

## A Note on Iran's IR-5 Centrifuge Feeding

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On November 7, 2014, the International Atomic Energy Agency (IAEA) released its quarterly safeguards [report](#) on Iran's compliance with its safeguards obligations, including technical information related to its compliance with the Iran/P5+1 Joint Plan of Action (JPA). Upon conducting its [analysis](#) of the report, ISIS noticed that Iran had recently begun feeding uranium hexafluoride gas (UF<sub>6</sub>) into the IR-5 centrifuge installed at the Pilot Fuel Enrichment Plant (PFEP) at Natanz. This centrifuge had not previously been fed with UF<sub>6</sub> and this new development raised the question of whether Iran had violated its commitment to freeze its centrifuge activities at the PFEP during the period of the JPA. The four previous IAEA Iran quarterly safeguards reports, including the November 2013 IAEA [report](#) issued right before the JPA was signed and Iran's centrifuge R&D program at the PFEP was frozen, stated that the IR-5 had yet to be fed with natural UF<sub>6</sub>. In response to learning of the new development, ISIS e-mailed administration officials involved in the negotiations taking place in Oman to notify them and ask for clarification on whether this was viewed as a violation of the JPA. It received no response, but subsequently, the State Department spokeswoman [indicated](#) a few days later the United States had brought up the matter with Iran and Iran pledged to stop feeding this centrifuge. U.S. action that weekend was a win for efforts to enforce the conditions of the interim deal. This case also confirmed the important role the IAEA plays in monitoring the JPA and publishing details about its work. But it was not without controversy, and this controversy motivated us to write this report.

Iran has since [denied](#) that the IR-5 feeding is a violation of the JPA but has not denied specifically that it has stopped feeding it with UF<sub>6</sub>. It claims that it will continue to test the centrifuge. Iran also [claimed](#) that it "tested" the IR-5 centrifuge in March 2014 but did not report that the tests included feeding it with UF<sub>6</sub>. The IAEA safeguards [report](#) in May 2014 and reports afterward up until the present stated the IR-5 still had yet to be fed with UF<sub>6</sub>. Iran may have been simply trying to save face for an action it agreed to take, namely to stop feeding the IR-5. But its subsequent actions need to be monitored closely, particularly given that some of its other commitments under the interim deal may not meet expectations, see [here](#) and [here](#).

Some analysts tried to argue that the feeding of the IR-5 had occurred earlier and thus no new feeding took place. For example, an anonymous Atomic Reporter article, since removed from the website, made this claim by misquoting a senior U.S. official's commentary about Iran's

feeding of centrifuges under restrictions on R&D at the PFEP. The Atomic Reporter article misused bracketed text, stating, “what Iran does ‘at the Natanz R&D pilot facility is they feed those machines [IR-1, IR2M, IR-4, IR-5 and IR-6] with natural uranium and they at the end of the process, they combine the product in the tails so there’s no enriched uranium produced...those are the sorts of activities they continue to do.” The briefer was in fact [far less specific](#) about which machines are fed, stating that they conduct these types of activities generally at the PFEP and several centrifuges are involved. By moving the list of centrifuges from a subsequent sentence that addresses activities in the centrifuges more generally to the middle of the quote, the Atomic Reporters article incorrectly made the senior briefer appear to be stating that the IR-5 was being fed uranium, when in fact the official did not say or imply that. This mistake is all the more striking given how clearly the IAEA reports have stated that the IR-5 was “yet to be fed” with uranium until recently. It also shows how in some groups’ zeal to defend the JPA, they lose objectivity and balance.

As ISIS indicated in its recent IAEA report analysis, the feeding of the IR-5 may be a violation of the JPA, which was intended to freeze Iran’s centrifuge program at November 2013 levels and prevent further advancements at the pilot plant. During talks in December and January 2014 aimed at concluding a technical implementation agreement of the JPA, which remains secret except to governments, Iran’s activities at the pilot plant, specifically centrifuge R&D, were discussed in greater detail because Iran tried to institute new centrifuge activities there after the November date. The P5+1 objected to those new activities which would have advanced Iran’s centrifuge R&D at the plant. Moreover, the announcement by the State Department that it brought up the matter with Iran and obtained a commitment to halt feeding into the IR-5 centrifuge suggests that it was viewed as either not in the spirit of the agreement or in violation of the implementation document.

The JPA is intended to freeze Iran’s existing centrifuge program and prevent further advances while negotiations toward a comprehensive agreement are underway. The feeding of the IR-5 centrifuge is an apparent violation of that commitment to freeze centrifuge R&D activities at the Natanz pilot plant. Whatever the legality of Iran’s action, however, quick action by U.S. officials in Oman strengthened the implementation of the JPA and confirmed the value of the IAEA in publishing detailed information about its monitoring of this important deal.