NIMBY, Deliberation, and Democratic Decision Making: 
A Comparative Analysis of Radioactive Waste Repository Siting Cases in Korea and Japan* **

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Abstract

Toyo-cho is the only municipality which applied for the Literature Survey of high-level radioactive waste repository in Japan. In Toyo-cho, a serious antagonism among citizens occurred and three decisive factors are found: 1) the emotional opposition provoked by opposing activists’ rhetorical expressions, 2) the opposition stakeholders’ initiative in democratic decision making, and 3) the adverse influence of grant on the citizens’ emotion. In Korea, despite the past serious oppositions, Gyeongju accepted a low and intermediate level radioactive waste repository. The three important differences from the case in Japan are found: 1) political leaders and experts played an important role in reforming the siting policy; 2) the siting policy involves referendum which enabled “neutral” democratic decision making; and 3) local people considered the grant as a factor of decision making. A lack of deliberation in the cases of both nations, however, results in dissatisfaction with process and even consequence of decision.

Key Words: Radioactive Waste, NIMBY, Japan, Korea, Deliberative Democracy, Emotional Opposition

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INTRODUCTION

Based on the Designated Radioactive Waste Final Disposal Act enacted in May 2000, Japan adopts the four-step repository siting process, which consists of 1) the Literature Survey (2 years), 2) the Preliminary Investigation (4 years), 3) the Detailed Investigation (15 years), and 4) the site selection for repository construction, and the "application-based" (voluntary) siting policy regarding the high-level radioactive waste (HLW) management. The Nuclear Waste Management Organization of Japan (NUMO), which was established in October 2000 based on the Designated Radioactive Waste Final Disposal Act and operates the radioactive waste management, has invited applications from mayors of municipalities[1] for the Literature Survey since 2002. Applying municipalities, or "candidates", will receive the Grants for development of area locating electric power stations that amount about 2 billion JPY (1 billion per year) in the Literature Survey and at most 7 billion JPY (2 billion per year) in the Preliminary Investigation. (The amount of grant after the Detailed Investigation will be determined by law in future.) The funds for the grants and the HLW final disposal, reserved by the electric power companies, are to be administered by Radioactive Waste Management Funding and Research Center (RWMC), and RWMC reimburses the funds based on NUMO's requirements with the approval of the government. Although some municipalities have considered applications for the Literature Survey since 2002, either in municipal councils or at mayors’ discretion, none of them had sent the application to NUMO until 2007.

In January 2007, Toyo-cho, Kochi Prefecture applied for the Literature Survey, which was the first and has been the only case so far in Japan. The application and the dispute, however, resulted in a serious antagonism among residents, a strong campaign to collect opposing signatures, the mayor's resignation, and finally, the withdrawal by the new mayor. The dispute made the residents too enthusiastic to deliberate the issue and caused the later trouble of latent chasm. Lessons about decisive factors influencing dispute regarding HLW repository siting should be learned from this case so that similar antagonism and problems can be avoided in other future applying municipalities.

Radioactive waste is classified into two categories in Korea: spent nuclear fuel (SNF) and low and intermediate level radioactive waste (LILW)[2]. LILW includes gloves, cover shoes and clothes, and so on, used in nuclear power plant and used machine parts in maintenance. Because of ROK-DPRK Joint Declaration of the Denuclearization of the Korean Peninsula in