

Update on Iran's Stock of Less than Five Percent Low Enriched Uranium

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Between January 20, 2014 and November 24, 2014 Iran produced 2,566 kilograms of 3.5 percent low enriched uranium (LEU) at its three facilities, and a further 115.6 kilograms were added from downblending of the near 20 percent LEU. Under the Joint Plan of Action, Iran has committed to convert all newly produced 3.5 percent LEU hexafluoride into oxide form. As of November 24, 2014, it has fed a total of 2,720 kilograms of this type of LEU into the conversion process at the Enriched UO₂ Powder Plant, an increase of 1,215 kilograms since October 2014. The amount of this LEU in final oxide form is not given in the IAEA reports.

In the most recent International Atomic Energy Agency (IAEA) monthly report on Iran's compliance with the Joint Plan of Action (JPA), Iran is reported to have produced, during the interim period from January 20, 2014 to November 24, 2014, a total of 2,566 kilograms of 3.5 percent LEU hexafluoride.

In its previous [report](#) on Iran's stock of 3.5 percent LEU, ISIS estimated that from early February 2014 to mid-October 2014, Iran produced about 2,000 kilograms of 3.5 percent LEU hexafluoride, which more precisely was estimated as 2,186 kilograms. Thus, about 380 kilograms of 3.5 percent LEU hexafluoride was produced in the period from January 20 to early February 2014 and between mid-October and November 24, 2014.¹

As of November 24, 2014, according to this report, Iran fed a total of 2,720 kilograms 3.5 percent LEU into the conversion process at the Enriched UO₂ Powder Plant, which constitutes an increase of 1,215 kilograms since October 2014. This action reflects a commitment Iran has made under the JPA to convert all newly produced LEU hexafluoride material to oxide form. If the material is in oxide form it would require additional processing, namely reconversion to hexafluoride form, before it could be further enriched. The final payment to Iran under the July 2014 extension of the JPA was conditioned in part upon Iran processing this LEU.

As highlighted in the last ISIS report, it is still unclear how much of the LEU fed at EUPP has emerged from the conversion lines as oxide. In particular, questions remain if some sizeable fraction of the LEU hexafluoride remains in hexafluoride form in feed tanks connected to the

¹ Because of differing reporting periods used in the IAEA safeguards reports on Iran, ISIS had not previously been able to estimate the amount of LEU produced in the enrichment plants from January 20 through February 9, 2014.

processing lines and in intermediate forms between hexafluoride form and the final LEU oxide product.

Total 3.5% LEU produced during the interim period	2,566 kg
Produced from downblending	115.6 kg
Fed into the conversion process at EUPP	2,720 kg
In hexafluoride form, net total	7,395 kg

Table 1. Production and further processing of 3.5 percent LEU in Iran during the interim period. *Source: Status of Iran's Nuclear Programme in Relation to the Joint Plan of Action, November 24, 2014.*