



Intra- vs. intergenerational justice tradeoffs in nuclear waste storage (W01)

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Abstract. We propose a workshop in two parts (approx. 90 min each) to discuss (i) general dilemmas due to the long time range until an operable solution for the waste problem is found and (ii) an ethics-inspired discussion on the extra burden for communities hosting interim storage sites (based on empirical data).

In the first part, we highlight the twofold responsibility concerning the current generation's decision-making perspective for present and future generations. According to our survey data and a debate with citizens, we see the need to discuss the respective weighing of directly affected generations during the next few decades (until the repository's closure, which affects about four to five generations) compared to the justice for (five+) future generations in the following decades and centuries (see the figure in the Supplement). Questions are, for instance, is discounting the ethical relevance of future generations justified, necessary or forbidden?

In the second part, we explore the consequences of the delayed final storage in Germany on the current interim storage sites. Following conversations with citizens (in Brokdorf, October 2022, and in Lubmin, March/April 2023) we investigate the tradeoffs between guaranteeing the safety in these sites and developing and implementing new concepts for long-term storage at these or new sites before commencing with final storage. In terms of safety and fairness, invasive monitoring of casks or storage in a new centralized interim repository would be welcomed by some. However, both possible measures conflict with long-term practices (e.g., approving licenses for several decades or the long-term planning for the final repository). Important questions to be discussed are, among others, how much time may current generations take to identify the most suitable site? How can addressing all three time horizons specified in the Site Selection Act help to contextualize delays in the initial steps? What are the risks and opportunities associated with delayed deep geological disposal (economic, social, political, etc.)? To what extent may intragenerational (current generations) justice discount for generations in the far future? How can the prolongation of interim storage be justified?

We propose a specific format during the workshop in which participants work in small groups using the rich picture methodology (https://naturwissenschaften.ch/co-producing-knowledge-explained/methods/method_factsheets/rich_picture, last access: 12 June 2023). This format is suitable for work in small groups to visualize (consensus or divergent views on) complex problems, structures and interrelationships between agents. The results from the small groups are then presented and discussed in the plenary. The respective answers to the key questions may provide possible practice-oriented results for responsible decision-makers (e.g., at BASE Bundesamt für die Sicherheit der nuklearen Entsorgung (Federal Office For The Safety Of Nuclear Waste Management)).