

MINUTES OF THE MEETING
OF THE DISPOSAL SUBCOMMITTEE
OF THE BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE
AT THE ASPO HARD ROCK LABORATORY IN
OSKARSHAMN, SWEDEN
ON OCTOBER 25, 2010

MEMBERS PRESENT:

JONATHAN LASH, Chair
VICKY BAILEY
SUSAN EISENHOWER
ALLISON MacFARLANE
PER PETERSON

Saida Engstrom, Head of EIA and Public Information for SKB, convened the meeting at 11:15 a.m. and introduced the meeting's speakers.

Chair Lash introduced the Commission and its present members. The role of the Commission is to advise the Secretary of Energy on the back end of the nuclear fuel cycle. President Obama removed the Yucca Mountain license application from review. The Commission is looking at the entire process of solving the waste problem. He said the Commission was interested to hear about community involvement, the consent-based process, and the roles of transparency, influence and information.

Sven Lindgren, Governor of Kalmar County, Sweden, said it was an honor to welcome the Commission. Kalmar sits on 450,000 square kilometers. It is a large area with a small population. There are about 22 persons per square kilometer. The county contains 12 municipalities. Kalmar was founded in the mid-13th century. By percentage, about 50% of Sweden's power comes from nuclear production, 45% from hydro and 5% from fossil fuels. There are ten nuclear reactors operating, producing 61 terawatt-hours per year. Nuclear power has been a success. Plant performance is high. Radiological exposure is far below the industry average for Light Water Reactors. Damage to fuel has been low. Operational safety is among the best in the world. Sweden is a world leader in waste technology. Parliament has ensured the nuclear future of Sweden, as well as the future of renewable sources. Nuclear is the pillar of electrical supply in Sweden. Now, the state must create long-term good conditions for business and society. Coal and oil are imported during the winter; we need more nuclear power. Sweden must improve nuclear competence and continue research. The old generation of reactors has an operating limit at 2020. New technologies ensure increased efficiency and safety with reduced downtime. The environmental situation calls for more nuclear production, since CO2 levels increase with the import of coal and gas. The licensing process for nuclear plants is comprehensive and rigorous. The Governor's office also inspects nuclear sites and has an important role to play during environmental disturbances and during emergency situations. The municipality provides a rescue response from its Command Center and will coordinate alarms and evacuations, if necessary. Sweden has lots of central offices and small national

ministries. Police will be involved in local security. A radiation monitoring zone has been delineated. In the event of a high alert, information would be provided to the government and the public.

Member Peterson asked the frequency of emergency response exercises. The Governor replied, at least every year. Sweden will have a national exercise next year. It will be conducted over the course of 48 hours

Member MacFarlane asked who controls the monitoring stations. The Governor replied that a central authority exists for nuclear and other environmental incidents. This authority has a good and trustworthy relationship with the municipality.

Lars Blomberg, Deputy Mayor of Oskarshamn, welcomed the Commission, saying he had no presentation but was available for political questions. He has been involved in Oskarshamn politics for 12 years.

Rolf Persson, project manager for nuclear waste issues in Oskarshamn, welcomed the Commission and spoke about “A Matter of Trust: Local Aspects of Decisionmaking.” The archipelago of Kalmar contains some 5,400 islands. Swedish federalism has two levels: national and municipal. Most social welfare programs are conducted at the municipal level, leading to a high degree of self-decisionmaking. For nuclear siting considerations, the veto power is very important. A municipal vote may come in 2015 on siting the storage facility. It is a long process. The waste problem cannot be voted away. There is a responsibility to be part of the solution. In Sweden, politicians live close to the voters. The process ought not be rushed. The main political considerations are long-term safety, environmental impacts, health and socio-economic impacts. Swedes have a high respect for authorities. Most questions from the public have been about the environmental impacts, not safety. The Municipality has conducted studies on various aspects of the siting decision. People are interested to know the affect the repository will have on Oskarshamn’s image. Can the Municipality affect that view? In 2009, some 84% of Oskarshamn residents were in favor of the repository. Local support is higher than at the national level, probably because information is more widely available at the lower level. The most important aspect of the program is full broad-based openness with participation and influence. The public should be seen as a resource because of the questions and concerns they raise, as should be environmental groups. The effect of these groups is to “stretch” SKB and the government.

SKB conducted eight feasibility studies and two site investigations. Local involvement allows for direct, informed dialogue. Under the added-value negotiation system, two municipalities were selected to take responsibility for a national problem. Both municipalities should be winners. Neither of them is acting heroically; they realized the advantages to participation and the progress that could be achieved. Two billion Swedish crowns will be paid to the two municipalities over the course of 15 years, with 75% of that value paid to the non-selected municipality. This is money for new jobs in education, business and infrastructure.

His conclusions were that trust takes time and communication allows participation. The process is as important as the consent derived. Milestones should be based on realistic timetables following a predictable process built on the principle of openness.

Member MacFarlane said that participation will be key in the US process. How had this principle been operationalized in Sweden? Mr Blomberg replied that it must be possible for individuals to attend meetings and seminars. Everything must be open. Always try to answer questions. The time factor is important. Hold meetings at people’s houses. She asked what

happens when a disagreement arises between the Municipality and SKB. Mr Persson replied that it should be brought to the surface.

Chair Lash asked why the stronger relationship was between the Municipality and SKB, rather than between the national government and SKB. Mr Blomberg replied that the authorities are in place in Kalmar. There is dialogue among all the parties. SKB is responsible for presenting the solution.

Member Eisenhower asked for comment on the image of the repository, saying in Nevada, it was called a dump. Can the Municipality frame the image? Mr Persson replied that studies have been done on the facility's affect on tourism and real estate; Indeed, more people are coming to Oskarshamn now than before the siting decision, perhaps for "nuclear tourism." There has been no negative effect on real estate values. The Commissioner asked if there were any proactive strategies with respect to the vocabulary of the repository. Mr Persson replied that it was natural for people to wonder about the site and its associated terminology. Perhaps a seminar will be held to discuss and assess.

Member Bailey asked about infrastructure improvements using NWF monies. Mr Blomberg said that infratstructure was a big problem in Oskarshamn. The town is not accessible by train and the road leading to the town is not a highway. These conditions prevent new residents. Ms Engstrom noted that this was a common interest for SKB.

Member Peterson asked when the veto could occur, who would exercise it and by what means. Mr Blomberg said the opportunity occurred at the end of the process, after the national decision. The veto process is not codified in law. Ms Engstrom said that Osthhammer might hold a referendum leading to debate among municipal representatives. Mr Thegerstrom said the formal decision always rests with the local council.

Chair Lash asked if the basic policy had changed over the course of the last ten years or so. Mr Blomberg replied, the waste was in our backyard ten years ago; it was not a final solution. "We have a responsibility." The Chair observed that some institutions learn faster than others.

Katarina Lihnell-Jarnhester of the Swedish Society for Nature Conservation (SSNC) said that she lives nearby in Oskarshamn and is active in NGO efforts. MKG is assessing critical issues for licensing. She represents the regional level in the process. MKG is only concerned with nuclear-waste issues, financed by the NWF and is active in the environmental consultation process and preparing for the licensing review by the regulator. It is her personal view that citizens, NGOs and communities should be involved and financed. The money came late for NGOs: 2005. SKB has suffered some backlash because of lack of access for the public. Local acceptance is high for both nuclear production and the repository. If one is opposed in Oskarshamn, it is harder to be heard. Local acceptance is high because SKB has large resources for outreach. This is not true for other parties.

Member MacFarlane asked if Ms Lihnell-Jarnhester felt the ability to influence the political process. Ms Lihnell-Jarnhester replied that she felt she could influence proceedings at the local level within certain limits. When the community writes statements, her views are included as a "side" opinion. She believes that investigations have improved because of NGO's participation.

Member Peterson asked what the provision of NWF monies has afforded the SSNC. Ms Lihnell-Jarnhester replied that the money has allowed SSNC to hire two full-time employees and commission expert reports.

Chair Lash asked how real experts in these matters can be identified. Ms

Lihnell-Jarnhester replied that the NGOs cannot have SKB-level experts because independent and university experts are financed or employed by SKB.

Charlotte Liliemark, a concerned citizen, said that she is a local resident. Moving there 10 years, she learned about the siting process then ongoing. Her lack of knowledge prompted her to attend a public meeting, where she found “nothing positive” about the Oskarshamn location. Her farm was the site of an SKB feasibility study. Two days after she spoke at the public meeting, she received a call from SKB saying they needed her opinion. A question that remains unanswered: who would be responsible for the repository post-closure? It was important to Ms Liliemark that people be able to raise their own questions. Involvement in the investigation and siting processes has been a big part of her life. She has started a company, PreDeci, Co., which provides support for complex decisionmaking processes. Everyone will agree; to give groups real influence builds the weight of the veto power.

Member MacFarlane asked if Ms Liliemark has been supportive of the decisions made so far. Ms Liliemark summarized her position that, if the waste were elsewhere, she would be opposed to bringing it to Oskarshamn; nevertheless, it is there.

Member Peterson had no question, but noted how different Ms Liliemark’s experience was from the US process.

Chair Lash asked if the model developed for PreDeci was scalable. Ms Liliemark replied that it was, adding that it is applicable to non-nuclear aspects.

Akko Karlson, of the National Board of the Swedish Green Party, said he was happy to see the Commission in Oskarshamn. The Green Party was formed because of nuclear issues as a coalition of peace and environmental groups. They stand against nuclear weapons and nuclear waste. She believes that we must take care of the waste we have and stop future use of nuclear technology. The Green Party is the third largest Swedish political party. Nuclear is an unsafe energy form. Today’s problems will not be solved by yesterday’s solution. SKB is owned by the energy companies, which in the beginning did not have a realistic view of waste issues. Young people do not know about the Chernobyl incident. The 1980 referendum to end nuclear power by 2010 was reversed by parliamentary act in 2009. She believes we must reduce greenhouse gases and that civil and defense wastes are “twins.” Radiation pollutes. The environment has been contaminated without knowledge of how to secure end storage of waste. Security is not possible, but waste can be made less dangerous. The time limit is the difficulty, both with respect to isolating waste and informing future generations of the repository’s presence and hazard. She can call SKB to ask questions and finds their scientific support good. She believes that money spent on advanced fuel cycle technologies is the wrong investment. She commended intoeternitythemovie.com to the Commission’s attention.

Member MacFarlane asked if Ms Karlson supported SKB’s plan. Ms Karlson replied that humans cannot build such a long-lasting structure as a high-level waste repository. She is concerned about the health of the Baltic Sea. The Commissioner asked if Ms Karlson felt the political process has been good. Ms Karlson replied yes, but there is no safe final solution.

Member Peterson not more broadly that some chemical wastes never go away. He asked how Ms Karlson reconciled chemical and radiological storage in this case. Both have moral implications. Ms Karlson said that both are problems. We will not know how bad they are, so it is best not to use these materials. We must try to lower their impact on natural resources.

Member Bailey asked, since neither coal, oil nor nuclear were desirable power sources, what should be used. Ms Karlson replied that first, energy use should be lowered. Solar,

wind and hydro power should be sufficient. Kalmar should be fossil-free by 2030.

Matthew Barzun, US Ambassador to Sweden, thanked Ms Karlson for her presentation. He provided clarification that nuclear was not viewed by President Obama as a “magic bullet” but as a means to get to a low-carbon future.

The meeting was adjourned at 1:16 p.m.