

# Energy Fuels & Team from Penn State University Selected by U.S. Department of Energy to Develop Design for the Production of Rare Earth Elements from Coal-Based Resources

written by Raj Shah | September 22, 2020

September 21, 2020 ([Source](#)) – **Energy Fuels Inc.** (NYSE American: UUUU) (TSX: EFR) (**“Energy Fuels” or the “Company”**) is pleased to announce that it has been advised by the U.S. Department of Energy (“DOE”) Office of Fossil Energy (“FE”) and the National Energy Technology Laboratory (“NETL”) of their intent to award a contract to Energy Fuels, working with a team from Penn State, to evaluate and develop a conceptual design to allow for the commercial production of mixed rare earth oxides (“REO”) from coal-based resources in an environmentally benign fashion. Furthermore, the DOE has the option to award Energy Fuels a contract for the completion of a feasibility study on this initiative.

The DOE has already demonstrated the technical feasibility of extracting rare earth elements (“REE”) from coal and coal-based resources, including coal refuse, over/under burden materials, power generation ash and the like. The DOE wishes to accelerate the advancement of commercially viable technologies to produce rare earth elements from these coal-based resources. Energy Fuels applied for this grant in June 2020, as REEs contained in

these coal-based resources are similar to the REEs contained in other materials the Company is currently evaluating in its REE program.

The first phase of DOE funding will allow Energy Fuels and the team from Penn State to complete a detailed conceptual design and flowsheet for the potential commercial operation of a facility that produces REOs from coal-based resources. Following this phase, the DOE will conduct a merit evaluation and determine whether to award the funding for the development of a feasibility study.

Mark S. Chalmers, President and CEO of Energy Fuels stated: "We are excited to have the opportunity to work with the DOE office of Fossil Energy, the National Energy Technology Laboratory, and Penn State on this important rare earth initiative. Energy Fuels has been carrying out substantial work over the past year to explore the potential for implementing a commercial rare earth recovery and processing program at our White Mesa Mill. This initiative to produce REOs from coal-based resources is complementary to our ongoing efforts and will potentially broaden the sources of REE feedstock available to us in the future. We also hope this project opens the door for us to work with the the DOE and other agencies on future rare earth initiatives.

"Rare earths are used in a host of advanced and everyday technologies, including cell phones, computers, renewable energy generation, batteries, automobiles, and military applications. However, the U.S. does not currently have a fully integrated rare earth supply chain. Therefore, the government has made it a priority to assist in the development of domestic sources of rare earth production. With this award, we are excited to play a role in this effort, while also pursuing our other complementary rare earth initiatives."

**About Energy Fuels:** Energy Fuels is a leading US-based uranium mining company, supplying  $U_3O_8$  to major nuclear utilities. The Company also produces vanadium from certain of its projects, as market conditions warrant, and is evaluating the potential to implement a commercial rare earth recovery and processing program at its White Mesa Mill. Its corporate offices are near Denver, Colorado, and all of its assets and employees are in the United States. Energy Fuels holds three of America's key uranium production centers, the White Mesa Mill in Utah, the Nichols Ranch in-situ recovery ("ISR") Project in Wyoming, and the Alta Mesa ISR Project in Texas. The White Mesa Mill is the only conventional uranium mill operating in the U.S. today, has a licensed capacity of over 8 million pounds of  $U_3O_8$  per year, and has the ability to produce vanadium when market conditions warrant. The Nichols Ranch ISR Project is on standby and has a licensed capacity of 2 million pounds of  $U_3O_8$  per year. The Alta Mesa ISR Project is also on standby and has a licensed capacity of 1.5 million pounds of  $U_3O_8$  per year. In addition to the above production facilities, Energy Fuels also has one of the largest NI 43-101 compliant uranium resource portfolios in the U.S., and several uranium and uranium/vanadium mining projects on standby and in various stages of permitting and development. The primary trading market for Energy Fuels' common shares is the NYSE American under the trading symbol "UUUU", and the Company's common shares are also listed on the Toronto Stock Exchange under the trading symbol "EFR." Energy Fuels' website is [www.energyfuels.com](http://www.energyfuels.com).

**Cautionary Notes:** This news release contains certain "Forward Looking Information" and "Forward Looking Statements" within the meaning of applicable United States and Canadian securities legislation, which may include, but is not limited to, statements with respect to: any expectation that DOE will in fact award a contract to Energy Fuels to evaluate and develop a

conceptual design to allow for the commercial production of mixed REOs from coal-based resources, as advised by DOE; any expectation that DOE may award Energy Fuels a contract for the completion of a feasibility study on this initiative; any expectation that this initiative may be complementary to Energy Fuels' ongoing efforts or will potentially broaden the sources of REO feedstock available to Energy Fuels in the future; any expectation that this project may open the door for Energy Fuels to work with the DOE and other agencies on future rare earth initiatives, or that Energy Fuels may play a substantial role in the U.S. government's priority to assist in the development of domestic sources of rare earth production; and any expectation regarding the ability of Energy Fuels to implement a commercial rare earth recovery and processing program. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans," "expects," "does not expect," "is expected," "is likely," "budgets," "scheduled," "estimates," "forecasts," "intends," "anticipates," "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," "be achieved" or "have the potential to." All statements, other than statements of historical fact, herein are considered to be forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements express or implied by the forward-looking statements. Factors that could cause actual results to differ materially from those anticipated in these forward-looking statements include risks associated with: any expectation that DOE will in fact award a contract to Energy Fuels to evaluate and develop a conceptual design to allow for the commercial production of mixed REOs from coal-based

resources, as advised by DOE; any expectation that DOE may award Energy Fuels a contract for the completion of a feasibility study on this initiative; any expectation that this initiative may be complementary to Energy Fuels' ongoing efforts or will potentially broaden the sources of REO feedstock available to Energy Fuels in the future; any expectation that this project may open the door for Energy Fuels to work with the DOE and other agencies on future rare earth initiatives, or that Energy Fuels may play a substantial role in the U.S. government's priority to assist in the development of domestic sources of rare earth production; any expectation regarding the ability of Energy Fuels to implement a commercial rare earth recovery and processing program; and the other factors described under the caption "Risk Factors" in the Company's most recently filed Annual Report on Form 10-K, which is available for review on EDGAR at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml), on SEDAR at [www.sedar.com](http://www.sedar.com), and on the Company's website at [www.energyfuels.com](http://www.energyfuels.com). Forward-looking statements contained herein are made as of the date of this news release, and the Company disclaims, other than as required by law, any obligation to update any forward-looking statements whether as a result of new information, results, future events, circumstances, or if management's estimates or opinions should change, or otherwise. 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, the reader is cautioned not to place undue reliance on forward-looking statements. The Company assumes no obligation to update the information in this communication, except as otherwise required by law.