

## Comparative Analysis of Local Acceptance of Renewable Energy Facilities and Spent Nuclear Fuel Repositories

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**Abstract :** Public deliberation committee on Shin-Gori Nuclear Reactors No. 5 & 6 in South Korea recently suggested policy recommendation in July 2017 including complementary measures for resumption of construction: 1) nuclear power generation reduction, 2) expansion of investment to increase proportion of renewable energy, 3) repositories of spent nuclear fuel. Even when constructing eco-friendly renewable energy facilities such as solar and wind power plants, local residents are opposed to construction of these facilities due to environmental pollution and health impacts. In order to transform eco-friendly energy, it is necessary to convert nuclear energy into renewable energy and to take measures to increase the acceptance of residents through the participation of citizens. Therefore, this study aims to compare the factors of local acceptance of renewable energy facilities and spent nuclear fuel repositories through literature review and in-depth interview. The results show that environmental and economic concerns, risk perceptions, sociality, demographic characteristics and subjective recognition types affect the local acceptance for spent nuclear fuel repository. The factors of local acceptance for renewable energy facilities are partially coincide with those for spent nuclear fuel repository. The results of this study will contribute to improving residents' acceptance and reducing conflicts when determining the location of facilities in the future.

**Keywords :** local acceptance, renewable energy facility, spent nuclear fuel repository, interview

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