# Public Understanding of the Replacement of Aged Pressure Tubes in Wolsong NPP Unit 1

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#### Abstract

For safety, KHNP(Korea Hydraulic Nuclear Power) is supposed to replace the aged pressure tubes in Wolsong NPP unit 1 from on April 2009. The period expected for retubing is assumed to be longer than 1.5 years. However, the residents have little information about the retubing project because KHNP would not try to let the residents know what the project is.

This paper describes the current status of the resident understanding and their demands which was collected from WSNESC (Wolsong Nuclear Environment Supervisory Center) tour to nearby villages, and explains why KHNP would try to present the retubing project to the residents. Hopefully, we expect that this paper could be helpful to move the project forward to the social cooperation for their future.

Key words: Public, Pressure tube replacement

### I. Introduction

KHNP is going to replace the whole pressure tubes in Wolsong unit 1 from on April 2009 to on December 2010. This kind of work would be not only very new to residents around NPP in Wolsong and but also understood as an allusion of life extension of aged Wolsong NPP unit 1. Incidentally, it could be partly known that this project would be for only purpose of profit increment for KHNP without the resident safety considerations. The residents would worry about the pressure tube replacement project which needs much money and results of big change in NPP without any active KHNP explanations.

Up to now, KHNP have driven the project in their closet since last several years ago. This paper would try to describe the current status about the pressure tube replacement, and the public understanding and demand acquired in tour to some villages nearby Wolsong NPP. Hopefully, we expect that this paper could be helpful to move the project forward to the social cooperation for our future.

### **II. Current Status**

There are four PHWR typed operating NPP, two PWR typed NPP in constructing and middle and low level radio-waste management facility in Gyongju. Recently, the government has tried to make a consensus for the spent fuel management and furthermore decided to increase the ratio of NPP portion into 60%. Beside the technical issue, these projects related to nuclear industry need a public acceptance. Here, we need to look into the resident poll at Gyungju in 1995. What we need to pay attention is the agreement ratio in three villages nearby NPP. Whereas the agreement ratio was about 89% in whole city, the ratio in nearby three villages was less than 60% after even publishing regional supporting plans. As a result, we could conclude that the residents nearby NPP have had any negative experience for nuclear industry for about 30 years. In Gyongju, KHNP starts to drive a new project which replaces the elongated pressure tubes on April 2009. This project seemed to be prepared since last few years. During this period, there was no any explanation about the project of pressure tube replacement to residents on their own initiative.

Each administrative district including NPP has its own NESC (Nuclear plant Environment Public Supervisory Committee) which consists of a steering committee and a center. The purpose of NESC is to let the public survey and inspect nuclear plant environment and then improve a clarity and confidence in plant construction and operation by themselves [1][2]. Wolsong NESC has been visiting villages around NPP and communicating with the residents. Figure 1 is a picture of NESC visiting a village where there was a questionnaire inspection for resident understanding of Nuclear. A few months ago, KHNP gave a presentation about the retubing project after WSNESC's (Wolsong Nuclear Environment supervisory Committee) even asking. We had got an impression that they did not need to present the project to nearby residents. In other words, it seems that they have a short understanding the residents as a partner to step together. They remember that how much social energy in 19 years we spent for the past radio-waste management project. In order to realize green growth plan driven in the government, all we firstly start to agree that the public acceptance is one of the most important international competitiveness.



Fig. 1 NESC visiting a village nearby NPP

## **III. Public Understanding and Demand**

The average residents living around NPP are lack of technical understanding about NPP. So far, the residents nearby NPP have been excluded from any great change resulting from nuclear industry in their front yard which results in the loss of their own identities. Because the local area they are living could be regarded as their life and their being at the same time. KHNP should provide them with any bit of chance to participate the project so that they could feel their living in their own region. Unless there is an opportunity such as even a hearing, their antipathy toward KHNP would hardly be moderate. As a starting, there must be a number of presentations about KHNP plans with own initiative based on careful concern and respect to nearby region. After then the residents expect the aged pressure tube to be replaced safely and managed properly. Lastly, they want KHNP to explain the long term plans such as NPP life extension if KHNP has.

## **IV. Summary**

In Wolsong, both KHNP and the resident is facing to the replacement of aged pressure tube before coming to the design life of NPP unit 1. The residents want to know KHNP plans since this retubing project seems to be related to the life extension of NPP unit 1. In this situation, both sides need to deeply think how to do and what to do for our future.

KHNP should realize that public acceptance is one of the national competitive powers and try to communicate with the residents nearby NPP. We believe that KHNP explaination about the Retubing is the starting point for both sides to proceed together. After that, the residents could agree KHNP to replace the aged pressure tube through any logical thinking.

### REFERENCES

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