

IN CONFIDENCE

August 17, 2007

**Considerations for U.S. – DPRK diplomacy based on observations from visit to Yongbyon, Aug. 10, 2007 and Pyongyang, Aug. 7 – 11, 2007.
Siegfried S. Hecker, Stanford University**

- 1) The Yongbyon nuclear operations are effectively suspended under IAEA monitoring. Be patient to negotiate an effective and safe closure of Yongbyon facilities. Don't rush for diplomatic expediency. In the short term, time is on our side. With each day, their facilities (and perhaps their weapons) degrade further making reconstitution more difficult.
- 2) Push for the reprocessing option for the current load of fuel rods. It is the most effective, quickest, least expensive, and most permanent solution. It may also present a diplomatic opportunity to build confidence in how to deal with the eventual removal of the plutonium in their weapons.
- 3) The light-water reactor (LWR) represents a huge negotiating leverage for the U.S. It should be used in conjunction with other normalization measures to leverage irreversible closure of Yongbyon facilities and elimination of the DPRK nuclear weapons.
- 4) The proliferation risk of the LWR can be managed with appropriate controls on the fuel cycle – that is, fuel leasing with no enrichment and no reprocessing. Vice Minister Kim Kye Gwan has indicated that the DPRK is willing to take such measures. Such a move combined with DPRK's elimination of weapons could represent a major step for restoring the NPT regime. It gets DPRK back into the fold.
- 5) To effectively implement an LWR strategy, it must be combined with a comprehensive program to help the DPRK upgrade its energy infrastructure and grid. This effort could prepare the electrical grid for the LWR.
- 6) It is critical to have DPRK stop nuclear and missile cooperation with countries of concern. This can be part of the LWR strategy, combined with an effective program to redirect DPRK nuclear workers. The most effective redirection is to engage them in complete closure and remediation of Yongbyon nuclear facilities and to engage them in civilian nuclear programs, such as the LWR and medical isotope production. The sooner these steps are taken, the better the chances of terminating undesirable nuclear or missile cooperation and transfers.