

# Dealing with the NORTH

# NORTH KOREAN NUCLEAR PROBLEM

edited by

TAEWOO KIM AND SELIG S. HARRISON



## Research Institute of Peace Studies Peace Study Series No. 1

### Dealing with the North Korean Nuclear Problem

edited by
Taewoo Kim and Selig S. Harrison

HANUL ACADEMY Seoul, Korea 1995 RIPS Peace Study Series No. 1 Dealing with the North Korean Nuclear Problem

Copyright © Hanul Publishing Company, 1995

All rights reserved. Except for the quotation of short passages for the purposes of criticism and review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

First published 1995

Sponsored by Research Institute of Peace Studies

Published by Hanul Academy Publishing Co. #201, 503 - 24 Changcheon-dong, Seodaemun-gu Seoul, Korea

ISBN 89 - 460 - 2208 - 6 94340

국제평화전략연구원 평화연구총서 1 Dealing with the North Korean Nuclear Problem

한울아카데미
1995년 4월 13일 초판 인쇄
1995년 4월 29일 초판 발행
엮 은 이/ 김태우·셀릭 S. 해리슨
펴 낸 이/ 김종수
책임편집/ 오현주
펴 낸 곳/ 도서출판 한울
서울시 서대문구 창천동 503 -24 휴암빌딩 201호
전화 326 -0095/ 팩스 333 -7543
등록 1980. 3. 13 제14 -19호
ⓒ 도서출판 한울, 1995. Printed in Korea.
ISBN 89 - 460 - 2208 - 6 94340
값 25,000위

#### Preface

The Korean peninsula is a vortex of diametric confrontation: high ideals versus Hobbesian realities, classic competition between the haves and the have nots, and a deep-seated distrust between North and South. This legacy of the Cold War could easily destabilize the most dynamic region on earth, or worse. It could ruin global aspirations for nuclear nonproliferation and arms control, and it could obliterate all hopes for peaceful reunification of the Korean nation.

If the problem can be solved amicably, however, the world will not only breathe a sigh of relief but will blink in awe. Whatever formula is applied successfully will be properly useful in future conflicts anywhere.

It is not difficult to see the issue in terms of conflicting national interests, e.g., between the imperial designs of major powers. It can also be seen strictly in terms of contention between an international and thus overriding priority on nuclear nonproliferation and a local priority on Korean reunification. Either view by itself is probably too narrow.

Not only does nuclear proliferation have serious implications in Northeast Asia as well as anywhere else, but also the success or failure of Korean unification will reverberate far beyond regional boundaries.

In no way will the North Korean nuclear issue resolve itself. Heroic leadership as well as national consensus will be essential. Enormous sacrifices will be inevitable, and perhaps quite purifying. It could flare into a hideous international war killing scores of millions, but its honorable resolution would allow Korea to blossom into a shining star of harmony and progress and transform the Northeast Asian region into the locomotive of world development.

This volume only begins to outline the situation, but it does introduce some starkly disturbing realities and scenarios as well as some thought-provoking and hopeful suggestions.

l. ..

April, 1995

Hun-Sung Kwon
Chairman, Board of Trustees,
Research Institute of Peace Studies

### Contents

	Preface	v
1	Introduction Taewoo Kim and Selig S. Harrison	1
2	The Nuclear Issue of the Korean Peninsula: An Overview Taewoo Kim and Woong Chun	6
3	The US-DPRK Geneva Accord: A South Korean View Taewoo Kim	44
4	North Korean Plutonium Production David Albright	54
5	Plutonium: The Heart of Proliferation Threat in East Asia Paul Leventhal and Steven Dolley	80
6	Logic, Bribes and Threats: The Role of Economic Incentives or Sanctions for North Korea Robert A. Manning	105
7	The Transfer of Light-Water Reactor Technology to the DPRK Peter Hayes	132

0	South Korea's Strategic Choice Seongwhun Cheon	153
9	The North Korean Nuclear Crisis: From Stalemate to Breakthrough Selig S. Harrison	180
10	Harmonization: The Way to Defuse the Bomb Ma Zongshi	192
11	Japan's Nonnuclear Policy and Proliferation in Northeast Asia Hajime Izumi	220
12	North Korean Nuclear Policy: A Developing World Perspective Krishaswami Subrahmanyam	235
13	A Holistic Approach: A Nuclear Weapon-Free East Asia Taewoo Kim	252
	Authors	284

#### Introduction

#### Taewoo Kim and Selig S. Harrison

On October 21, 1994, the United States and North Korea concluded a historic "Agreed Framework" in Geneva that will, if fully implemented, remove the threat of a North Korean nuclear weapons program. But the successful implementation of this accord will depend on a series of further negotiations that are likely to prove extremely difficult and hazardous.

The Framework provided for an immediate freeze of the graphite-based North Korean nuclear program under international inspection and its eventual dismantlement. In return, the United States agreed to supply oil for non-military use, rising to a level of 500,000 tons per year, and to construct light-water reactors with a capacity of 2,000 megawatts. At the same time, in contrast to these explicit provisions, the agreement left a variety of critical issues unresolved or only partially resolved.

For the United States, South Korea and Japan, the most important unsettled issue is precisely how North Korea will comply with its commitment to permit the full-scope International Atomic Energy Agency inspections necessary to

2

establish the extent of its past plutonium accumulation.

The Framework and its Confidential Minute speak in general language of "full compliance" with the IAEA safeguards agreement signed by Pyongyang. To the United States, this means acceptance of the IAEA's right to conduct "special inspections" of undeclared facilities and thus the right to inspect two suspect waste dumps that became the focus of conflict between Pyongyang and the international agency in 1992 and 1993. However, North Korea points to the fact that "special inspections" have never been carried out in any other country and asks why it should be the guinea pig for establishing a new nonproliferation norm. Pyongyang argues that to acknowledge this right would open the way for random inspection access to its military facilities which could be a cover for espionage.

The framework clearly stipulates that the crucial nuclear components of the light-water reactors will not be provided until the issue of past accumulation is settled. Thus, if "special inspections" are not accepted, another form of IAEA access to the waste dumps and other suspect facilities will have to be negotiated or the framework will collapse.

For North Korea, the most important unresolved issue is how rapidly the US will move toward the full normalization of economic and political relations and the extent to which progress toward normalization will be conditioned on concessions unrelated to the nuclear issue, such as the state of the dialogue between North and South Korea, missile proliferation and human rights. The framework conditioned the establishment of liaison offces in Washington and Pyongyang solely on the resolution of "technical and consular" issues, not on political issues. However, it did link subsequent steps toward full normalization to "progress on issues of concern

to each side."

By January 21, 1994, both sides pledged to "relax restrictions on trade and investment, including telecommunications and financial transactions." But the Clinton administration, fearful of Republican criticism, has acted hesitantly in carrying out this pledge. While removing barriers to telecommunication links, the US did not relax trade and investment restrictions by the January deadline. As a result, only four months after the ink was dry on the Geneva agreement, the two sides were exchanging recriminations centering on North Korean charges of US bad faith on the liberalization of trade and investment, on US charges of North Korean diversion of oil to quasi-military uses and on the thorny issue of whether South Korea should be in charge of constructing the light-water reactors.

North Korea views the nuclear agreement primarily as a lever for rectifying what it sees as a one-sided US alignment with South Korea based on Cold-War geopolitical premises that are no longer valid. In North Korean eyes, political normalization with the US is necessary to balance Soviet and Chinese ties with Seoul and must be achieved before the North-South dialogue can take place on a "level playing field." But South Korean leaders, for their part, suspect that Pyongyang is merely trying to drive a wedge between Washington and Seoul and want the US to condition steps toward normalization on the resumption of a meaningful North-South dialogue.

It was no surprise that North Korea has objected to a controling South Korean role in the construction of the lightwater reactors, or that Sorth Korea has been determined to condition financial support for the reactor project on such a role.

#### 4 Dealing with the North Korean Nuclear Problem

The reactor issue reflects a broader struggle between Pyongyang and Seoul over the terms for a North-South dialogue and over the way in which unification will take place. Given its broader political objectives, North Korea insisted that both the agreed framework and the companion letter from President Clinton to North Korean leader Kim Jong-il commit the US to finding the funds for the reactors without specifying where the reactors would be manufactured and by whom.

The essays in this book present authoritative analyses by authors representing a wide range of differing views on the North Korean nuclear issue. Against the background of Kim Tae Woo's overview and David Albright's assessment of Pyongyang's past accumulation of plutonium, Robert Manning examines the relative merits of economic sanctions and economic incentives. Selig S. Harrison reviews the evolution of the nuclear negotiations between Pyongyang and Washington, arguing that the 1994 agreement can be successfully implemented only if it is accompanied by a normalization of economic and political relations. Peter Hayes then focuses on the pros and cons of providing light-water reactors to the North.

The key role of China is underlined by Ma Zongshi's plea for a diplomatic solution, followed by Hajime Izumi's exploration Japanese policy concerning diplomatic options. Japan's critical relevance to the North Korean nuclear issue is examined from an American perspective by Paul Leventhal and Steven Dolley, who point to the projected accumulation of plutonium buffer stocks in the Japanese civilian nuclear power program as a destabilizing factor in the region, arousing South Korean as well as North Korean suspicions that Tokyo wants to keep its nuclear option open.

As the analysis by Indian commentator K. Subrahmanyam suggests, the US confronts North Korea from a politically weak bargaining position because it remains wedded to an inequitable global nuclear order. On the one hand, the US still has 9,555 deployable nuclear weapons of its own. In its Nuclear Posture Review announced on September 22, 1994, the Pentagon asserted its intention to retain nuclear weapons in US military strategy for an indefinite period, rejecting proposals for a "no first use" policy advanced by arms control groups. On the other hand, Washington calls on North Korea and other nonnuclear states to abjure nuclear weapons. It is the discriminatory character of the nonproliferation policies of the existing nuclear power that emboldens North Korea and other potential nuclear weapon states to demand compensation for giving up their own nuclear option.

## The Nuclear Issue of the Korean Peninsula: An Overview

Taewoo Kim and Woong Chun

North Korea's nuclear development has emerged as a serious security problem for the Republic of Korea. Following Iraq, Pyongyang's attempt to develop nuclear weapons was sufficient to rock the NPT system and become a major source of tension between North Korea and the international community. South Korea voluntarily stripped itself of any nuclear weapons development capabilities through the Denuclearization Declaration of November 8, 1991, and the nonnuclear declaration of December 18, 1991. Pyongyang, however refused to do the same. Consequently, many have criticized the government's security policy as a failure. South Korea's daunting foreign policies such as the renouncement of longrange missile development and nuclear capabilities, and its signing of the chemical weapon abolition treaty, etc., have been interpreted as typical examples of American hegemonism, and the debate on "nuclear sovereignty" l has come

<sup>1</sup> Especially, before the Roh Tae Woo government declared the denuclearization of Korea on November 8, 1991, Kim Tae Woo had already warned that the denuclearization declaration, without guarantee of the acquisition of enrichment and reprocessing facilities,

up among South Korean scholars and politicians. This is recognized as an incredible and desirable development in the nuclear debate in South Korea, which in the past could never have been even imagined.

While all these developments were taking place, the Soviet Union began to disintegrate, and Ukraine emerged as a major nuclear power. Concern about the dangers of nuclear weapons proliferation became more intense. Due to the progress in nuclear reduction negotiations between the US and Russia, many nuclear warheads have been dismantled, creating a surplus of highly enriched uranium and of plutonium. Under such circumstances, Japan made its position clear during the G-7 summit conference held in Tokyo in July 1993 that it would not agree to an indefinite extension of the NPT. Nuclear issues suddenly became more complicated for the world as well as for the Korean peninsula.

As the nuclear issue emerged as a stumbling block in South-North talks, the entire national unification policy of the Korean government has been taken hostage. In addition, the nuclear issue on the Korean peninsula has been complicated by the two rounds of nuclear talks between the US and North Korea in June and July 1993. These talks began with the assumption that the US would not be able to take a hard

would damage ROK national sovereignty. After the declaration, based on the issue of nuclear sovereignty, he has also criticized the renouncement of the enrichment and reprocessing facilities. For that, see a newspaper interview on February 27, 1992, Chosun Ilbo; Taewoo Kim, "Truth and Falsehood of the Denuclearization of the Korean Peninsula" (Hanban do Beehaekhwa eui Heowa Sil), Studies of Unification Issues Vol. 3, No. 3 (Autumn 1991), pp. 187 - 223; Taewoo Kim and Seongtaek Shin, "The Denuclearization Declaration and the Dualism of Nuclear Issues in South Korea," Korea Institute for Defense Analyses (한국국방연구원), Studies in National Defense, No. 17 (Spring, 1992), pp. 145 - 169.

line against North Korea at least until the middle of 1995 because the issue of North Korea's nuclear program influences the extension of the NPT a great deal. And much of the concern is that American hegemonic aspirations and North Korea's strategy of excluding the South might work together to damage ROK security and diplomatic interests.

Moreover, in spite of the end of the Cold War, it has been forecast that the security environment of Asia will be more complicated. It is becoming more difficult for Korea, which is pursuing national unification while insisting on denuclearization, to establish a national policy on these issues. In other words, in spite of reconciliation between the US and the former Soviet Union, strategic confrontation in Asia will continue. Also, military modernization in China and Japan is a forewarning of a new power competition in this region. White America's hegemonic nuclear policy exerts an overwhelming influence, keeping the existing nonnuclear countries, such as Korea, Japan and North Korea, nonnuclear will require the continuation of alliances between the US and Japan, as well as between Korea and the US. There may be more developments confusing to policymakers, such as that Japan's potential nuclear military strength quite unnerves its neighbors.

This paper will review the nuclear issue on the Korean peninsula and its ever-changing and complex security environment. Considering that the issue involves many different viewpoints, it might be interesting to analyze each one in depth. But that is not the purpose of this study, which has been conducted with two specific objectives in mind. First, major topics on various aspects of the nuclear issue have been selected and rearranged in a broader perspective in order to help readers understand the nuclear issue as a whole.

Second, by drawing some conclusions from these topics, we will be better prepared for any changes in relation to the nuclear controversy. Particularly, we would like to emphasize that the nuclear issue has to deal with many elements. It is our security issue as well as an issue between North Korea and the international community. At the same time, it is an issue between the Republic of Korea and the international community, as well as an issue between South and North Korea. It is also our national unification issue.

#### North Korea's Nuclear Program: Capability and Intention

Since the establishment of the Kim Il Sung regime, North Korea has devoted itself to economic development and to building up its military capability in order to unify the peninsula by force. However, North Korea's economic performance turned out a complete failure. Its economy has been more devastated than it would have been had it not excessively invested in building up its military. Its once-formidable military strength became instead an economic burden toward the end of the 1980s. To make matters worse, as the Cold War ended and the value of North Korea diminished for China and Russia: their military and economic aid to Pyongyang rapidly decreased. Forced to stand on its own, North Korea became quite uncertain as to whether it should open up for economic growth or remain closed to preserve its system. North Korea's attempt to develop nuclear weapons and its attitude in talks with the US reflect its dilemma. However, regardless of motive, North Korea's nuclear development creates a serious security problem for us, and such

a problem will most likely continue until the day of unification.

North Korea's atomic power development began when it concluded an agreement with the Soviet Union in August 1956 to participate in establishing the Dvuna Multinational Nuclear Research Institute in the Soviet Union. North Korea used to send many scientists every year to exchange atomic power technology with East European scholars and to establish a foundation for its own atomic power development. In September 1959, an agreement between North Korea and the Soviet Union on the peaceful use of atomic power was signed, thus establishing official ties for cooperation in regard to atomic power. In 1962 an atomic power research center was established in Yongbyon. With the importation in June 1965 of the IRT-2000,2 an atomic research reactor with a generating capacity of two megawatts from the Soviet Union and with the beginning of full-scale research, a system capable of developing atomic power was complete.

Intending to use nuclear energy for both peaceful as well as military uses, North Korea put great effort into training the necessary personnel by launching courses in nuclear engineering and nuclear physics at Kim Il Sung University and Kim Chaek Engineering College, in addition to sending its nuclear scientists to Dvuna. From the middle of the 1980s, the outside world has seen various signs that North Korea was pursuing nuclear weapons development. Particularly, atomic reactor number one in Yongbyon with its electrical output of 5 MWe, which began to operate from the end of

<sup>2</sup> IRT-2000 is a reactor for an atomic research, for which the Soviet Union supplied nuclear fuel and recovered the spent fuel. Since North Korea joined the IAEA in 1974 and concluded a safeguard agreement with the IAEA for the reactor, it has been under the IAEA inspection. The reactor was enlarged from 2 MWt to 8 MWt in capacity.