The sole functioning uranium mill (White Mesa) in the United States is located near Blanding, Utah and is operated by Denison Mines, a Canadian mining company. White Mesa was opened in 1979, but has been repeatedly idled and has not run at full capacity since the late 1980s. Throughout the last decade White Mesa has operated at partial capacity and relied heavily on processing “alternate feed” material, rather than milling traditional uranium feed stock.

Given the low grade quality of the uranium deposits at the Coles Hill site and the uniqueness of the physical environment of Pittsylvania County—particularly its high levels of precipitation and population density compared to the American southwest—it is unlikely the VUI will be a low cost producer of uranium. The Scoping Study indicates that should the average price VUI receives for its uranium fall below $45 per pound, then the net present value of the entire operation would approach zero. Additional unforeseen regulatory burdens—as well as a general bias among scoping studies to underestimate the initial capital costs—argue that VUI’s actual break-even point will be higher than $45 per pound. For instance, the Scoping Study explicitly states the tailings holding cells’ design is tentative as it is based on scientific measurements taken in the 1980s and represent “approximate” results. While additional research by VUI has indicated they may be able to realize greater efficiencies than what was assumed by their Scoping Study, their consultants conclude that even small changes in some of their assumptions could greatly increase their costs estimates. For these reasons specific to VUI as well as the track record of the only other functioning US-based uranium mill, we judge there is a non-trivial chance that VUI’s operation could suffer extended periods of reduced production or may even be idled. This would necessarily entail that some of the economic benefits—both jobs and taxes—would be forgone. Regulations would need to be developed to establish protective measures necessary to ensure public health and safety while the plant was idled and VUI was unready or unwilling to implement full remediation and reclamation efforts.

Profitability is not just an issue for VUI and its investors. Another troubling aspect of the uranium mining industry discussed in the Chmura study is its history of idling operations during periods of unfavorable pricing on the world market. The study goes on to point out that Coles Hill is particularly susceptible to this scenario due to the low grade of the deposit and the high cost of extraction.
Regulations would need to be developed to establish protective measures necessary to ensure public health and safety while the plant was idled and VUI was unready or unwilling to implement full remediation and reclamation efforts.

Disturbingly, the quite likely scenario of extended idling also creates a costly regulatory burden beyond the multi-million dollar annual expense the Commonwealth would shoulder to regulate the Coles Hill Mine.
Virginia Uranium and its parent company, Virginia Energy Resources, Inc, has deceived regulators, investors, and the people of Virginia

- VUI is not a “Virginia-owned, Virginia-managed” company. They are 100% owned by Virginia Energy Resources, Inc, a British Columbia-based exploratory mining interest.
- VUI & VERI have spent millions attempting to influence public officials and sway public opinion in favor of their plan.
- Lifting the moratorium and permitting uranium mining in Virginia would create a huge regulatory burden and expense to taxpayers.
- VUI is only expecting to recover and process about 64 million pounds of uranium at Coles Hill, far less than their original claims.
- VUI has consistently used an unrealistic market price for uranium of $64/lb in their public filings and reports. The current spot price for uranium is less than $35/lb and the current long-term contract price is approximately $50/lb and dropping.
- VUI’s net present value is dramatically different than their stated NPV of $427 million. Based on current conditions, and using VUI’s own formulas, their NPV is currently *negative, at* -$233 million.
- According to the Chmura study, current market conditions would likely lead to prolonged idling and the reduction or outright elimination of any real economic benefit to Virginia.
- In place of much-touted economic benefit, VUI would leave an unfunded regulatory and remediation tab for the Commonwealth of Virginia to pay.
Questions?

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