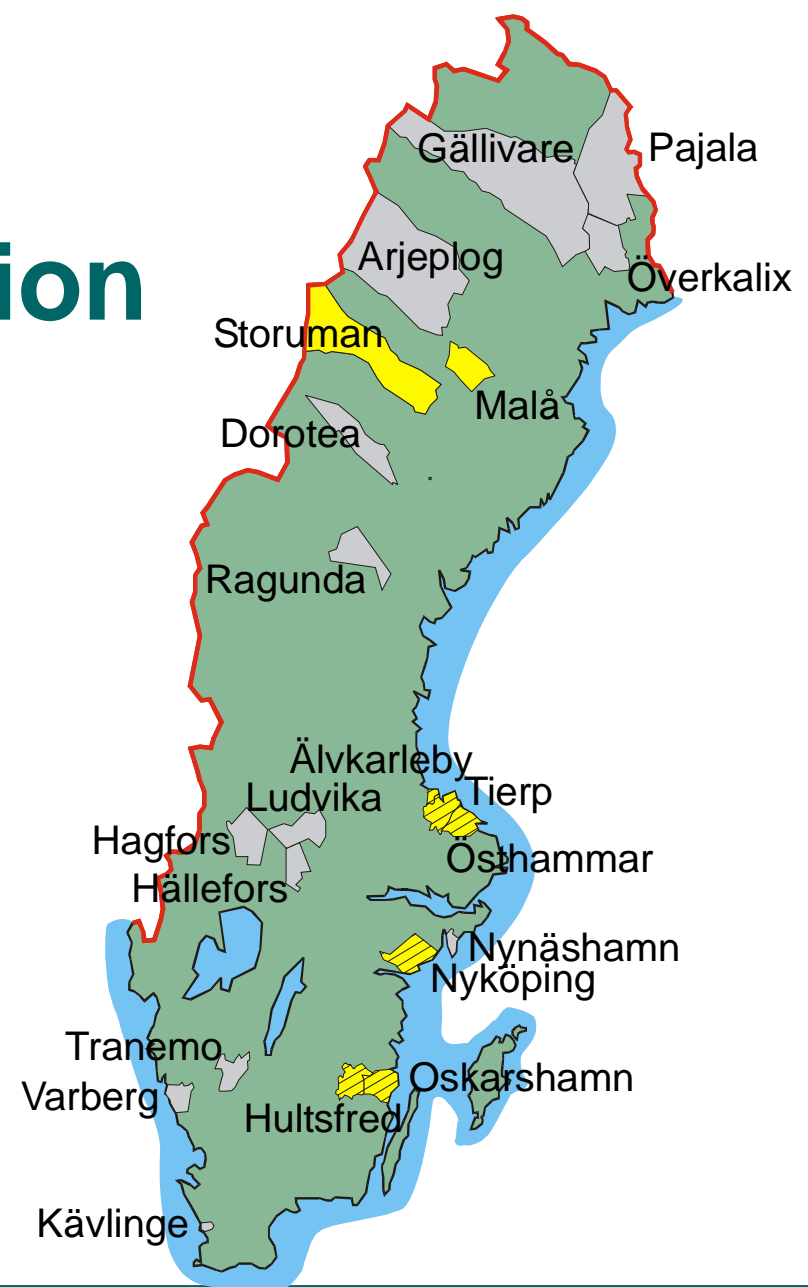


Reflections on the Swedish site selection process

Tuija Hilding-Rydevik
Associate professor, Swedish
University of Agricultural
Sciences

Eva Simic

PhD, Director at the Swedish
Council for Nuclear Waste



The present situation

June 3, 2009: SKB selects Forsmark for the final repository for Sweden's spent nuclear fuel.

We see a clear advantage for Forsmark concerning long-term safety, says SKB President Claes Thegerström.

The rock in Forsmark at repository depth is dry and has few fractures – important for long-term safety.

End 2010: SKB plan to submit their license application according to the Nuclear Activities Act and the Environmental Code

The basis for the Swedish nuclear waste programme and SKB:s site selection

1973 - 2002

A study regarding high level waste from the NPP (1973 – 76) proposed:

- Intermediate storage of spent nuclear fuel while awaiting reprocessing.
- The suitability of the rock should be investigated near the NPPs in Östhammar and Oskarshamn and on "alternative sites".
- Direct disposal as an alternative to reprocessing
- The Government should be engaged in the nuclear waste management



A new organisation was formed: formally associated to the Government and to work with geological investigations

The first surveys started in 1977 within the framework of a geoscientific program

- Aim: to characterize the Swedish bedrock
- In 1981 the governmental organization was dissolved and SKB was formed
- No dialogue with local stakeholders led to increasing opposition
- SKB had to stop the program in 1985

A fresh start was required...

- In 1992 SKB presents a new siting process based on voluntariness and dialogue with local stakeholders
 - feasibility studies in 8 municipalities
 - result: potentially suitable bedrock in all but one municipality
- SKB published a number of other siting studies
- In 2000 SKB proposed to conduct site investigations in Oskarshamn, Tierp and Östhammar
 - The authorities and the Government had no objections
- Site investigations commenced in Östhammar and Oskarshamn in 2002. The municipal council in Tierp declined.

**For SKB it has been a successful
process...**

The mayor in Östhammar is happy about the decision. He says *'I trust SKB, but above all I have confidence in the review of SKB's programme by the authorities'*.



Source: SKB

The mayor in Oskarshamn respects the decision since *'it was the long-term safety that determined the site'*. Oskarshamn will also get 75% of the added value according to an agreement between the municipalities, SKB and its owners.

Political standpoints

- 'We will build a repository now and not postpone it'
- 'We must ensure that future generations will have the freedom to make their own choices.'
- The nuclear industry has the formal responsibility (pollutor pays principle) but 'we all use the electricity generated by nuclear power and we all have a responsibility to dispose of the waste'

Hearing on the site selection - findings

- All participants agreed: site selection principally guided by safety-related considerations, BUT
- clear that there are conflicts
 - how active should the politicians and the Government be?
'The nuclear waste issue is a political issue that cannot be reduced to an industrial establishment issue.'
 - do we look for the 'best site' or 'the best available site' given a voluntary process
 - responsibility regarding future generations = build now or wait?

Reflections 1

- The introduction of voluntarism and dialogue opened up for going ahead with the process
- Local stakeholders appears to trust both the implementer as the regulator – process proceeds and dialogue works, trust in knowledge production
- NGO's played an important role to make process more democratic, together with inputs from municipality of Oscarshamn.
- NGO's presence supported financially

Reflections 2

- The change in legislation – Environmental Code – brings in EIA and demands on new kinds of data of the site to be included
- There appears to be some unclarities in the three different pieces of legislation to be applied: "best site" or "sufficiently good site" or "best available site".
- The methods for site investigations not exactly the same – difficulties in comparing.
- Safety analysis will only be handed in for the site selected – difficulties in comparing