

## Institute for Science and International Security

ISIS REPORT

October 25, 2012

## Discouraging Any Iranian Decision to Produce Highly Enriched Uranium

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Any official Iranian announcement to make highly enriched uranium (uranium enriched more than 20 percent) should be seen as unacceptable. Iran should consider that many will view such a decision as equivalent to initiating a breakout to acquire nuclear weapons, reducing any chance for negotiations to work and potentially increasing the chances for military strikes and war. Before Iran announces official plans to make highly enriched uranium, the United States and the other members of the P5+1 should quietly but clearly state to Iran what it risks by producing highly enriched uranium under any pretext.

Iran Press TV <u>reported</u> on October 2, 2012 that the deputy head of the Iranian Majli's (Parliament's) Foreign Policy and National Security Committee, Mansour Haqiqatpour, said that if talks between the P5+1 and Iran over its nuclear program fail, Iran will enrich uranium to 60 percent for use in nuclear submarines. Any uranium enriched to 20 percent or greater is classified as highly enriched uranium (HEU). Press TV quotes him as saying, "In case our talks with the P5+1 group – including the US, the UK, France, China, Russia and Germany – fail to pay off, Iranian youth will master enrichment up to 60 percent to fuel submarines and ocean-going ships." He added, "Iran cannot guarantee it would keep its enrichment limited to 20 percent," and, "They should not think that we will stay calm in the face of threats, sanctions and pressure."

Haqiqatpour's threat to make highly enriched uranium likely has more to do with this influential parliamentarian attempting to exert political pressure on the P5+1 to seek agreement at negotiations. His claim should not be seen as having any official standing for policy unless repeated or announced by senior executive or nuclear officials. However, it is time to consider the implications of such statements, before Iran makes any official announcements about making highly enriched uranium.

The United States and the international community should prepare for the possibility that Iran may officially announce that it has decided to make highly enriched uranium, including enriching up to 60 percent, under a civilian or naval nuclear rationale. The production of 60 percent enriched uranium would put Iran significantly closer to having weapon grade uranium, (WGU, a form of highly enriched uranium that enriched to 90 percent or more) compared to its current stockpile of 19.75 percent enriched uranium and would significantly shorten the amount of time Iran would need in a breakout scenario. Moreover, Iran does not require 60 percent HEU despite the parliamentarian's claims. The production of highly enriched uranium would be an important precedent, which Iran could later use to justify the production of weapon-grade uranium.

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<sup>&</sup>lt;sup>1</sup> It should be noted that Press TV is a propaganda arm of the Iranian regime and no context for the official's remarks was given, including time, place, or medium of expressing this view. Press TV often fabricates information and takes quotes out of context, so the accuracy of this report cannot be ensured.

Because 60 percent enriched uranium production is an important step towards the production of WGU and has no civilian justification, such a move will be widely viewed as Iran starting to break out to build nuclear weapons. The United States and other members of the P5+1 should ensure, ideally in a quiet manner, that Iran understands that its production of highly enriched uranium is unacceptable, regardless of the pretext.

Facts, implications, and realities of Iran making highly enriched uranium:

- 1. Iran has no need to produce highly enriched uranium at all, even if it wanted nuclear fuel for a reactor powering nuclear submarines or other naval vessels, or for a research reactor. It has already acknowledged that any future research reactors would use low enriched uranium. Iran could choose to design a naval reactor to operate with low enriched uranium that is enriched from 5 to 20 percent. Other countries, such as France, use low enriched uranium to power naval reactors. Even so, Iran has conducted very little, if any, preliminary work on nuclear powered submarine development, and is not expected to be able to build nuclear powered submarines for decades. Furthermore it makes little sense for Iran to begin a nuclear submarine program by producing the enriched uranium, years before it could conceivably produce a prototype reactor able to use fuel containing that enriched uranium. Iran's claim to need 60 percent highly enriched uranium fuel has no credibility and should be seen as a pretext for breakout.
- 2. As noted above, amassing 60 percent highly enriched uranium significantly shortens Iran's dash time to reaching weapon grade uranium. This shortened amount of time dramatically weakens the ability of the International Atomic Energy Agency (IAEA) and government intelligence agencies to detect a breakout to WGU in a timely manner and institute sanctions or other preventive policies to stop it. Thus, Iran's production of highly enriched uranium would on its own likely undermine policies aimed at deterring Iran from breaking out based on the timely detection of that breakout.
- 3. An official Iranian decision to enrich to 60 percent could be part of an effort to undertake what ISIS called in a March 2012 report to the U.S. Institute of Peace a "slow motion breakout." In this scenario, Iran incrementally increases the enrichment level over a relatively long period of time hoping the international community would accept this higher enrichment. A slow motion breakout necessarily involves finding a non-nuclear weapons justification for higher enrichment since the enriched uranium would remain under safeguards. Iran may be motivated to try to move to the 60 percent level since it succeeded in starting production of 20 percent enriched uranium under a civilian guise, despite widespread belief that Iran would not dare to do so. But the production of highly enriched uranium crosses a qualitatively different threshold.
- 4. If Iran successfully produces 60 percent highly enriched uranium without provoking military strikes or draconian sanctions, there is little to prevent it from claiming a civilian or naval justification for producing WGU and amassing a stockpile of nuclear weapons material.

Taken in this context, any official Iranian announcement to make highly enriched uranium should be seen as unacceptable. Many will view such a decision as equivalent to initiating a breakout to acquire nuclear weapons, reducing any chance for negotiations to work and potentially increasing the chances for military strikes and war. Before Iran announces official plans to make highly enriched uranium, the United States and the other members of the P5+1 should quietly but clearly state to Iran what it risks by producing highly enriched uranium under any pretext.

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<sup>&</sup>lt;sup>2</sup> Discussion of this scenario and other breakout scenarios using Iran's capabilities is included in ISIS's March 2012 report to USIP: *Preventing Iran from Getting Nuclear Weapons: Constraining its Future Nuclear Options*, <a href="http://isis-online.org/uploads/isis-reports/documents/USIP">http://isis-online.org/uploads/isis-reports/documents/USIP</a> Template 5March2012-1.pdf