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BACKGROUNDER

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National Security Imperative Lacking, Protectionism Abounding in Section 232 Uranium Case

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Abstract

The Trump Administration has opened a national security investigation of uranium imports under Section 232 of the Trade Expansion Act of 1962. Uranium imports are irrelevant to the military's current and expected needs, and action under Section 232 would be misapplied. There is also little risk to civilian customers from imported uranium, such as the nuclear power industry. Although imposing tariffs may give the short-term impression of helping the uranium-mining industry, doing so ignores the longer history of damage inflicted to the industry by protectionist policies.

The Department of Commerce is progressing through a national security investigation of uranium imports under Section 232 of the Trade Expansion Act of 1962.[1] The petitioners—uranium-mining companies Energy Fuels and Ur-Energy—argue that the small domestic uranium industry is threatened by unfair competition from Russia, Kazakhstan, and Uzbekistan, and that reliance on these countries threatens surety of supply for uranium-dependent defense assets like the Navy's nuclear-powered submarines and civilian nuclear power reactors.

Despite these claims, the petition lacks a clear national security imperative and, in fact, would implicate some of the United States' strategic allies and major uranium suppliers, principally Australia and Canada. There is no compelling evidence that foreign-sourced uranium places current or future military operations at risk. Protectionism, as conceived by the petitioners, would also levy undue costs on the greater nuclear industry while providing no sustainable, long-term solution for uranium miners in what is clearly a situation

Key Points

- The civilian nuclear industry today is inherently international in scope. Trade has given U.S. nuclear companies access to new markets and enabled them to shop for affordable components, including uranium.
- Contrary to the premise in the current Section 232 petition, the Department of Energy has determined its uranium inventory currently meets all government requirements.
- What the Section 232 petition frames as a national security threat is actually a massive correction in international markets stemming from short-term contractions in uranium demand and longer-term developments in uranium production and use.
- Action by the President and Department of Commerce under Section 232 of the Trade Expansion Act would misuse the law and exacerbate problems in the greater domestic nuclear industry.
- The Trump Administration should recognize the value of international markets to the U.S. nuclear industry and encourage greater competition.

This paper, in its entirety, can be found at **http://report.heritage.org/bg3360**

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of economic hardship. Today's commercial uranium-mining industry is in some sense a victim of the very protectionist policies that reigned through 1984.

The Trump Administration should quickly address regulatory issues so that the uranium-mining industry can nimbly respond when domestic and international markets recover. To address any real trade abuses, the U.S. should present a united front with allies. However, action under Section 232 is misdirected and misapplied.

Section 232 and the Petition

The Constitution empowers Congress with the authority to regulate international trade. However, Section 232 of the Trade Expansion Act of 1962 delegates extensive authority to the President to determine whether a product "is being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security."[2]

Once an investigation is opened, the Department of Commerce has 270 days to recommend whether the President should take action. There have been 30 investigations under Section 232, only eight of which resulted in action by the President; of these, five were related to crude oil and petroleum. According to the Congressional Research Service, the President has not acted under Section 232 since 1986—a decade before the World Trade Organization's creation—until the Trump Administration's most recent tariffs on steel and aluminum imports.[3]

Among the factors considered by the Department of Commerce in an investigation are:

- Defense and related civilian industry needs, both current and future,
- Quality and availability of imports, and
- The effect of imports on supporting civilian industry.

If the Secretary of Commerce concludes that imports threaten national security, the President has 90 days to decide whether and how to act.[4]

The Department of Commerce opened an investigation on uranium imports on July 18, 2018, in response to a petition by uranium-mining companies Energy Fuels and Ur-Energy. According to the petitioners, "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 percent of the nation's electricity."[5] Russia, Kazakhstan, and Uzbekistan supplied 32 percent of the uranium delivered to U.S. nuclear power reactors in 2017, compared to the 7 percent from U.S. suppliers.[6] The petitioners have requested limits on imports to guarantee roughly 25 percent of the domestic market for U.S. uranium miners and "Buy American" provisions for government purchases.[7]

Four Points to Consider

Action by the President and Department of Commerce under Section 232 of the Trade Expansion Act would misuse the law and exacerbate problems in the greater domestic nuclear industry.

1. News release, "U.S. Department of Commerce Initiates Section 232 Investigation into Uranium Imports," U.S. Department of Commerce, July 18, 2018, https://www.commerce.gov/news/press-releases/2018/07/us-department-commerce-initiates-section-232-investigation-uranium (accessed October 2, 2018).
2. 19 U.S. Code § 1862.
3. Rachel F. Fefer, Vivian C. Jones, Keigh E. Hammond, Brandon J. Murrill, Michaela D. Platzer, and Brock R. Williams, "Section 232 Investigations: Overview and Issues for Congress," Congressional Research Service *Report for Congress*, September 11, 2018, https://fas.org/sgp/crs/misc/R45249.pdf (accessed October 10, 2018).
4. Ibid.
5. "Petition for Relief Under Section 232 of the Trade Expansion Act of 1962 from Imports of Uranium Products that Threaten National Security," January 16, 2018, p. 2, http://www.energyfuels.com/wp-content/uploads/2018/01/2017.01.16-Signed-Petition.pdf (accessed October 22, 2018).
6. U.S. Energy Information Administration, "2017 Domestic Uranium Production Report," May 2018, https://www.eia.gov/uranium/production/annual/pdf/dupr.pdf (accessed October 2, 2018).
7. News Release, "Energy Fuels and Ur-Energy Jointly File Section 232 Petition with U.S. Commerce Department to Investigate Effects of Uranium Imports on U.S. National Security," Energy Fuels, January 16, 2018, http://www.energyfuels.com/news-pr/energy-fuels-ur-energy-jointly-file-section-232-petition-u-s-commerce-department-investigate-effects-uranium-imports-u-s-national-security/ (accessed October 2, 2018).

1. Sourcing Domestic Uranium Is Not an Immediate or Pressing National Security Issue.

Critical defense-related assets—principally nuclear-powered submarines, aircraft carriers, and weapons—require domestically sourced uranium, processing, and enrichment facilities that are not "obligated" or "encumbered" by international nonproliferation agreements or peaceful-use restrictions. Most of these needs are met through the stockpile of highly enriched uranium managed by the National Nuclear Security Administration within the Department of Energy (DOE).

Contrary to the premise of a Section 232 petition (and the claims of the petitioners), the DOE has determined its uranium inventory currently meets all government requirements. Future defense-related uranium needs are well known: The most immediate need is unencumbered tritium production reactor fuel in the range of 2038 to 2041, and new fuel sources for naval reactors are not needed until 2060.[8] If anything, it could be argued that domestic uranium resources should be reserved exclusively for meeting these national security needs rather than subsidized for consumption by commercial entities.

Further, Congress created tools to provide for the national defense in extreme economic cases should a critical defense shortage arise. Principally, the Defense Production Act (DPA) authorizes limited industry protections in order to ensure the military's strategic needs are met. The DPA defines three criteria for federal action in the face of a strategic shortage in the defense industrial base:

1. The resource or product must be "essential for national defense";

2. The private sector "cannot be expected" to meet national security needs in the time required; and

3. Action taken to address the shortage must be "the most cost effective, expedient, and practical alternative."[9]

Appropriately then, under the DPA *taxpayers* pay the premium for a national security benefit rather than *ratepayers* shouldering the costs for everyone, as the petitioners propose.

On the civilian side, there is little risk of supply shock to nuclear power plants that would induce the sort of emergency the petitioners imagine. Undeniably, Russia has manipulated energy markets in the past to leverage politics. But rather than dependence on any one supplier, American nuclear power operators purchased uranium from 11 countries in a variety of long-term and spot-price contracts. Longtime allies Canada and Australia supplied 52 percent of the uranium delivered to U.S. reactors in 2017.[10] Comparatively, Russia supplied 16 percent, Kazakhstan 11 percent, and Uzbekistan 5 percent. China supplied zero percent. Throughout the fuel cycle, nuclear power today is inherently an endeavor in international trade. Far from being a threat, inexpensive uranium imports have helped nuclear power companies in the U.S. to be more competitive in tight electricity markets.

Some in the domestic uranium-mining industry have tried to leverage a national security angle before, but with different targets. In the late 1980s, the mining industry unsuccessfully attempted to use a variety of legal, legislative, and trade measures to target Canada and Australia. At the time, the Uranium Producers Association stated that a statutorily mandated study of the uranium industry "will highlight the risks involved in letting one or two foreign governments, however friendly, dominate the domestic uranium market."[11] The study did not lead to executive action, and in the 30 years since, neither Canada nor Australia has presented a national security threat,

8. U.S. Department of Energy, "Tritium and Enriched Uranium Management Plan Through 2020," Report to Congress, October 2015, http://fissilematerials.org/library/doe15b.pdf (accessed September 7, 2018).
9. Katie Tubb, Nicolas Loris, and Rachel Zissimos, "Taking the Long View: How to Empower the Coal and Nuclear Industries to Compete and Innovate," Heritage Foundation *Backgrounder* No. 3341, September 5, 2018, https://www.heritage.org/energy-economics/report/taking-the-long-view-how-empower-the-coal-and-nuclear-industries-compete.
10. U.S. Energy Information Administration, "2017 Uranium Marketing Annual Report," May 2018, https://www.eia.gov/uranium/marketing/pdf/umar2017.pdf (accessed September 7, 2018).
11. James R. Wilch, "GATT and the Half-Life of Uranium Industry Protection," *Northwestern Journal of International Law and Business*, Vol. 10, No. 1 (Spring 1989), p. 173, https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1277&context=njilb (accessed September 7, 2018).

but rather have been reliable suppliers of affordable uranium for commercial needs. Today, as then, the issue is not about national security needs but international competition.

2. Uranium Markets Are Oversupplied and Highly Competitive.

What the Section 232 petition frames as a national security threat is actually a massive correction in international markets stemming from short-term contractions in uranium demand and longer-term developments in uranium production and use. The uranium-mining industry in the U.S. has experienced a prolonged decline since its peak in 1980. Since then, the U.S. Energy Information Administration reports reduced investment in employment, land, exploration, drilling, and production that has been almost uninterrupted.[12] This domestic experience has been mimicked globally.[13]

In the more recent past, the hoped for increase in uranium demand failed to appear with the "nuclear renaissance" of the early 2000s. The Nuclear Energy Agency's latest review of global uranium resources, production, and demand (also known as the 2016 "Red Book") is littered with revisions to adjust for unanticipated slow growth across the nuclear industry, particularly in response to the Fukushima Daiichi accident in 2011.[14] Contributing to this unexpected downturn in global uranium demand were a number of other factors that depressed markets in the U.S.: the 2008 financial crisis, flat electricity demand, nuclear power plant closures, increased fuel and reactor operations efficiencies, and the natural gas boom.[15] Accordingly, domestic licensed mine capacity more than tripled since 2004 in anticipation of growth, but only a small handful of mines are actually operating given market conditions.[16] On the demand side, commercial inventories of uranium are one-and-a-half times larger than in 1994.[17]

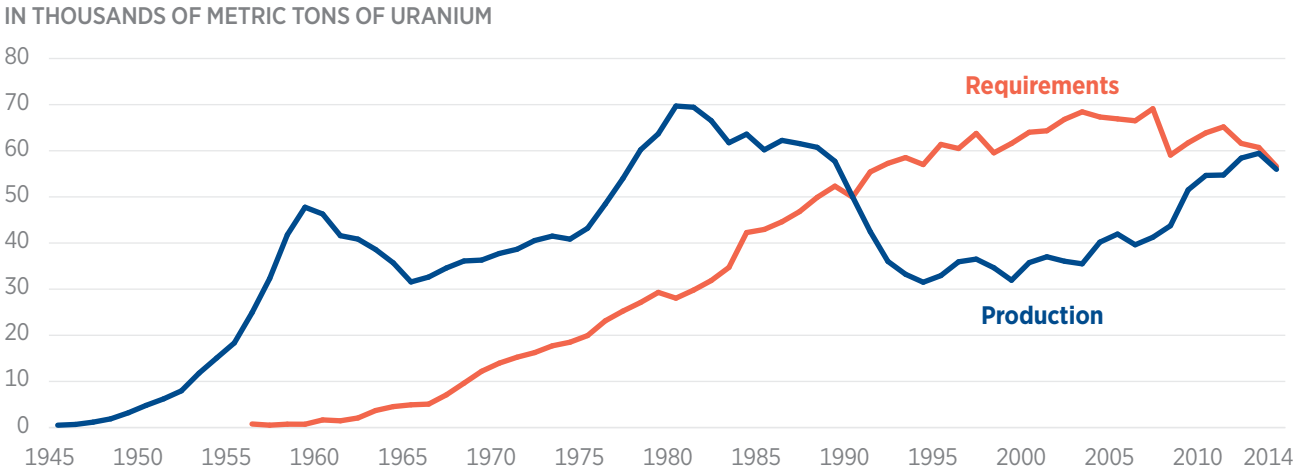
Looking at long-term trends, the American uranium industry has been struggling for decades. It enjoyed favorable contracts with the federal government through 1970, when the Atomic Energy Commission (DOE's predecessor) ended its procurement program for natural uranium.[18] Not long after, a burgeoning civilian nuclear-power sector was bogged down in overregulation after the Three Mile Island accident in 1979, leaving in its wake a drought in new construction. U.S. uranium production peaked in 1980 and, like the rest of the U.S. nuclear industry, began a slow, steady decline.

Concurrently, weapons programs during World War II and the Cold War created large strategic demand for uranium and consequently massive stockpiles of uranium that far exceeded world demand for the past half century.[19] Though global demand increased as more countries adopted nuclear power, these secondary sources of uranium—notably peaceful repurposing of excess military uranium inventories—have fed into civilian markets, meeting anywhere from 1 percent to 50 percent of global uranium requirements.[20] Since the end of the Cold War, strategic stockpiles from the U.S. and Russia—large enough to meet several years of global demand—gradually have been made available to civilian markets, underscoring the challenging civilian market conditions for uranium mining and creating uncertainty for market investments.[21]

12. U.S. Energy Information Administration, "2017 Domestic Uranium Production Report."
13. Nuclear Energy Agency and International Atomic Energy Agency, *Uranium 2016: Resources, Production, and Demand* (Organization for Economic Co-operation and Development: Paris, 2016), https://www.oecd-nea.org/ndd/pubs/2016/7301-uranium-2016.pdf (accessed September 7, 2018), pp. 114–115.
14. See, for example, ibid., p. 70.
15. Ibid., p. 93
16. U.S. Energy Information Administration, "2017 Domestic Uranium Production Report."
17. Ibid., p. 11.
18. Nuclear Energy Agency and International Atomic Energy Agency, *Uranium 2016*, p. 408, and U.S. Department of Energy, "Tritium and Enriched Uranium Management Plan."
19. Nuclear Energy Agency and International Atomic Energy Agency, *Uranium 2016*, pp. 104 and 114.
20. Ibid., pp. 102 and 104–105.
21. Ibid., pp. 104 and 108.

CHART 1

Uranium Markets Are Oversupplied and Highly Competitive



NOTE: Figure for 2005 was interpolated
SOURCE: Nuclear Energy Agency, "Nuclear Development Publications," http://www.oecd-nea.org/tools/publication?query=&div=NDD&lang=English&period=2y&sort=date&filter=1 (accessed October 22, 2018). NEA numbers correspond to the following years: 2005—6098; 2007—6345; 2009—6891; 2011—7059; 2014—7209; 2016—7301.

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3. Federal and State Governments Have Made the U.S. a Volatile and Sometimes Hostile Place for Uranium Mining and the Civil Nuclear Industry in General.

The uranium-mining industry, like the rest of the nuclear industry, faces regulatory barriers that tamp down demand and could keep it from nimbly responding when markets recover. Both Energy Fuels and the Department of Commerce identified multi-year permitting delays to open or re-open mines as a challenge for uranium miners.[22] State and federal governments have also restricted access to resources. For example, in 2012, the Obama Administration denied access to over 1 million acres of federal land in Arizona in 2012, and the State of Virginia has a ban on uranium mining that is being contended in the Supreme Court.[23] The DOE has distorted uranium markets and production through uranium transfers and special deals for DOE contractors.[24]

Too often in the nuclear sector the government has chosen to subsidize specific companies or technologies rather than address the regulatory challenges and government-induced uncertainties that reverberate throughout the nuclear industry. Just one example is the federal government's willful failure to finish the licensing review of a possible nuclear-waste repository at Yucca Mountain. Otherwise legitimate licensing activities were halted during the hailed

22. News release, "UR-Energy and Energy Fuels: Utility-Sponsored Paper Misses the Mark on Economic Impact of Remedies Proposed in Section 232 Petition," July 17, 2018, http://www.energyfuels.com/news-pr/ur-energy-and-energy-fuels-utility-sponsored-paper-misses-the-mark-on-economic-impact-of-remedies-proposed-in-section-232-petition/ (accessed September 7, 2018), and news release, "U.S. Department of Commerce Initiates Section 232 Investigation into Uranium Imports," U.S. Department of Commerce, July 18, 2018, https://www.commerce.gov/news/press-releases/2018/07/us-department-commerce-initiates-section-232-investigation-uranium (accessed September 7, 2018).
23. Timothy Gardner, "U.S. Miners Seek Reversal of Uranium Mining Ban near Grand Canyon," Reuters, March 9, 2018, https://www.reuters.com/article/us-usa-uranium-grandcanyon/u-s-miners-seek-reversal-of-uranium-mining-ban-near-grand-canyon-idUSKCN1GM001 (accessed September 7, 2018).
24. See, for example, Jack Spencer and Daniella Markheim, "Protectionism Won't Fuel a Nuclear Renaissance," Heritage Foundation *Backgrounder* No. 2221, December 16, 2008, http://s3.amazonaws.com/thf_media/2008/pdf/bg2221.pdf.

"nuclear renaissance" as a result,[25] and the nuclear waste issue has discouraged states and localities from maintaining or introducing nuclear power.[26] Naturally, this failure indirectly impacts commercial uranium demand. The nuclear industry cannot grow with one-third of its business suspended by government inaction and no clear pathway for waste management.

Perhaps more egregious, however, is the legacy of past protectionist policies. Through 1984, the Atomic Energy Commission (AEC) maintained policies that effectively prevented imported uranium from entering U.S. markets—principally through denying uranium-enrichment services. The policy succeeded in forcing U.S. nuclear power plants to use domestic uranium because at that time the Soviet Union housed the only other enrichment capabilities needed to fabricate nuclear fuel. The expressed intent of these policies was to temporarily block competition in order to help launch a civilian nuclear industry independent from strategic wartime infrastructure.[27]

Instead, these policies distorted markets and grossly misinformed the uranium-mining industry as to what constituted actual demand. AEC policies set off a mad dash for its enrichments services by nuclear-power operators anxious to secure reliable fuel for their reactors, ballooning uranium prices within the U.S. and ultimately creating civilian stockpiles large enough to cover years' worth of demand.[28] Protectionism also pushed the limits of reciprocal trade agreements with allies, mobilizing nations like France, Great Britain, Germany, and the Netherlands to break the AEC's monopoly on enrichment.

International trade with more flexibility in contracts replaced the AEC's centralized approach as it phased out its protectionist policies by 1984. But decades of protectionism created a glut in domestic supply, left the domestic uranium industry ill-prepared, and mobilized its greatest competitors.

4. Action Under Section 232 Is Misapplied.

As discussed previously, there is no national security case to warrant targeting uranium imports under Section 232. To the extent that there are legitimate, provable violations of international agreements by trading partners, there are far better policy tools that directly address those concerns—rather than negatively impacting companies and countries that have competed in good faith to win customers in America. For example, the Office of the United States Trade Representative can file country-specific disputes through the World Trade Organization, an avenue through which the U.S. has had success in pursuing other trade disputes.[29]

The U.S. should also present a united front with allies to address any real violations by trading partners. As Heritage's Tori Whiting writes, "The goal of trade cases should not be to 'punish' other countries. Using broad trade measures to target the actions of one country might seem like firing a missile at a target, but the shrapnel can have a devastating effect on bystanders."[30]

No Tariff Winners

There are no long-term winners should the Trump Administration impose tariffs on uranium imports under Section 232. Tariffs on uranium imports do not address the military's need for domestic enrichment capabilities and are otherwise irrelevant. Restricting access to the most competitive materials makes nuclear power plants and other uranium users less competitive. While tariffs may give the short-term

25. In September 2014, the Nuclear Regulatory Commission determined that dry-cask storage was safe indefinitely and restarted licensing activities. Katie Tubb and Jack Spencer, "Real Consent for Nuclear Waste Management Starts with a Free Market," Heritage Foundation *Backgrounder* No. 3107, March 22, 2016, http://www.heritage.org/environment/report/real-consent-nuclear-waste-management-starts-free-market.
26. National Conference of State Legislators, "State Restrictions on New Nuclear Power Facility Construction," May 2017, http://www.ncsl.org/research/environment-and-natural-resources/states-restrictions-on-new-nuclear-power-facility.aspx (accessed September 7, 2018).
27. Wilch, "GATT and the Half-Life of Uranium Industry Protection."
28. Ibid., pp. 171 and 189.
29. Tori Whiting, "Tariffs Make for a Poor Negotiating Tactic: The Trump Administration Should Abandon Them Without Delay," Heritage Foundation *Issue Brief* No. 4848, April 26, 2018, https://www.heritage.org/trade/report/tariffs-make-poor-negotiating-tactic-the-trump-administration-should-abandon-them.
30. Tori Whiting, "Four Guidelines for the President When Considering Tariffs," Heritage Foundation *Issue Brief* No. 4811, January 22, 2018, https://www.heritage.org/trade/report/four-guidelines-the-president-when-considering-tariffs.

impression of helping the uranium-mining industry, doing so ignores the history of damage done by earlier protectionist policies—as well as anti-competitive policies in the more recent past. Perhaps the only winners in a tariff situation are foreign competitors who may be able to raise their own prices to just below the tariff-inflated price for American customers with whatever market share remains to them, should the Department of Commerce act.

The civilian nuclear industry today is inherently international in scope. Trade has given U.S. nuclear companies access to new markets and enabled them to shop for affordable components, including uranium. The Trump Administration should recognize the value of international markets to the U.S. nuclear industry and encourage greater competition.

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