
The Light-Water Reactor Project and the Issue of Burden Sharing

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Issue Analysis

The light water reactor (LWR) project is a core component of the Geneva Agreed Framework signed by the DPRK and the United States in October 1994. In the Agreed Framework, the United States promised North Korea that the two 1,000MW LWRs will be provided on the condition that North Koreans give up their nuclear weapon development capabilities and desire. The Korean Peninsula Energy Development Organization (KEDO) was established to lead the LWR project and related activities. South Korea (or the ROK), the United States, Japan and the European Union are the principal members of KEDO and a dozen other countries have participated as regular members of the organization. The other major mission of KEDO is to provide the DPRK with an alternative source of energy for heating and electricity production until the first of the two reactors is completed. For this purpose, 500,000 tons of heavy oil has been annually provided to North Korea. From the beginning, the United States has been in charge of the heavy oil provision.

The supply agreement was signed on December 15, 1996, and subsequently, a dozen important protocols have been agreed upon.

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The site survey of the Shinpo area where the reactors are to be built has been completed. Last August, the preliminary construction for ground leveling began. Recalling the implementing processes of the Agreed Framework, it can be concluded that the LWR project has made steady but slow progress with intermittent interruptions.

At this moment, the LWR project has reached a critical juncture. The main issue to be resolved is the burden sharing of the construction expenses among the three principal players of the project: South Korea, the United States and Japan. The Rough Order of Magnitude (ROM) was originally estimated to be about 5.2 billion U.S. dollars. The three countries have carried out negotiations to decide the portions of money each of them will have to spend. When KEDO was established, the implicit assumption among the three countries was reported to be that Seoul would play a 'central' role, Tokyo a 'significant' role, and Washington a 'symbolic' role. But nothing in detail has been agreed upon in a formal and concrete manner.

At the time of signature of the Agreed Framework, then-South Korean Minister of Foreign Affairs, Mr. Han Seung-joo, remarked that South Korea would pay approximately 50% of the construction costs. This was regarded by the ROK government as compensation in order for two principles to be maintained in the entire process of the LWR project. The first principle is that South Korea plays a central role. The second is that the reactor model to be built in North Korea will be the Korean standard nuclear power plant.

As time goes, however, the ROK's burden has become much higher than Minister Han's original estimate. As a result of the recent negotiations, it is reported that the ROK has agreed to pay 70% of the total expenses while Japan would pay 1 billion U.S. dollars, which is about 20% of the entire cost. But who will cover the remaining 10% has not been decided. Seoul wants Washington to take charge of that portion, but the U.S. position is far less encouraging. Washington has not shown any positive response. To make matters worse, the Americans are asking South Koreans to pay for the heavy oil expenses, which they voluntarily agreed to take charge of.

The burden-sharing issue has become much more complicated

due to the financial crisis South Korea has been facing since late 1997. At the moment, the South Korean economy is so bad that it is virtually unable to make substantial financial contributions to the LWR project. Even if the burden sharing is agreed upon among the three countries, it is not sure that the agreement can be approved in the South Korean National Assembly, where the majority is the opposition party.

On the condition that the ROK's standard nuclear power plant was chosen and its central role guaranteed, it is reasonable that, compared to other countries, South Korea pays the biggest portion of the LWR construction expenses. I think that there is no objection in South Korea to the fact that Seoul will have to pay more than half of the total expenses. But the question is exactly "how much"? 60%, 70% or 80%? Under the current circumstances, it is imperative for the ROK to minimize its burden sharing while keeping the two principles: its central role and the provision of the Korean standard nuclear power plant.

More Active Contributions Needed from the United States and Japan

The provision of the LWRs to North Korea is an issue not just confined to the Korean peninsula. The LWR project should be approached in the context of a global dimension. That is, the major mission of the project is to deter the so-called "rogue states" from having access to nuclear weapons and to secure international non-proliferation norms and regimes. After the Cold War, a consensus was reached that the most serious threat to international peace and security is that the rogue states and terrorist groups develop or possess weapons of mass destruction (WMD) and use such weapons for their malicious purposes. Nuclear, biological and chemical weapons are categorized as WMDs. Such a conclusion was reinforced by the Iraqi secret WMD program which was revealed by the international inspections carried out by the UN Special Commission (UNSCOM). Under these circumstances, it was only natural that the North Korean nuclear weapon program was regarded as a top security threat both regionally and globally.

When the Agreed Framework was signed, the United States government came under heavy criticism that the United States had paid for North Korea's nuclear intimidation and blackmail. The United States justified its decision by arguing that the prime objective was to defend the international nonproliferation regime by forbidding Pyongyang from carrying out its nuclear weapon development program and withdrawing from the NPT. From the American perspective, it was believed that the LWR project was a highly calculative and strategic choice of the Clinton administration with the purpose of maintaining and reinforcing the international nonproliferation regime.

Japan was as much concerned as the United States about North Korea's nuclear weapon program. In particular, the Japanese deep concerns were amplified by North Korean testing of Rodong missiles, medium-range ballistic missile able to reach Japanese territory from North Korea.

Considering the strategic nature of the Agreed Framework, the LWR project is perceived to be a core policy means to eliminate an important national security threat to the United States and Japan. The security dividends derived from the LWR project must be enormous for the two countries. Therefore, it is not only Seoul but also Tokyo and Washington that are key beneficiaries of the project. The United States and Japan should demonstrate their sincere willingness to make all forms of contributions to the project as much as they can. It is the ROK's obligation and right to demand that the two countries put utmost efforts to successfully carry out the project in terms of financial contributions.

If North Korea were to succeed in obtaining nuclear weapon capabilities, the political, military, economic and psychological burdens to be borne by the United States and Japan would be immense. Compared to these burdens, the financial contributions to the LWR project, even if the two countries are assumed to pay for half of the total construction costs, would be negligible. Therefore, more active contributions on the parts of the United States and Japan are needed. Particularly, their support to the project is desperate when South Korea is facing a financial crisis of a magnitude that has never been experienced since the inception of

the country.

A Suggestion for the Proper Modalities of the Burden Sharing

It is reported that South Korea has already committed to pay for 70% of the construction expenses on the condition that the principles of the central role and provision of the Korean standard reactor are kept. Since this is an international promise, I would argue that the promise should be implemented sincerely. But the current financial crisis in South Korea makes it difficult for Seoul to take charge of more than what was already committed. If the United States and Japan make excessive demands of South Korea, that will cause the general public in this country to be outraged, having adverse effects on the LWR project in general. So the possibilities of additional commitment from Seoul should be ruled out entirely.

Then the question is: who will be in charge of the remaining one-third portion of the costs? It is said that Japan is willing to pay for about 20% of the total expenses, that is, 1 billion U.S. dollars. The United States has stuck to its position that it cannot contribute to the LWR construction expenses since it is the main sponsor for delivering heavy oil. At this critical juncture, the two countries are suggested to consider how much security benefit they would get from the LWR project. Tokyo and Washington should not try to achieve their security objectives at the expense of Seoul, who is suffering from financial turmoil. The two countries, especially the United States, should demonstrate their active support for the LWR project by making a greater financial contribution to the project. This will be praised by the South Korean public as good will from the United States and Japan to help South Korea recover its economic health as soon as possible.

Besides the burden sharing, there still remains the issue of how to spend the money contributed to KEDO. Here are two suggestions. First of all, South Korea needs to be exempt from financially

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contributing to the project until its economy escapes from the current financial emergency—for example, for two years or so. Second, assuming the ROK's central role, about three quarters of the ROM will have to be paid to Korean companies on the basis of the Korean Won. This will significantly reduce the ROK's financial burdens due to a drastic rise in the exchange rate.

The Importance of the LWR Project

In addition to being a security bulwark against North Korea's irrational behavior, the LWR project will have a great contribution to the improvement of the North-South Korean relations. Three important merits warrant special attention.

First, in spite of North Korean resistance, it is inevitable that the LWR project involves a great deal of South Korean workers during the construction period. According to an estimate, assuming that the two LWRs are completed by the year 2004, a maximum of 7,000

people a day and 10 million people in total are expected to participate in the project. Most of them are from both Koreas. In fact, the project is the biggest enterprise where North and South Koreans are working together on the same site since the division of the Korean peninsula. The project, although limited to a narrow area of the nuclear industry, will provide a great deal of opportunities for ordinary Korean people to get acquainted with each other and increase mutual understandings.

Second, the LWR project is an important confidence building measure. Since the construction of the nuclear power plants per se is inherently a scientific and technical business and has less sensitivities compared to other political or military dialogues, it is expected that the project, if successfully completed, can facilitate inter-Korean reconciliation and cooperation. The project can initiate a North-South Korean confederation in the field of science in the first place. If successful, the project will become a basis of peaceful unification.

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opportunities to scrutinize the North Korean nuclear industry and thus to have a better assessment of the North's nuclear weapon development capabilities. Frequent discussions, meetings, nuclear site visits etc. will help the establishment of important human intelligence assets and increase our knowledge of the North Korean nuclear infrastructure. This is particularly important since the suspicions over the DPRK's past nuclear activities before its signing the IAEA safeguards agreement still have to be resolved. The question of how much plutonium was produced by North Korea has yet to be answered. As a result, South Koreans has remained hostage to the North Korean nuclear blackmail.

Furthermore, intelligence cooperation with other countries such as the United States, Japan or China seems to have been less than what the ROK government had expected. Uncertainties have remained in South Korea about the North's nuclear weapon development program and the South Korean public is often frightened when the media reveals unconfirmed reports on the DPRK's secret nuclear weapon development activities. On the other hand, the United States, Japan and China do not seem to regard the reports as seriously as the ROK and their responses have been cool and calm. This phenomenon indicates the information asymmetry of the North's nuclear program. Thus, from a security perspective, the South's having a unilateral access to the North Korean nuclear activities are very important. The project is an effective means for this purpose.

The Prospects for the LWR Project

As a component of the Agreed Framework, the LWR project is closely linked to political situations on the Korean peninsula as well as to other issues of the Agreed Framework. It is not surprising that the implementing procedure of the project has been frequently interrupted. The submarine incident that occurred in September 1996 was the most visible event to demonstrate how sensitive the project has been and will be to external factors. The incident caused the negotiating process on the protocols to be delayed for five months. It cannot be ruled out that such an event

will not happen again in the future.

However, the principal players of the KEDO, South Korea, the United States and Japan, have shared a common view that the LWR project is a key business to deter North Korea from developing nuclear weapons, to protect the international nonproliferation regimes and to defend their core national security interests. On the part of North Korea, the importance of the project is also appreciated very much. North Korean authorities have regarded the project as a bridgehead to expand their relations with the Western countries and to invite much needed foreign investment to their country. In fact, they hope that the project will proceed as fast as possible.

So the project will be steadily carried out although there might be some turbulence. Some may argue that North Korea is not a trustful partner and there exists a possibility for North Koreans to violate the Agreed Framework. But this is an unnecessary worry. North Korean authorities fully realize the importance of the Agreed Framework and have been interested in sticking to the docu-

ment. They believe that their regime can only survive by establishing a strong partnership with the United States and Japan. Their diplomatic efforts have heavily focused on improving relations with the two countries. Pyongyang's sincere implementation of the Agreed Framework is an essential precondition for having better ties with Washington and Tokyo.

Finally, there is a suggestion that the LWR project be replaced with a conventional power plant project. Recently, this argument has been raised on a number of occasions. Since the construction of the LWRs is more costly, needs much longer time, and is less suitable for North Korea in terms of the efficient energy use than conventional power plants, it is argued that instead of LWRs, conventional power plants equivalent to 2,000MWe is a much better alternative for all of the countries directly involved in the project. This is an idea with a lot of merit and needs to be further scrutinized. EKP

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