

Yucca Mountain – Lessons Learned

Olof Söderberg

**Energi- och miljöstrategi O Söderberg, SWEDEN
(Energy and Environment Strategies
O Söderberg)**

Three themes

- **Political context**
- **Organizational form of the implementer**
- **Independent technical/program oversight**

Political context (1)

Question for discussion:

- **Did the YM-project "go wrong" because of the political context that created the project?**

Political context (2)

- **Both in US and in Sweden long term management of high-level nuclear waste and/or spent nuclear fuel raised public concern developing into a political force during the early 1970's.**
- **Illustrated by**
 - **Failure of siting a repository to Lyons, Kansas 1970-1971.**
 - **Legislation in California in 1976 on conditions to construct new NPPs.**
 - **Legislation in Sweden in 1977 on conditions for Government permits to start new NPPs.**
 - **(Continued...)**

Political context (3)

- **Illustrated by (continuation)**
 - **The 1987 Amendment of the Nuclear Waste Policy Act creating the YM-project**
 - **The current US Administration's initiative to close down the YM-project and setting up the Blue Ribbon Commission to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle.**

Political context (1)

Question for discussion:

- **Did the YM-project "go wrong" because of the political context that created the project?**

Organizational form of the implementer (1)

Question:

**Does the US system facilitate or complicate
long-term management of high-level
waste/spent nuclear fuel from the
commercial NPPs?**

Organizational form of the implementer (2)

- **US: Federal government responsibility to implement long-term management of spent nuclear fuel**
- **Sweden: Responsibility to implement long-term management of spent nuclear fuel rests with the owners of NPPs (acting through SKB)**

Organizational form of the implementer (1)

Question:

**Does the US system facilitate or complicate
long-term management of high-level
waste/spent nuclear fuel from the
commercial NPPs?**

Independent technical/program oversight (1)

- **US: Nuclear Waste Technical Review Board**
- **Sweden: Swedish Council for Nuclear Waste**
- **Partly different charters**
 - **NWTRB restricted to purely technical review**
 - **Swedish body may also comment on ethical, legal, social and policy dimensions of waste management**

Independent technical/program oversight (2)

Questions:

Would the NWTRB's advice on the YM-project have been different if its mandate had been broader?

Would advices taking into consideration also ethical, legal, social and policy dimensions have changed the fate of the project?

Independent technical/program oversight (3)

Early examples of themes for seminars and debates arranged by the Swedish Council for nuclear waste:

- Ethical issues in nuclear waste management (1987)**
- Acceptability, Tolerance, Participation (1989)**
- Nuclear waste management and the Environment (1994)**
- Nuclear waste management and decision-making (1997)**
- Nuclear waste management, democracy and science (2003)**
- Nuclear waste management – financing (2005)**

Independent technical/program oversight (4)

Swedish Council for Nuclear Waste Transparency program (from 2006) – Some themes for workshops:

- **Decommissioning of nuclear facilities in Sweden,**
- **Deep boreholes – an alternative for final disposal of spent nuclear fuel?,**
- **Site selection for final disposal of spent nuclear fuel – on what grounds?,**
- **Mechanisms of copper corrosion in aqueous environments.**

Independent technical/program oversight (2)

Questions:

Would the NWTRB's advice on the YM-project have been different if its mandate had been broader?

Would advices taking into consideration also ethical, legal, social and policy dimensions have changed the fate of the project?

Thank you for your attention!

*Energi- och miljöstrategi O. Söderberg
Greta Garbos väg 21 A
16940 SOLNA
SWEDEN
Phone + 46 70 556 4039
E-mail: ol.soderberg@bredband.net*