

Summary report of Stanford delegation trip to North Korea, August 7-11, 2007
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The North Koreans used our 7-11 August visit primarily to highlight their fulfillment of the February 13 agreement—i.e., by halting operations and allowing the IAEA to seal the nuclear facilities at Yongbyon. They also utilized the opportunity to disseminate and test their positions at upcoming nuclear talks—something they apparently started with the Chinese a few days before our arrival.

By showing us the facilities at Yongbyon and allowing us to discuss technical matters with the operators, the North Koreans revealed that while they are not dealing from a position of strength, they still possess considerable technical prowess and an ability to improvise in order to cope with their situation. For example, alterations/upgrades to the reprocessing plant over the past year or so have improved performance of the facility.

Overall, Yongbyon shows the effects of the eight-year freeze (1994-2002). The fuel fabrication facility, in particular, has badly deteriorated, although it has been jerry-rigged to resume operations at some point, if called on to do so. The available fuel rods—prepared over a decade ago for use in the never-completed 50 MWe reactor—have been stored in plastic bags in barn-like conditions, on crude hand-made wooden racks. These 12,000 rods would have to be cut down to size (and probably machined to a smaller diameter), then wrapped in magnesium cladding before they could be used in the 5 MWe reactor. These would supplement the nearly 2,000 clad 5 MWe rods in the inventory to make up at least one core load of 8,000 to reload the reactor.

Disablement. The North Koreans directed virtually all of their attention to the issue of disablement during our visit. Their discussions about both technical and diplomatic aspects of disablement were consistent and well coordinated—despite the foreign ministry's protestations that it has little understanding of, and may even be at odds with, officials at Yongbyon.

The discussions with Kim Kye Gwan and Ri Gun suggested that Pyongyang is prepared to make disablement a major battleground in the talks, and is already working out multiple fallback positions in order to preserve maximum tactical flexibility over the issue. Kim spoke of "stages" and "degrees" of disablement, implying that the North was planning to argue that virtually anything it did to the facilities could be counted as some form of disablement--beginning with removal of the fuel rods from the reactor. Kim set the stage at dinner on the first night by describing disablement as a complicated process that involved numerous problems—technical, environmental, and political. The message at Yongbyon was essentially the same, albeit with more detail.

Curiously, neither Kim nor Ri—with one notable exception—laid out what Pyongyang expects from the United States through the various "stages" of disablement, nor even what those stages might entail. However, both emphasized that "irreversibility", a term they did not further define or clarify, would require US action on LWRs. Left unclear was how closely these two elements would track, i.e., whether irreversibility would have

to be matched by completion of LWRs, a commitment to build them, or merely entering into discussion about them. VFM Kim's one flat assertion on the subject was that "if the US doesn't want to give us LWRs, then we can't go to irreversibility."

Ri Gun did imply that the North is thinking in terms of a step-by-step process in which stages of disablement would correspond with stages in construction of LWRs—the closer to irreversibility Yongbyon moved, the closer to completion of the LWRs.

The case for LWRs was exactly the same one the North Koreans employed in 1993, i.e., by shutting down their graphite moderate program they would be denying themselves the ability to produce electricity. That is a much weaker argument now than it was then, because the 50 MWe reactor, which had appeared approaching completion in 1993, is now clearly a wreck. The 200 MWe reactor—which they offered to show us but due to road conditions we declined—is not salvageable. Unlike in his remarks last March, however, Kim was not nearly so shrill this time in his arguments for the LWR.

When explicitly invited to detail what the North expected in return from the United States for stage two, Ri declined to answer.

As laid out by officials at Yangbyon (note: we think that the recent replacement of the long-time director of the facility is worrisome), all the steps required for dealing with purely "technical" aspects of putting the facilities in a safe, disabled state, will take anywhere from a minimum of six months to several years. If the fuel rods are to be removed, they said, it would have to be according to the normal procedure of transferring them to the spent fuel pond for cooling. They are not equipped (either in terms of experience or facilities) to attempt dry storage of the entire load of 8,000 rods.

Nuclear weapons. The entire focus of the North's position was on the fissile material production program at Yongbyon. Neither Kim nor Ri raised the ultimate disposition of the nuclear weapons or plutonium. Kim did say Hecker should "tell the people at Yongbyon to show you the process of weaponizing," but once there, Hecker only saw the steps leading to the production of plutonium metal (these facilities were unsophisticated and not safe). When Hecker asked Kim about seeing the weapons themselves, Kim smiled and said, "Not yet, we are still belligerent parties."

Unlike our November visit, when Ri Gun laid out a two-stage approach, dealing as a first stage with the fissile material production and then, as a second stage with the total denuclearization, this time there was no discussion of a second stage. The only mention of broader possibilities was a pro forma reference by Vice President Kim Yong Dae, that "denuclearization of the Korean Peninsula at large is the teaching" of Kim Il Song during his lifetime and "it is our eventual (chajonghchuk) target."

Enrichment. The issue of enrichment came up only briefly, during the first night's dinner with VFM Kim. (...as per previous paper) I will have to add this when I get to my office.

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Foreign Ministry comeback? There was evidence during our visit that the Foreign Ministry (and by extension, Vice Minister Kim) has regained at least some of footing in the policy process. In two instances, the foreign ministry intervened with two other ministries (health and education) to overcome their initial reluctance to respond positively to proposals to begin exchanges with Americans. If carried out, these would represent a major change in approach to relations with the US, and would be in line with steps the foreign ministry has long advocated but, for many years, was unable to get approved.