### KHNP's Experience of Obtaining Public Acceptance for Continued Operation of Kori Nuclear Power Plant Unit 1

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### 1. Introduction

The operation of a nuclear power plant after the design life time is known as continued operation. In order to gain permit for a continued operation, utilities have to submit a safety analysis report (SAR) 5 to 2 years before the end of the design life.

Then, government authorities reviews the SAR, and should make decision of continued operation permission within 18months.

Continued operation of Kori Unit 1 was promoted for the first time in Korea. Government authorities rigorously probed the safety evaluation report submitted by Korea Hydro & Nuclear Power Co., Ltd (KHNP) in June 2006, and permitted Kori Unit 1 to be operated continually in December 2007.

The safety evaluation for the continued operation and the gaining license were successful thanks to thorough planning and equipment improvement, but there were a lot of difficulties such as the opposition against the continued operation during the process of obtaining public acceptance.

This manuscript will describe KHNP's Experience of obtaining public acceptance for continued operation

of Kori nuclear power plant Unit 1.

### 2. Gaining Public Acceptance

# 2.1 Opposition of Residents in the neighboring area of Kori Unit 1

Local residents expressed safety concern over Kori Unit 1's continued operation and protested against it demanding excessive compensation for the region.

Indicating that the Kori district was designated as a greenbelt for 30 years, they requested compensation for the damage and opposed the continued operation by staging group demonstrations 7 times.

The village chief of Gilcheon-Ri had been on hunger strike for 8 days, and 24 representatives of Kijang-Gun set up a protest camp and staged all-night protests for 9days.

The Youth Federation of Kijang-Gun held an opposition debate on the issue in which 300 local residents along with environment organizations participated. They also submitted opposition petitions to the National Assembly, the Government, the Ombudsman of Korea as part of their opposition activities.



Fig 1. Protesters against Kori Unit 1's continued operation

### 2.2 Opposition of Environmental Organizations

Environmental Organizations also expressed safety concerns stemming from the continued operation and resisted the idea.

Busan Youth Environment Center launched several opposition campaigns and held opposition debates along with the Democratic Labor Party as well as Japanese antinuclear group.

Major domestic environmental groups in opposition jointly made an appeal and plea more than 10 times to the National Human Rights Commission and every government ministry calling for related information to be disclosed to the public.

### 2.3 Overcoming Public Resistance

To overcome the public opposition and to raise public acceptance, KHNP focused on public relations to inform local residents of the necessity and safety of continued operation and presented cases of other countries. Also, in its wide-ranging and far-reaching promotional campaigns, KHNP emphasized that continued operation helps effective use of nation's energy resource and that it would contribute to the local economy as well.

By hold public hearings and one-on-on promotional campaigns 1,131times, KHNP aimed to raise awareness of local residents, public opinion leaders, government officials, major organizations, and lawmakers to build consensus on the safety of the continued operation.

KHNP also held press conferences on the safety issue including media tours 53 times to help journalists of major newspapers to write correct reports. KHNP's efforts also included seminars and workshops on the issue with local residents, environmental organizations and the academic circle 9 times and made their voices heard.

The government especially focused on the resolution of conflicts among stakeholders by organizing an

Inspection Team comprised of the board of directors of KHNP, the academic world, and conflict management experts.

# 2.4 Residents came to an agreement on continued operation

The continued operation after end of the original design life doesn't require legal agreement of local residents, but under the recognition that resident acceptance is important in continued operation, the management including CEO of KHNP held a coffee klatch of 27times with the local lawmakers, head of the local municipal government, Gijang-Gun resident representatives, Uljoo-Gun resident representatives as well as key figures of the Busan metropolitan City, and proposed the establishment of a council to solve various issues through rational conversation.

At the same time, we heard and reflected the residents' views in responsible manner and earned trust from local representatives through honest communication about the situation of KHNP.

On the basis of the trust, two opposition committees in the Gijang-Gun region were consolidated into a unified council. This meaning is to provide a way of solving conflict rationally through conversation on opposition demonstration.

After that a council exchanged opinions about the safety of continued operation through 5times of general assemblies and several negotiations, and KHNP agreed to support desired local business such as construction of agricultural and marine specialty mall, and the local library because the opinion was raised that the region had been declined as it was designated as a greenbelt for 30years.

The council of Gijang-Gun district at last signed agreement on December 18th 2007 thanks to serious and honest negotiation between the two sides, and Uljoo-Gun district council also signed agreement December 21st, 2007 which took 2years to solve the conflict with local residents.



Fig 2. KHNP and resident signed agreement

2.5 Reasons behind successful Resident Agreement



Fig 3. A Commemorative Event of Kori Unit 1 Continued Operation

First, there were changes in conflict recognition and approaching methods. KHNP recognized that there were differences in meaning of safety which was required by the residents and science & technology itself, and tried to understand them by putting ourselves in theirs shoes.

And local residents recognized that there was a limit for KHNP as a public enterprise couldn't accept their entire request so they demanded a feasible request.

Second, there was change in solving method on conflict. KHNP experienced a resident disturbance of Buahn-Gun and Kyungjoo-City against radioactive waste disposal center and realized the importance of agreement through group discussion. Residents recognized from their experience that the opposition fighting itself couldn't help solve the problem and understood that realistic discussion and agreement was necessary.

Third, there was change in discussion system and discussion method. To solve problem, KHNP managed different method from the past of having a negotiation with the government or local government head, and it constituted a council formed by local figures who have actual representation in regional society and approached to the problem which had been wanted substantially by residents.

Finally, formation of trusted relation can be counted as a main cause. The management of KHNP who participated in the negotiation honestly talked about feasibility of resident request based on the accurate basis and sought understanding from residents.

So residents and KHNP confirmed mutual genuine effort and foundation of faith was accomplished.

Thanks to this effort, after the residents' agreement, Kori Unit 1 started fuel charge on December 21st, 2008 and reached the critical point on January 3rd, 2008 and synchronized with power system on January 9th 2008, and at last held a commemorative event for Kori Unit 1's continued operation on January 17th with congratulation from local residents.