

The Dangers of Iran's Increased Uranium Enrichment

THE ISSUE

To international alarm, in late December 2020, Iran announced an increase in the enrichment of uranium-235 (U-235) in its nuclear program to 20 percent concentration at the Fordo Fuel Enrichment Plant (FEP), putting the repressive regime a big step closer to enriching uranium to weapons-grade (90 percent) concentration.

According to Iran's foreign minister, it began doing so in early January 2021.

Iran's latest move violates the 2015 Joint Comprehensive Plan of Action (JCPOA) reached among Iran, the United States, the United Kingdom, France, Germany, China, and Russia. The JCPOA capped Iranian uranium enrichment at 3.67 percent.

This provocative action marks the most worrisome escalation of Iranian nuclear defiance since it began ignoring key nuclear deal restrictions in 2019, after the U.S. withdrew from the agreement in 2018.

WHY THE CONCERN?

Iran's Increase in Uranium Enrichment Is Another Violation of the JCPOA. Indeed, according to the International Atomic Energy Agency (IAEA), which monitors the JCPOA in Iran, press reports, and other analyses, Iran is already violating the Obama-era nuclear deal by:

- Increasing U-235 enrichment in 2019 to 4.5 percent, exceeding the JCPOA-allowed level;
- Exceeding restrictions on its low-enriched-uranium stockpile about 12-fold, accumulating about 2,400 kilograms;
- Starting to deploy advanced uranium-enriching centrifuges at the plant at Natanz,

bolstering the efficiency of its uranium-enrichment operations;

- Exceeding the total number of allowed centrifuges in operation, permitting the production of greater amounts of enriched uranium;
- Expanding the locations for uranium-enrichment operations to the Fordow FEP, a facility limited to research purposes only under the JCPOA; and
- Failing to meet transparency requirements, including not declaring all its pre-2003 nuclear weapons efforts as evidenced from an undisclosed Iranian nuclear archive, exposed by Israel in 2018.

The Increase in Uranium Enrichment Reduces the Nuclear "Breakout Time."

The "breakout time" is the period it takes to produce enough fissile material for a bomb starting from right now. The JCPOA envisioned that Iran's breakout time would initially be one year, although that would rapidly shrink as enrichment restrictions began to expire in 2025.

Technically, enriching uranium to 20 percent represents approximately 90 percent of the effort to produce weapons-grade fissile material required for a nuclear weapon. Iran's decision to increase enrichment means Tehran's breakout time has been shortened.

Iran's Missile Programs Continue to Develop. Iran has the biggest missile program in the Middle East. It is likely its missile arsenal is not only to advance Iran's goals of deterrence and regional hegemony, but it is also closely linked to Tehran's nuclear weapon aspirations.

Iran's increasingly capable ballistic and cruise missiles could one day carry a nuclear warhead, threatening not only regional allies and partners, but if developed to greater distances, all of Europe and the American homeland.

The JCPOA Is Flawed. Even putting aside Iran's JCPOA violations, the nuclear deal is rife with pitfalls. For instance, key JCPOA restrictions on uranium enrichment gradually "sunset" in just four short years, allowing Tehran to expand uranium enrichment and paving the way for a possible sprint to a nuclear weapon.

In addition, the deal also failed to address Iran's missile program and contained inadequate verification provisions that allowed Iran to block U.N. inspectors at undeclared nuclear sites, including military facilities.

Returning to the JCPOA would empower the regime by lifting sanctions and squander the bargaining leverage that the Trump

Administration amassed, reducing the chances of negotiating an acceptable follow-on agreement to fill the JCPOA's dangerous gaps.

The Threat from Iran Is Real. Iran is a malign actor with an ambitious agenda that includes regional dominance, conflicting with the national interests of the United States and its regional allies and partners.

From Iran's aggressive activities in Iraq, Syria, and Yemen to its support of international terrorism and violent attacks around the Persian Gulf, Iran has been—and still is—a global threat to peace, security, and stability.

Iran's violations of the JCPOA raise questions about its nonproliferation commitments and intentions. A nuclear weapon in the hands of this aggressive, belligerent regime will only magnify the threat that Iran poses—and increasing uranium enrichment puts Tehran closer to that possibility.