



September 13, 2013

Misleading Statement by Salehi on 20 Percent Low Enriched Uranium Conversion

By David Albright and Christina Walrond

On Thursday, September 12, 2013, the head of the Atomic Energy Organization of Iran Ali Akbar Salehi [announced](#) that Iran had reduced its stockpile of 20 percent low enriched uranium (LEU) “from around 240 kilograms to around 140 kilograms” by converting it into fuel for the Tehran Research Reactor (TRR). Salehi noted that Iran had “converted a remarkable part to fuel rod” (sic) and indicated that Iran would eventually convert the rest. Unfortunately, this announcement is misleading based on how little LEU Iran has actually converted to fuel. Based on the International Atomic Energy Agency’s (IAEA) August 2013 [safeguards report on Iran](#), Iran had converted no more than 30 kilograms of near 20 percent LEU, or 45 kilograms of near 20 percent LEU hexafluoride, into fuel assemblies for the TRR. This represents approximately 12 percent of Iran’s total stock of 19.75 percent enriched uranium, or only about 25 percent of the amount of LEU Iran has sent to Esfahan for conversion. Salehi’s statement refers to the entire amount of uranium sent to its conversion facility, not the amount of uranium converted to TRR fuel.

Unless the near 20 percent LEU oxide is converted to fuel assemblies and irradiated, it can easily be reconverted to uranium hexafluoride suitable for further enrichment. Even if Iran began rapidly producing fuel assemblies for the TRR, due to the small size of the research reactor, Iran cannot realistically irradiate this fuel. As such, this action cannot be seen as a significant confidence building measure. Even so, Iran should be commended for taking measures to convert its uranium to uranium oxide at the Esfahan facility.

Iran has been careful to convert sufficient 19.75 percent uranium hexafluoride to keep its total stockpile of this material under one weapon’s worth of material. As Iran’s stockpile of this material increases, even in uranium oxide form, it decreases the amount of time required for Iran to further enrich it to weapons-grade uranium (WGU). Although conversion of uranium hexafluoride into uranium oxide and fabrication into fuel elements does limit Iran’s ability to quickly use this material in a breakout scenario, the only iron-clad way to prevent further enrichment is for an outside country to hold this material in escrow prior to irradiation.

Capping the number and type of Iran’s centrifuges remains an even more important variable when considering its capability to produce WGU. As Iran continues to install both IR-1 and IR-2m centrifuges, the international community should not be placated by an Iranian effort to only decrease its 19.75 percent enriched uranium stockpile. Capping Iran’s total enrichment capacity must remain a high priority in any negotiations or confidence building measures.