

## Executive Summary

Uranium is a key element of U.S. national security. It is the source of our nuclear deterrent and powers the commercial reactors that produce 20% of the electricity for the U.S. electric grid. U.S.-sourced uranium is essential for national security:

- Fissionable material in U.S. nuclear weapons
- Tritium that boosts U.S. nuclear warheads
- Fuel to power U.S. Navy submarines and surface ships
- Nuclear power plants that are essential for a reliable power grid

Today we face a serious crisis because the domestic industry that produces this key ingredient for the nation's defense and critical infrastructure is threatened by imports from state-sponsored producers in Russia, Kazakhstan, Uzbekistan, and China. With no free market constraints, producers in these countries are destroying our uranium mining industry. They have already seized the majority of the U.S. market, and the few remaining U.S. miners now supply less than five percent of our domestic uranium needs.

### Foreign State-Owned Companies Have Targeted the U.S.

As U.S. producers have closed mines and laid off workers, nations who do not share our democratic values and are not open markets have expanded their production facilities and strengthened their commercial positions. State actors from Russia, Kazakhstan, Uzbekistan, and China are targeting the U.S. market, throwing U.S. miners out of work, and jeopardizing the domestic nuclear fuel cycle, including the jobs of other U.S. workers throughout the fuel cycle. This is not a matter of foreign competition legitimately underpricing domestic producers. It is foreign, state-mandated production undermining U.S. companies that have the ability to compete on a level playing field.

Adding to the gravity of the miners' situation is the fact that the entire U.S. nuclear industry is in crisis. The sole uranium conversion facility in the U.S. has been struggling financially and recently announced it will idle production, lay off employees, and terminate contractors. Our

leading supplier of reactor technology is in bankruptcy. The nation no longer has any domestic capability to enrich uranium for defense purposes, and its aging nuclear stockpile needs renewal. Although the uranium mining industry is not the only part of the U.S. nuclear fuel cycle being unfairly challenged, it is the part that has been most directly targeted by foreign state actors. Unless the government acts promptly, these state-sponsored foreign companies will succeed in their objective of destroying any future for U.S. uranium mining operations.

#### The Threat Comes from Russia, Kazakhstan, and China

The U.S. uranium industry needs immediate relief from imports that have grown dramatically and captured almost 80% of annual U.S. uranium demand. Our country cannot afford to depend on foreign sources – particularly Russia, and those in its sphere of influence, and China – for the element that provides the backbone of our nuclear deterrent, powers the ships and submarines of America’s nuclear Navy, and supplies 20% of the nation’s electricity. The Department of Commerce and the President must act decisively to restore the long-term viability of the nation’s uranium mines and related infrastructure. Otherwise, our commercial and military nuclear capabilities will be further diminished, and our country will become dependent on foreign governments that compete with the U.S. for geopolitical influence and commercial advantage.

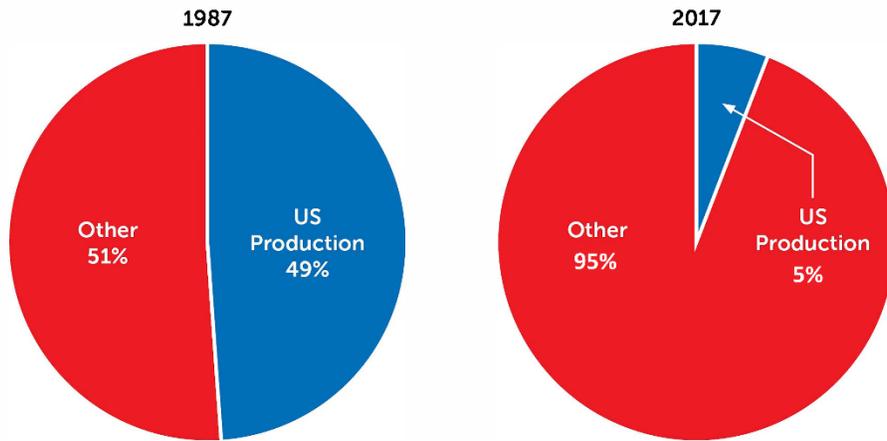
The domestic uranium mining industry needs U.S. government assistance to survive the foreign onslaught – particularly from Russia and Kazakhstan – that has undermined the U.S. uranium industry while new players – particularly China – will soon make the situation worse. The Russian nuclear industry and its relationship with Kazakh and Uzbek uranium producers is driven by Russian geopolitical goals and is part of a broader effort to expand Russian influence around the globe. Such state-sponsored actions against the U.S. industry require a comparable response by our government. That is the precise reason Congress enacted Section 232 of the Trade Expansion Act of 1962 -- to protect essential national security industries whose survival is threatened by imports.

The two Petitioners – Energy Fuels and Ur-Energy – are the primary domestic producers still operating mines, and in 2017, they produced more than half of all the uranium mined in the

U.S. However, their capacity utilization has shrunk to 9% and 13.5% respectively, they face increasing financial pressure, and during the last two years, they have laid off more than 50% of their workforce. Their current situation reflects years of industry decline, while imports have risen dramatically.

## The uranium industry in crisis: 30 years of decline

### Shares of national requirements



### Domestic industry participants:

1987: 39



2017: 5 (3 inactive)



### Domestic industry employees:

1987: 2,002



2017: <500



Confronted with a persistently low spot-price and an oversupplied market, Petitioners have been relying on existing higher priced long-term contracts to survive. However, those contracts are coming to an end and cannot be replaced at a reasonable level of pricing in the current market.

State-supported producers in the Russian sphere of influence have led the assault that has caused this damage to the U.S. industry:

- Almost 40% of uranium delivered in the U.S. in 2016 and 2017 came from Russia, Kazakhstan, and Uzbekistan
- Kazakh imports have benefited from an 87% devaluation of the national currency in comparison to the U.S. dollar
- Uranium producers in these countries are state-owned and continue to produce at uneconomic levels despite a global uranium surplus

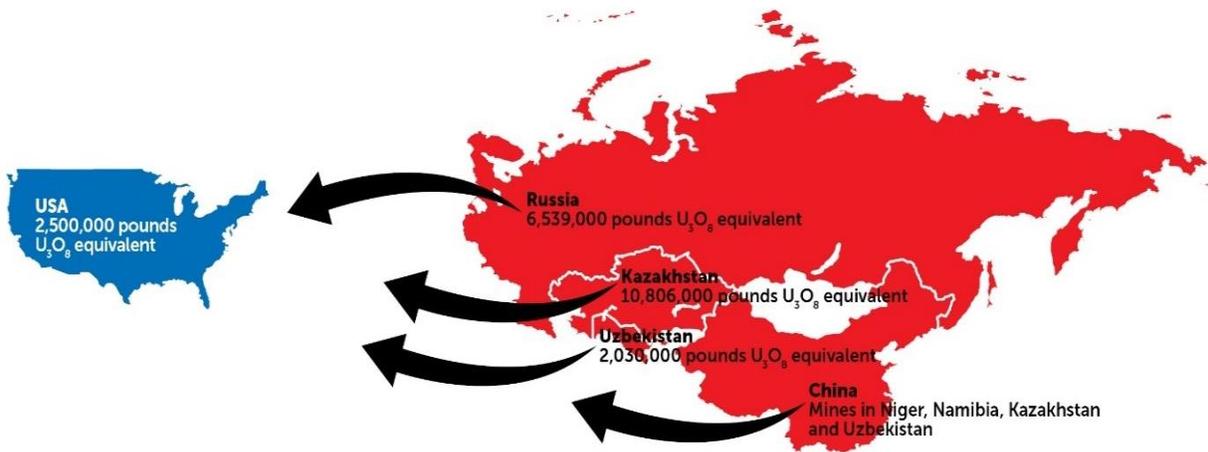
As difficult as the situation has been in recent years, U.S. uranium miners will face additional threats in the next few years because of Russia and China:

- The Russian industry has announced it intends to increase its share of the U.S. market when the Suspension Agreement between Russia and the U.S.<sup>1</sup> expires in less than three years
- China is in the process of becoming a major new supplier, investing in mines in Kazakhstan, Namibia, and elsewhere

Thus, today's bad economic situation is likely to become worse as both Russia and China target the U.S. market for additional sales at the same time that major commercial players (including Cameco, which is the largest producer that is not state-owned) have been forced to reduce production and close efficient mines because of low prices and reduced demand.

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<sup>1</sup> The Suspension Agreement currently restricts Russian uranium imports and settled an antidumping dispute between the U.S. and Russia in which the Department found that Russian uranium imports were unfairly priced by a margin of over 100%.



The relief requested in this Petition is essential to stop the erosion of our nuclear national security and stem the tide of decline that threatens the entire U.S. nuclear industry.

#### U.S. Defense Needs Require U.S. Uranium

For each of the three primary defense requirements, U.S.-sourced uranium is essential because international treaties preclude the use of foreign uranium for defense purposes. First, the warheads in U.S. nuclear weapons are required by law and treaty to be manufactured from uranium produced from U.S. mines. Second, the tritium that is an essential component of such weapons is required to be produced in a U.S. reactor utilizing domestic uranium as a fuel source. Third, the uranium that is highly-enriched and fabricated into fuel for the nuclear Navy must be of U.S. origin; in fact, there is a direct correlation between the commercial nuclear and nuclear Navy supply chains. If the U.S. mining industry ceases to exist, the country will lose the ability to supply these essential national security requirements from domestic sources. *In the history of Section 232, no investigation has ever been more clearly linked to national security than this proceeding.*

#### Critical Infrastructure Requires a Secure Supply of Uranium

In addition to the direct threat that an absence of U.S.-mined uranium would pose to the nation's defense capabilities, there are significant negative implications for the security of the electrical grid, which relies on nuclear energy to produce 20% of the nation's electricity (and nearly 60% of the nation's carbon-free electricity). Until recently, the 99 commercial nuclear reactors in the U.S. have relied heavily on U.S.-mined uranium. There have been past concerns about the

U.S. becoming too reliant on imports; indeed, in 1989 a Section 232 investigation of uranium imports was triggered because the share of imported uranium exceeded 37.5%. That 1989 investigation confirmed that domestic sources of uranium are vital to national security. Today, however, the import penetration is much higher, over twice the 1989 figure, at the direct expense of U.S. domestic producers. There is, moreover, a significant difference between imported uranium supplying a majority of U.S. reactor needs and having no domestic mining source at all. Unfortunately, unless this Petition is successful, that is the endpoint toward which the country is headed.

#### Foreign Nationalistic Interests Increase the National Security Threat

Dependency on imported uranium is dangerous in the abstract but even more troublesome because the growth in U.S. dependency has been accompanied by an increase in the share of the U.S. market supplied by state-sponsored producers in countries with a nationalistic agenda – Russia, Kazakhstan, and Uzbekistan. Given that Rosatom, the state-owned nuclear entity of the Russian state, has effective control or strong influence over the nuclear infrastructure in all three countries, dependency on imported uranium means reliance on uranium over which Russia has either direct control or significant influence. As evidenced by its cutoff of the supply of natural gas to the Ukraine in 2009 and 2014, Russia is willing to use its control of energy resources as an economic and political weapon. This sort of geopolitical risk should be unacceptable to U.S. nuclear utilities and their rate payers, who currently depend heavily on Russia and nations under Russia's influence to fuel their reactors. Indeed, it is conceivable to envision a supply disruption from those nations triggered by sanctions or other geopolitical developments. If the U.S. uranium mining industry does not receive the relief it seeks in this Petition, that risk will increase, increasing the vulnerability of the U.S. commercial power infrastructure.

#### Both National Security and Nonproliferation Goals Are Threatened

The loss of our domestic uranium mining industry, combined with our current uranium dependency on Russia and countries within its sphere of influence, would have severe national security implications, both for our military capabilities and for the nation's critical infrastructure.

This vulnerability is more profound because the military and commercial nuclear structures are interwoven and heavily dependent on each other -- a weakness in one sector weakens the other. This is a crisis of the first order and needs to be addressed in a pragmatic and effective manner that provides the mining industry immediate relief to ensure its survival, and long-term support so that it can fully recover and play its essential role in support of the country's national security interests.

It also deserves emphasis that a weakened U.S. nuclear fuel cycle and supply chain diminishes the ability of the U.S. to serve as an effective voice for nuclear nonproliferation. Without a robust domestic industry, it is not possible for the U.S. to continue to play a leadership role in shaping the development of nuclear energy in emerging nuclear states. If the U.S. is no longer a leading source of nuclear goods and technology, it will lose the ability to insist that nuclear energy be developed responsibly and to minimize the potential for further proliferation of nuclear weapons. The loss of the U.S. uranium mining industry because of excessive imports from Russia, Kazakhstan, and Uzbekistan plays into the hands of countries that do not share U.S. goals and democratic values.

#### The Proposed Relief Is Both Essential and Reasonable

Petitioners are proposing a form of relief designed to halt the decline of the industry and enhance its long-term viability. There are two components of this relief: (1) a quota that would reserve a limited portion of the U.S. market (25%) for U.S. uranium and (2) a Buy America policy for U.S. government agencies that utilize uranium. By implementing a flexible quota based on historical import shares, the U.S. can reserve a portion of its market for U.S. producers to compete and provide the essential domestic sourced uranium that U.S. national security requires. The quota proposal in this Petition takes account of existing business relationships between U.S. utilities and their foreign suppliers, while setting reasonable limits on the amount of imported uranium so that U.S. producers have sufficient commercial opportunities to survive.

In addition, Petitioners propose that the federal government adopt a Buy American policy for federal agencies that is consistent with current government policy and requires the federal government to purchase domestic uranium for its own needs. This second component of the

proposed relief is important because in recent years the government has contributed to the economic problems of U.S. miners by selling part of the government stockpile of uranium to raise money for the remediation of Department of Energy facilities. The Buy American component of the proposed remedy will help offset the financial harm to the U.S. mining industry that such government sales have caused.

The proposed form of relief considers the interests of all affected parties, while serving the broader national interest. It limits the potential for foreign parties to circumvent by recognizing the interrelationships between the different parts of the nuclear fuel cycle and the many different forms in which uranium is imported. The portion of the market that would effectively be reserved for U.S. uranium miners reflects the current capabilities of the U.S. industry to produce and the level of domestic production required to sustain the domestic industry. As we demonstrate later in this Petition, the potential financial impact of this proposal on U.S. consumers is negligible and a reasonable price to pay to ensure the survival of an industry that is essential for U.S. national security.

This Petition seeks protection against overwhelming imports in order to preserve and revitalize what remains of an imperiled uranium mining industry. To those who would suggest that this action is poorly timed or at odds with recently announced reductions in international production, it should be made clear: those announced reductions are, in fact, critical to restore a healthy international uranium market but are otherwise irrelevant to the national security threats posed by the current state of our U.S. uranium industry. This Petition neither overreaches nor seeks relief that would harm the international uranium markets. It does not, for example, propose to subsidize the domestic industry in order to permit significant exports of uranium into the international market. The simple objective of this Petition is to obtain relief from the excessive levels of imports that threaten our national security by destroying the domestic uranium mining industry.

An Expedited Investigation is Necessary and Appropriate

Pursuant to 15 C.F.R. § 705.9, the Petitioners request that the Department expedite its investigation because of the serious implications of the current situation for U.S. national security and the risk that some nations will take steps to circumvent the proposed remedy and worsen the current situation while the Department of Commerce considers this Petition.