

# ISIS Imagery Brief: Update on Construction Activities at Arak 40 MW Heavy Water Reactor

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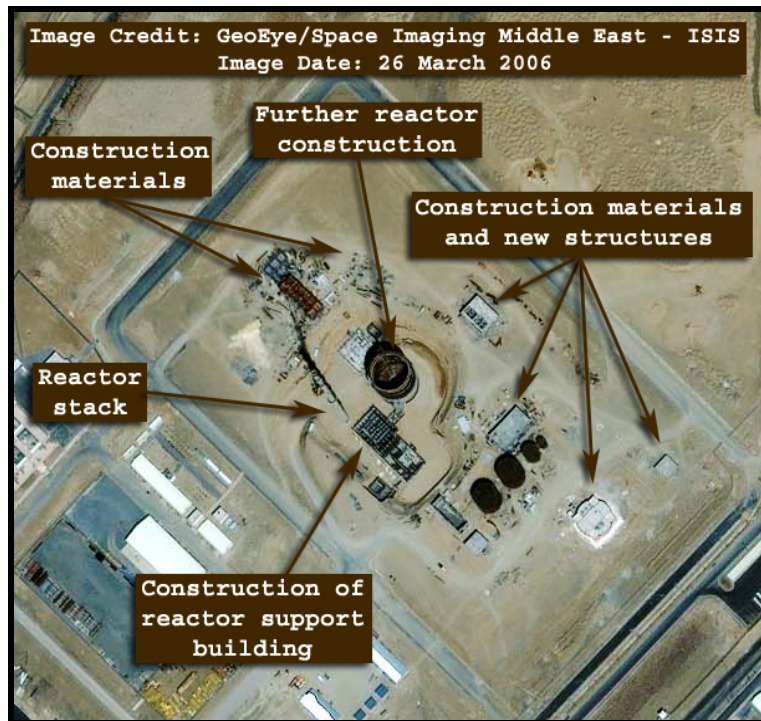
Institute for Science and International Security (ISIS)

ISIS has obtained commercial satellite imagery from GeoEye that shows steady progress in the construction of the Arak reactor, a 40 megawatt-thermal heavy water reactor that is adjacent to a heavy water production plant. In a speech on 11 April 2006, Gholamreza Aghazadeh, the head of the Atomic Energy Organization of Iran, stated that the Arak reactor is expected to be finished in 2009, which is consistent with other statements made by Iranian officials. This date might be delayed if the adjacent production facility cannot produce enough heavy water. It is not yet producing at its nominal capacity.

Once fully operational, the Arak reactor can produce about nine kilograms of weapon-grade plutonium each year, or enough for about two nuclear weapons each year. Because of concerns about the potential misuse of this reactor, the IAEA's Board of Governors called on Iran to halt construction of the Arak reactor in a resolution adopted February 4, 2006.



In a comparison of satellite imagery from February of 2005 to that of March of 2006, Iran has made noticeable progress in constructing the circular reactor wall, a support building next to the reactor, a stack, and several other buildings in the surrounding area. In the March 2006 image, construction materials and structures can be seen in the areas adjacent to the reactor and the reactor support building.





A close-up shows that Iran is constructing the walls of the reactor as well as an adjacent stack. The foundation for the stack is visible in the image from February of 2005. The foundation for the reactor, measuring 40 meters in diameter, is also visible in the earlier image.



February 2005



March 2006