

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

SPENT FUEL SOLUTIONS
INFORMATIONAL WEBINAR: INSIGHT FROM
INTERNATIONAL HOST COMMUNITIES
Via Zoom
TRANSCRIPT OF MEETING
January 29, 2024

1 SPENT FUEL SOLUTIONS
2 INFORMATIONAL WEBINAR: INSIGHT FROM
3 INTERNATIONAL HOST COMMUNITIES
4
5
6
7
8

9 Transcript of video-recording meeting via Zoom
10 commencing at 8 a.m., Monday, January 29, 2024.
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 WEBINAR SPEAKERS:

2 CHRIS WAHL - (EXECUTIVE DIRECTOR OF SPENT FUEL
3 SOLUTIONS)

4 JACOB SPANGENBERG - (FORMER MAYOR OF ÖSTHAMMAR
5 MUNICIPALITY, SWEDEN)

6 JIM DESMOND - (SUPERVISOR, SAN DIEGO COUNTY)

7 VESA LAKANIEMI - (MAYOR OF EURAJOKI MUNICIPALITY,
8 FINLAND)

1 Via Zoom, Monday, January 29, 2024

2
3 CHRIS WAHL: Welcome everybody.

4 My name is Chris Wahl, and I'd like to welcome
5 you to, again, the Spent Fuel Solutions' fifth webinar.

6 We're very excited today.

7 We have some very distinguished guests and we'll
8 talk about that in in a minute.

9 Just to remind everyone, Spent Fuel Solutions is
10 a coalition formed to advocate for federal action to
11 secure a durable and integrated spent fuel management
12 program and that includes both offside interim storage
13 and a permanent repository.

14 As a part of this mission, we support a consent-
15 based siting process and look forward towards best
16 practices, in other, we look at best practices, excuse
17 me, in other countries that have successfully
18 identified and formed a willing host community.

19 Today's webinar will profile inside in some of
20 the international community's experiences with and
21 interest in hosting a spent fuel repository.

22 But before we jump into our Q&A, I'm pleased to
23 introduce one of our Spent Fuel cochairs, Supervisor
24 Jim Desmond.

25 He's gonna say a couple of opening remarks.

1 SUPERVISOR JIM DESMOND: Well, Chris, hey, good
2 morning.

3 Thank and thank you very much.

4 I guess good morning to some of you and whoever
5 it is and the rest of the world.

6 But anyway, I just want to say thanks to our
7 guests who we are going to be introducing you here in a
8 little bit.

9 But the object today is is to learn from others
10 and if the and their successes in in trying to site
11 spent nuclear fuel.

12 Many of you know that are on, Finland is in the
13 final stage of repository development, and will soon
14 open the first facility in the world for the permanent
15 disposal of spent nuclear fuel.

16 Their experience shows that siting that
17 prioritizes local support can yield successful results.

18 So after a consent-based siting process that
19 began in the 1990s, Finland approved the spent fuel
20 repository, spent fuel repository on Onkalo, I think
21 Onkalo site, I'll be corrected here later in 2000 and
22 the facility is on track to be operating in next year,
23 2025.

24 And Sweden is not far behind.

25 The Swedish government approved a spent fuel

1 repository in January of 2022 after decades of
2 community outreach and engagement.

3 And of course, we recognize, you know, the U.S.
4 is a is a different government structure from Finland
5 and Sweden, with state governments playing a a stronger
6 role, but nonetheless, it's, it's wise for us to
7 understand how other countries have successfully sited
8 spent fuel repositories, we still don't have one in the
9 U.S., in ways that are consistent with their host
10 communities and interests and divisions for their
11 future.

12 These lessons learned are extremely valuable as
13 we continue forward with our Department of Energy's
14 currently consent-based siting process, which has just
15 started a year or two ago for consolidated interim
16 storage.

17 We're just looking for interim storage and
18 Finland's already got permanent depository.

19 So I would, I'm looking forward to hearing from
20 our guests and and from them and what lessons they've
21 learned and, and maybe we can learn from to site some
22 of the spent nuclear fuel here in the United States.

23 So appreciate it.

24 And Chris give it back to you.

25 CHRIS WAHL: Thank you Supervisor and thank you

1 for your continued support.

2 Supervisor Desmond has been with us from the
3 very beginning, 2021, and we very much appreciate his
4 continued support of of this important effort.

5 I'm really excited today.

6 We've had a number of webinars in the past, but
7 today is an opportunity for us to learn from people
8 that have actually been through the process of consent-
9 based siting and actually been successful as as the
10 supervisor said.

11 So I'm pleased to welcome folks from both
12 Finland and Sweden.

13 I'm going to introduce them now.

14 Vesa Lakaniemi is has served as the mayor of
15 Eurajoki, a municipality in Finland, since 2017.

16 Welcome, Vesa.

17 Please raise your hand to let everyone know.

18 Thank you so much.

19 Eurajoki is home to a nuclear power plant in
20 addition to the spent fuel repository, which provides
21 community benefits such as €20 million in annual tax
22 revenue.

23 Also joining us is Jacob Spangenberg, who served
24 as the mayor of Östhammar municipality, Sweden from
25 2006 to 2022.

1 Welcome, Jacob.

2 Thank you so much.

3 Their experience has set an example for spent
4 fuel management programs in other countries such as
5 Canada and here in the United States.

6 We have a lot to learn from from their
7 participation.

8 But their insight's also valuable at a local
9 level, particularly as a 12 consent-based siting
10 consortia conduct outreach and work with local
11 communities in the United States.

12 As we know we've talked about that in the past
13 that that is something that the Department of Energy
14 has gotten going and we're very excited about.

15 So please join us in welcoming Vesa and Jacob
16 and I'm going to move on into the program now.

17 We have a number of questions for our panelists
18 we've already established, including a few few from
19 members of our audience.

20 If you do have questions, please submit them in
21 the chat and we will do the best we can to get to them.

22 Jessica Luternauer here with Spent Fuel
23 Solutions Coalition, you can see on the screen is
24 helping coordinate that and she'll make sure that the
25 questions are routed to us as well if you have any

1 additional on the fly here.

2 Ok, so I'm going to jump in with you, Vesa first
3 and I'm going to ask you, Jacob, the same question.

4 But Vesa, can you start off by telling about
5 your experience during the siting process and the role
6 of community consent?

7 VESA LAKANIEMI: Greetings from Finland and and
8 first, you have to know that we have a quite long
9 history with nuclear facilities, over 40 years, and and
10 people are quite used to nuclear issues in this area.

11 And of course, of course, we have had quite a
12 big role here, here in Eurajoki and, and we have
13 cooperated with TVO and Posiva, Posiva is our final
14 disposal company.

15 And, and there has been a lot of cooperation
16 with those companies.

17 We have had a lot of different kind of hearings
18 and, and public implications and, and, and that kind of
19 thing all the time.

20 And so people know very well how it goes with
21 nuclear facilities and in Finland, of course, the
22 safety is the question and biggest thing for us that
23 everything goes according our our regulations and laws.

24 CHRIS WAHL: Thank you.

25 Jacob, can you share with us about your

1 experience during the siting process and the role that
2 community consent played?

3 JACOB SPANGENBERG: I think we share both
4 Eurajoki and Östhammar, the two municipalities that
5 we're now dealing with in this seminar has a lot of
6 things in common when it comes to experience.

7 The nuclear power plant in our municipality with
8 three reactors was actually commissioned late during
9 the late 70s.

10 And to, to add on this experience, I would also
11 say that the fact that we are now a host municipality
12 for a repository for, for low and intermediate waste
13 that was commissioned as early as 86 in our
14 municipality with a, let's say similar process, but it
15 was much, much shorter in time had built has built an
16 experience and an understanding, just as Vesa puts it,
17 for not only nuclear power and the nuclear power plants
18 and how they are operated, but also for the idea and
19 the the, the technology relating to this repository.

20 And the the, the specific project, when when
21 we're talking about the, the bedrock repository for
22 spent nuclear fuel waste was the, the, the process
23 started as early as 1995 formally in our municipality
24 together with a number of other municipalities in
25 Sweden.

1 And so we have have been working as a
2 municipality building our own understanding and our own
3 knowledge of what this repository.

4 I mean, it's, it's a difficult project.

5 It is, it's a project that has a lot of safety,
6 long-term safety issues relating to it and so on.

7 But the, the, the process has been ongoing for
8 many years.

9 And we might come to that later, but but one of
10 the main, how should I put it, experiences that that we
11 have have understood, I think both in Eurajoki and
12 Östhammar, has been that building this trust takes a
13 lot of time, which is not good news maybe to people
14 that are anxious to, to do something in the U.S. I
15 don't know.

16 But it takes a lot of time and for us lay people
17 to understand what these issues are all about, we need
18 to build this understanding and this trust not only
19 towards the, the industry, but also to, to national
20 institutions and licensing authorities and things like
21 that.

22 Sorry, maybe, maybe, maybe a long answer, but I
23 think that is important to know.

24 CHRIS WAHL: No, I, I think you're, you're spot
25 on.

1 It's, it's a long process and, and not a simple
2 issue, so long answers are probably appropriate.

3 Just a side note for a minute in, I had
4 mentioned earlier that the chat was where to put your
5 questions.

6 I believe the chat is actually disabled, so if
7 you could use the Q&A function, I know folks are
8 starting to load questions into there, we would
9 appreciate that.

10 So Jacob...

11 JACOB SPANGENBERG: Let me sorry, may, may I also
12 add one thing which is slightly different compared to
13 the U.S. situation and both Sweden and Finland and that
14 is the fact that that municipalities according to our
15 law, but in both countries they are slightly different.

16 But at least in Sweden, the municipalities has a
17 lot of influence formally when it comes to saying yes
18 or no.

19 Through the veto process, we have an opportunity
20 to or possibility to say no to the whole project
21 throughout all these years that we have been working
22 with it.

23 So our final veto decision was taken very late,
24 2020, in our municipality.

25 I know it was earlier in, in Eurajoki, but and,

1 and there is no state level as you have, I mean, the
2 state of California has a lot to say in this.

3 The political, the political state, politic,
4 politicians has a lot to to say.

5 But we have no state in between ourselves as a
6 local level and the national, let's say federal level.

7 We have no federal level in Sweden, but the
8 national level.

9 And that makes it easier because there are fewer
10 sort, sort of formal decision makers.

11 No, on the, on the, yeah, on the political
12 level.

13 And that is very important to, to understand
14 that, that there is a huge difference in I've, I've had
15 several contacts with the with the U.S. people relating
16 to this, so it's important to to state that.

17 CHRIS WAHL: Yeah, thank you for that clarity.

18 There's no question that layers of government
19 are very important in all of this and how the outcome
20 ultimately comes.

21 Vesa, let me let me take it back to you here for
22 a question related to the residents of your community.

23 And you know, they've been receptive from what
24 we understand.

25 And so what are some of the benefits or

1 incentives that made hosting a repository attractive
2 for residents of your community?

3 VESA LAKANIEMI: There's no benefits for,
4 straight for the residents, but of course there's a lot
5 of business opportunities for local companies and, and,
6 and a lot of working places for people.

7 In this area, we don't have a family who doesn't
8 know someone who has worked or is working at the moment
9 in the Olkiluoto.

10 And, and that's why they are very used to when
11 Jacob talked about trust, that's the big issue also.

12 And and as you very well know that trust never
13 comes during one or two years.

14 It takes times.

15 You have to always be behind the words you say.

16 You you have to do like you say.

17 And and that's how it has gone here, here, here
18 in Eurajoki.

19 TVO and Posiva has always stand behind the words
20 what they have said.

21 But but of course we can have a income taxes and
22 and real estate tax taxes to to the municipality and
23 and that's why we can get some benefits from Olkiluoto
24 but not straight for the residents.

25 CHRIS WAHL: Right, yeah.

1 And and that has been a a discussion in our
2 country too of is, is not necessarily do individual
3 residents get money perse, but are there community
4 benefits?

5 Are there, are there parks or are there other
6 aspects of the project?

7 You know, we, we talked about you know, in
8 Euroki, there's, one community benefit that we're aware
9 of is \$20 million of euros in annual tax revenue.

10 Those dollars maybe are spent in a way that or
11 some of them are spent in a way that's positive.

12 Jacob, do you have any?

13 VESA LAKANIEMI: You have to always know also
14 that in the way how they do in Finland, I can say that
15 Lord gives and Lord takes and ok, we can have taxes
16 here, but we have also in Finland, you know, it's state
17 aid system.

18 And because we can get so much real estate
19 taxes, we have to also pay back those state aids.

20 At the moment it's €5 million.

21 CHRIS WAHL: I see.

22 Ok, Jacob...

23 VESA LAKANIEMI: It's not all what we're going to
24 get there.

25 CHRIS WAHL: Understood, understood.

1 It's never all of it, government.

2 So, Jacob, back back to this question though,
3 is, is, was there something that that stuck out in your
4 mind as being particularly attractive to the residents,
5 a benefit or an incentive that came out of the process?

6 JACOB SPANGENBERG: Unlike Finland and maybe the
7 U.S. I don't know, we have no part in the in the estate
8 tax sort of flow.

9 So the real estate tax goes all to central
10 government, which is very unfortunate because we are
11 very envious of Eurajoki but very early or rather mid
12 in the midst of the process, 2007, together with the
13 our sister municipality Hargshamn, which was also
14 involved in this process from the beginning as a
15 candidate municipality to host a repository, we, we, we
16 asked SKB and their owners which are big power company
17 companies to and we finally, anyway, we agreed on a so-
18 called added values program, which it's one-of-a-kind,
19 it has never been such a program commissioned anywhere
20 in Sweden.

21 So it was the was, was the first time and it it,
22 it is something like €200 million that was originally
23 put into this program.

24 And we have have used a lot of these resources
25 to develop the municipalities when it comes to

1 development of of some infrastructure, some competence
2 increase in terms of of education and support to small
3 businesses etcetera.

4 And of course, we also benefit from the project
5 in terms of an an increased interest, commercial
6 interest in establishing subsidiaries etcetera in our
7 small municipality that will be a part of this
8 development of the the repository for spent fuel waste.

9 But at the same time there is a process to
10 double the size of the present, the present repository
11 for low and intermediate waste, which is also a very
12 big project.

13 So, so the the industry is planning for two big
14 projects here and actually a third one which relates to
15 the power station to increase the capacity there and so
16 on.

17 So, so for us it has been the benefits are
18 commercial development of the local sort of business
19 infrastructure as well as this as this added values
20 program, which is small in the perspective of the
21 enormous costs as you're aware aware of when it comes
22 to the to building these repositories.

23 CHRIS WAHL: So you mentioned Prosiva and well,
24 you mentioned SKB I believe, but Prosiva was also
25 involved in the development in Finland and SKB in

1 Sweden.

2 How did those two companies or the companies
3 that you had experience with build trust in your
4 communities during the process?

5 Did they play a big role when they came in and
6 talked about their expertise?

7 JACOB SPANGENBERG: They they did, but it was,
8 how should I put, put it, It was a partnership, but it
9 was built between the municipality and the the company,
10 but it was built on, on different roles.

11 Our perspective has always been to understand
12 and to disseminate information relating to the
13 municipality and sort of common man's knowledge and
14 understanding of this project.

15 And we have not been, how should I put it,
16 propagating for to for the the repository.

17 But what we have been working with all at all
18 times is the long-term safety.

19 The industry, the SKB, they have been very
20 active in disseminating their, their point of view, so
21 to speak.

22 And they have done it very transparent and very
23 open and very interactive, I would say both with us as
24 a municipality, but also with the, with the inhabitants
25 of the municipality very active. I would say yes,

1 that's very important.

2 CHRIS WAHL: That's great.

3 VESA LAKANIEMI: Same kind of system here in
4 Eurajoki.

5 And, and of course there has been a lot of
6 different kind of info sessions for municipality and,
7 and the inhabitants also.

8 And there has been a lot of experts who have
9 told how it is safe to wait to do final dispose.

10 But but it's I, I think that is the long history
11 with nuclear power plants.

12 It has helped this this situation because people
13 understand better nuclear issues.

14 CHRIS WAHL: Thank you.

15 Supervisor Desmond, I see you have a question.

16 You want to chime in?

17 Oh, you're on mute, supervisor.

18 JIM DESMOND: Yeah, someday I'll learn.

19 The, I have a question for both Vesa and Jacob,
20 the on the two parts, really.

21 First of all, is nuclear energy still favored in
22 Finland and in Sweden?

23 In the United States, nuclear energy is is
24 looked at as a dirty energy or, or there we're closing
25 down nuclear plants or keeping them, you know, around

1 just just for a little bit longer.

2 But the, the major sentiment here is to close
3 down the nuclear plants.

4 And then secondly is, are, are these
5 repositories in your countries, are they located on
6 current generating sites?

7 So I mean, to me, it'd be easier, you know, for
8 the community to maybe be open to having a repository
9 if they've already got a nuclear site there and they
10 realize it's safe.

11 Are your site, are your repositories at current
12 nuclear plants?

13 If I guess two questions, is nuclear energy
14 still accepted and where exactly are your repositories?

15 VESA LAKANIEMI: Yes, in in Eurajoki Olkiluoto is
16 an island and and the final disposal is located on the
17 same area that we have with those power plants.

18 All nuclear infrastructure is in that island.

19 And and the first question was...

20 JIM DESMOND: Is nuclear energy still accepted?

21 VESA LAKANIEMI: Yes, yes, yes.

22 In Finland, people who are for nuclear, the
23 amount of people are, it has increased all the time.

24 It's very high at the moment.

25 JACOB SPANGENBERG: I would say it's almost the

1 same in Sweden.

2 There is a huge discussion and unfortunately had
3 it has been very polarized when it comes to party
4 politics.

5 I think you have the same problem in the U.S.,
6 not to say the least, but sorry, but I don't want to be
7 impolite.

8 But there is a discussion whether it's
9 sustainable and of course and also if it's makes sense
10 because of the high costs, but that's another issue.

11 But I would say it's it's reasonably positive at
12 the moment.

13 It varies, but I guess who you're asking.

14 But there there is a pro, the pro side is is
15 larger than the the no side I would say.

16 And in the, the repository is planned to, to be
17 constructed in the bedrock just next to the, the
18 nuclear power plant, the three reactors.

19 And those that have been criticizing this
20 process and the, the, the, the big positive or or
21 rather the consent, the local consent for this project
22 has been often criticizing.

23 But you have, have have done this on in the, in
24 the nuclear community and on the side, almost on the
25 side.

1 That is why people are positive.

2 But, and partly that is correct.

3 But at the same time we have had a lot of trust
4 in our licensing authorities that have been and still
5 are very strict both in Sweden and Finland relating to
6 the long-term safety.

7 So it would have been counterproductive for
8 the industry if they wanted to push this through just
9 because people are generally positive if you see the
10 difference.

11 And I wanted to mention that also that
12 throughout this whole process of almost more than
13 almost 30 years, it started in 1995, we have had very,
14 very good and, and the continuous contacts with the
15 national authorities, licensing authorities.

16 They have been our experts, if you understand
17 what what I mean.

18 So we have, they are the experts.

19 They are, they are reviewing the applications,
20 they are licensing and not licensing and you know all
21 these kind of things.

22 But we have, so we have never entered into
23 technical issues.

24 I think you're aware of the fact that there's
25 been a lot of criticism, especially from the

1 environmental groups relating to the copper corrosion
2 issue of the copper canisters.

3 And for I've got this, the question about how do
4 you view the, the corrosion issue of the copper
5 canisters.

6 And my, my reply to that question is always,
7 well, that is for the licensing authorities to give a
8 yes or no to.

9 It's not for us because we can't, we can't know
10 this.

11 We want everything put on the table.

12 We are not, I think everything will be made
13 public and the discussion is very open, but I have
14 personally no view relating to such an issue, for
15 instance.

16 So the licensing authorities are paramount for
17 any local community to have good contacts with.

18 That's, that's my message.

19 JIM DESMOND: Ok, thank you.

20 Now you're muted, Chris.

21 CHRIS WAHL: There we go.

22 Now I'm off mute, so thank you, appreciate that.

23 So just sticking with the critics for a second.

24 I think there's a lot to learn for us here.

25 Jacob, I want to turn to you first is what was,

1 what are some of the unexpected challenges that came
2 out of the siting process?

3 I mean, you talked about the copper corrosion in
4 the canisters, but were there were there situations
5 that surprised you during this process that ended up
6 being challenges that you didn't expect?

7 JACOB SPANGENBERG: I wouldn't say how should I
8 put the challenges, but frustration, the national, the
9 the decision making on national level when it comes to
10 the land, and our environmental court when it comes to
11 to the central government, the cabinet, it has taken
12 such a long time.

13 So the formal application was was handed over to
14 the Land and Environmental Court and the central
15 government 2011 and the preparation time, you know, to
16 get everything in place to get, we were also part in,
17 in this process because we had a lot of, of put forward
18 a lot of questions during all this period of time.

19 But the time scale, it's, it's good when we're
20 talking about building trust, but it's horrendous in
21 time.

22 It takes such a lot of time.

23 And that was a surprise when you in hindsight, I
24 mean, you, you, you, you can't understand that, we have
25 been so persistent in the process.

1 But we have built this understanding, the, we
2 have had a group of laymen, the local politicians, we
3 have had a desk with the designated offices officers in
4 our in our municipality and we have been working and
5 building this.

6 I would say people are proud, they have been
7 proud in order to participate and to know so much
8 without being experts.

9 But it takes such a lot of time and that is
10 maybe my lesson, a lesson that we have learnt, but it
11 takes time.

12 VESA LAKANIEMI: So Vesa let me turn it to you.

13 Did you have the same level of frustration in
14 terms of timing or was there something else that came
15 about that was an unexpected challenge or concern that
16 you had to deal with?

17 Of course, it has needed a lot of work and time.

18 But like I said before, we have had a lot of
19 different kind of information just which are which have
20 been organized by our Ministry of Employment and
21 Economy and our Radiation and Nuclear Safety Authority,
22 STUK.

23 And and in Finland people trust a lot for our
24 nuclear safety authority, authority.

25 They know very well that they never allow do

1 things which are against our regulations and laws and,
2 and, and, and they know very well that everything has
3 to be done like professionals and scientists have
4 planned.

5 Of course, of course information is you don't
6 have enough information in any time.

7 In any case, it has needed a lot of information
8 for people.

9 CHRIS WAHL: Absolutely.

10 We're and we're, we're starting in that process
11 now with the the grants that came from the Department
12 of Energy with the consortia that are evaluating
13 consent based in their particular communities.

14 We have a, we have a sitting supervisor here
15 who's a part of this effort to try to find spent fuel
16 repository here.

17 What advice would you give for to local leaders
18 that are exploring this possibility of hosting spent
19 fuel?

20 Do you have any advice for Supervisor Desmond or
21 anybody else that's listening that you've learned from
22 on the from elected official to elected official?

23 JACOB SPANGENBERG: Openness, transparency and
24 knowledge, that's the only thing.

25 And then I wanted to add that in, in, in Sweden,

1 we have something called the Nuclear Waste Fund.

2 So the industry actually puts in money into a
3 big fund that is controlled by government.

4 And each year we have applied from the
5 municipality to get a grant from that fund roughly I
6 would say half \$1,000,000 per annum or something like
7 that.

8 And that money, we have used that money, which
9 is not from the local taxpayer, so to speak, we have
10 used that money to to set up our desk that I told you
11 about the desk officer two, two to three people that
12 has built the professional knowledge on a on a lay
13 people's level.

14 But also to give allowances to, to some groups
15 of, of individuals relating to the, the, the, the
16 inhabitants through the political system that have been
17 working for many years with building the understanding,
18 the knowledge.

19 And because then if you are knowledgeable, you
20 can meet the industry and you can meet the national
21 authorities and whoever is interested in this process
22 and you get respect.

23 If you see my point, the, the, the, that's my
24 main advice.

25 And don't hesitate to, to be persistent in, in

1 building this understanding, which is sometimes very
2 difficult, but it, it's important.

3 CHRIS WAHL: Thank you.

4 Vesa do you have anything?

5 VESA LAKANIEMI: In our in our case, you know,
6 there's official information, it comes from company
7 and, and, and our radiation authority and, and, and the
8 Ministry of Economy and, and then there's also, you
9 know, silent information, which comes from the people
10 who work in the nuclear site.

11 And, and the message, message, says it's same,
12 it's same high level security culture.

13 And that, that's, that's the very important
14 thing also also, and, and, and we have also find out
15 that there's a lot of business opportunities for our
16 local companies and, and new jobs and, and, and that's
17 how people have had economical, economical benefits
18 from Olkiluoto because of the jobs and long history,
19 trust and and safety, safety, of course, the most
20 important thing.

21 JACOB SPANGENBERG: May I also add another thing
22 and that is that don't fear critical voices.

23 Be very open to discussions and invite the
24 critical voices, regardless of who they represent, so
25 to speak, to have a dialogue.

1 And that is quite an exciting example.

2 And, and people from, when I meet people from
3 the, the with an international perspective, they, they
4 are often quite surprised that, that during all this
5 process, there has been funding for, for an NGO on
6 national level.

7 And we as a municipality have been funding a
8 local NGO or a society which are very critical.

9 And then you can have a dialogue and, and the
10 critical voices feel that that there have, they have
11 their advocates also.

12 And I, I, I think that that has created, how
13 shall I put it, the process which is more predictable.

14 And I was at one stage thinking a lot about what
15 would happen when the municipality was to take the
16 final veto decision.

17 I thought that, you know, maybe internationals
18 and NGOs like Greenpeace or whatever might come and try
19 to interfere and, and mix in the local, in the local
20 process like I think they've done in Germany or other
21 places.

22 But because of the, the, the, the, the, the
23 process and because of that, there was no need or, or
24 rather, how should I put it, they wouldn't have been
25 successful if they had come to our municipality.

1 So, so I wouldn't exaggerate but but maybe at
2 some stage some people thought that this would have
3 been a good, good idea from the, the critical, you
4 know, Greenpeace and, and such organizations, but they
5 had nothing to win in the local, in the local
6 community.

7 CHRIS WAHL: That's a great example.

8 I, you know, you had talked about openness and
9 transparency and keeping informed.

10 One thing we didn't, we haven't talked about yet
11 is how did you get informed?

12 How did both of you get informed on the process
13 and how did the community become informed?

14 VESA LAKANIEMI: We have had a different kind of
15 way to work with active communication and we have a
16 municipal cooperation committee.

17 It has been since 1970s.

18 We have a cooperation group of Eurajoki, TVO and
19 Posiva, a lot of seminars and and public impositions at
20 the site.

21 In Olkiluoto, there's also a visitor center.

22 There's about 15,000 visitors every year.

23 And of course nowadays social media, Olkiluoto
24 paper, which they will send in every house in this
25 county and and those official information and public

1 hearings, what they have held here in Eurajoki
2 municipality.

3 There's a lot of different kind of ways to
4 communicate, but it has been very active.

5 JACOB SPANGENBERG: So, so to add on, on Vesa's
6 example, which has also happened here, the industry has
7 been very active as I told you before, but also the
8 municipality.

9 So we have had so many meetings inviting the the
10 public and also inviting local business people and
11 small scale businesses and, and, and also regional
12 interests.

13 So when it comes to regional politicians and
14 companies and, and the Chamber of Commerce, etcetera.

15 So the information has been built for such a
16 long time and that has been it's a it's really a key
17 for success, I would say.

18 CHRIS WAHL: Yeah, that's great.

19 JIM DESMOND: Well, if, if I could just kind of
20 weigh in from my perspective in the U.S., you would
21 think, you know, with the landmass that we have, which
22 is many, many times more than Sweden or Finland, we
23 would find a place that would be safe but unfortunately
24 we haven't been able to convince I guess the public
25 that there is such a place or such a place exists yet.

1 We did have Yucca Mountain, which and we too
2 have a a fee on nuclear energy that we collect to, goes
3 to the federal government for repository and for
4 disposal or of the spent nuclear fuel.

5 And there it's that's been a multibillion dollar
6 growing pot.

7 I think 42,000,000,000 was the last billion was
8 the last number I had that that that's available here
9 in, in the United States.

10 And I appreciate all, you know, the trust, the
11 transparency, the inviting critical voices, inviting
12 the public and everything.

13 I mean, that's just about every problem we've
14 ever had to solve as as elected, you know, people in,
15 in, in offices that that's kind of the formula for, for
16 everything.

17 I'm, I'm, I guess in the U.S. are, are what I
18 see the biggest challenge is we've left this decision
19 up to the Congress, which right now is very divided,
20 almost split and is very political.

21 And about every two years it, it seems to switch
22 as far as what, what party or what element is, is in
23 power at the time.

24 And unfortunately, our politicians run every two
25 years for Congress and they're all making different

1 promises that that unfortunately so many can't keep.

2 But I do like your idea.

3 You know, persistence pays off.

4 And I think since the mid-80s, this has been for
5 us putting pressure on Congress.

6 I do like the idea of maybe getting a separate
7 body that's not political or not in just does have
8 experts and does have the means and, and people can
9 trust.

10 Cause unfortunately, right now, I, I don't know
11 that that that level of trust is there.

12 And we do have a lot of NGOs that are heavily,
13 are very active one way or the other.

14 There's there's some that don't want to see
15 nuclear being successful.

16 Therefore they keep fighting any repository to
17 make it a bigger problem and instead of a a solution
18 and and it there's just some of the challenges that we
19 face.

20 But I do I think if any takeaway is just try to
21 get this out of the hands of the government, it is, you
22 know, as much as possible so you can get a body that
23 people will have at this point in time can trust would
24 be a very beneficial.

25 But I do think it does sound like an easier path

1 to place a repository where a nuclear plant or maybe
2 focus on those municipalities that have a site near
3 them and maybe focus on them for maybe buy in to take a
4 a site.

5 That might be more of a focus we could take as
6 right now I think we're asking every municipality
7 throughout the country to maybe accept the the nuclear
8 waste.

9 But is there anything that that really kind of
10 was a selling point, I guess for people that they felt,
11 ok, this is going to be safe.

12 You know, the copper canisters, I think we've
13 got stainless steel canisters or something that you
14 know, that that again is a well, they crack or they
15 corrode or they, you know, what, what are you going to
16 do?

17 And, but was there anything that really kind of
18 sold the public on this is safe?

19 You're not going to die.

20 You're not going to your kids are are going to
21 be fine.

22 Is there anything that you that that kind of
23 worked as far as a a safety statement to the public is
24 what I would ask.

25 JACOB SPANGENBERG: I, I think here I, I just

1 want to underline what Vesa mentioned, that, and that
2 is a big difference between the U.S. and at least the
3 Scandinavian countries.

4 And that is that the trust in authorities is so
5 high.

6 So, so, and I mean, if, if you go to Southern
7 Europe, for instance, you have the same situation as in
8 the U.S. where where people are not very, they're not
9 very much relying on, on public institutions.

10 But for, for reasons, historic reasons, data,
11 this has been happening in both Finland and Sweden.

12 And I think that has been a part of the selling
13 point, the big large chunk of the, of the selling
14 point, but also the, the sort of understanding of
15 nuclear, not waste, but nuclear facilities and nuclear
16 activities that it has been ongoing for, I mean, 45
17 years.

18 And at least not in, in our countries, anything
19 has happened.

20 You have the problems of course, with, with the
21 Russia and what happened in Japan in, in, in and maybe
22 Three Mile Island and so on.

23 But somehow the, the, the, the industry has been
24 able to cope with that, at least to build the trust
25 for, for us.

1 But the trust in institutions, I would say it's
2 very, very important.

3 And, and let me add another thing, the, the
4 municipalities in our countries are reasonably small,
5 but very powerful when it comes to local government.

6 So we are, we are basically, we are basically
7 supplying the inhabitants with all types of welfare
8 from cradle to grave.

9 So a municipality like Östhammar with 22,000
10 inhabitants has more than 2000 employees working 24/7
11 with supplying this welfare.

12 And that makes it all so different that that the
13 trust in the local authorities is, is much higher, I
14 think compared maybe to the U.S.

15 I'm sorry, I if I, I don't want to be impolite.

16 JIM DESMOND: No, you're being honest, thank you.

17 JACOB SPANGENBERG: Thank you.

18 VESA LAKANIEMI: That's true.

19 That's true.

20 And, and of course, we have also have had
21 opposition, people who are against nuclear since early
22 70s, but it's ok.

23 When they decided to allow final disposal here
24 in Eurajoki, there was 27 councilors in our
25 municipality council and seven were against and, and 20

1 were for.

2 And those people who who have made decisions in
3 70s, they said that it has been always been the same
4 amount of people who are against and, and that's,
5 that's ok.

6 We are living in democracy.

7 CHRIS WAHL: Thank you.

8 Supervisor, are you good?

9 Any other follow up questions?

10 We have a few from the audience I wanted to
11 cover.

12 Ok, so I'm gonna try to in rapid fire go through
13 a few questions here from our audiences because they've
14 been really good and patient.

15 Just real quick, folks have have inquired as to
16 whether or not it's possible to visit the sites in
17 Sweden and Finland.

18 Are there tours that are available when you're
19 there or do you have to get special permission to visit
20 the sites?

21 VESA LAKANIEMI: In Finland, we have Olkiluoto,
22 there's a visitor center where is exhibition for for
23 the visitors.

24 You can go there every time when it's open, but
25 of course, power plant area and and final disposal

1 area, you can't go there.

2 It's...

3 CHRIS WAHL: Right.

4 VESA LAKANIEMI: Restricted area, restricted

5 CHRIS WAHL: Sure.

6 JACOB SPANGENBERG: It's the same for us.

7 And currently, currently both our countries are
8 it's, it's because of safety.

9 I mean, there, there's a very insecure situation
10 in Northern Europe at the moment.

11 So they have restricted the the access.

12 Sorry, but that's how it is.

13 CHRIS WAHL: No, that's yeah, understood.

14 We also got a question about the Finland site
15 Onkalo being built on or around water and relying on
16 bent night liners to keep its casks dry for thousands
17 of years.

18 Will future spent fuel storage facilities also
19 be built on and around water or will you be hosting
20 your future repositories where there is zero water
21 table and zero water basin?

22 I know it's a little bit of a technical
23 question.

24 Maybe you first Vesa?

25 VESA LAKANIEMI: Yeah, yes, like you heard in

1 Finland, we trust a lot for our authorities and Finnish
2 people are quite straight people.

3 So, so first scientist and, and professional
4 engineers, they, they find out which is to find a safe
5 way to do final disposal.

6 And after that will come political decision
7 making and our authorities take care of that.

8 Everything goes according rules and regulations.

9 In Onkalo it's, it's a very deep cave and, and
10 it's about 450 metres deep and, and of course near the
11 sea.

12 But the technologically what they have there,
13 it's it's very unique you and and it's very dry place
14 and and we have found out that it's very safe way to do
15 final disposal.

16 We trust engineers, scientists and and our
17 authorities.

18 JACOB SPANGENBERG: It's exactly the same for us.

19 And to it's, it's quite an interesting thing to
20 know that the, the bedrock consists of granite and it's
21 only 300 kilometres between our two sites and it's
22 exactly the same bedrock.

23 So they are, it's, it's kind of twinning
24 situation when it comes to the, the, the bedrock and
25 the, the sites.

1 And they're going to use exactly the same
2 technology when it comes to copper canisters that has
3 been developed both in Sweden and in Finland in tandem.

4 CHRIS WAHL: Thank you, thank you.

5 Another question that we received from our
6 audience is the emotionality of the project or the
7 process.

8 How I I would imagine that there were probably
9 people that were emotional at some level at some time
10 during the process.

11 How did those folks move beyond or what what did
12 you do to allow I mean, you talked about information
13 openness, transparency, but how did you get past the
14 emotional aspect of the concerns of people's children
15 and safety?

16 JACOB SPANGENBERG: Vesa, will you start?

17 VESA LAKANIEMI: Yeah, there's a lot of different
18 kinds things what we have done.

19 Of course, we are training if, if, if there's
20 something, something problems, there's you know, you
21 know, fire department training and and and and
22 evacuation training and that kind of thing.

23 But, but I think that in our case, if people
24 have something kind of of questions to ask from our
25 power company or final disposal company, they can

1 always ask and, and they will always get an answer.

2 And that's a good thing also because, because
3 those answers has been given by experts and, and
4 professionals who work in that area and, and that's how
5 the trust will increase all the time.

6 JACOB SPANGENBERG: One of the beauties with the
7 small communities is that you have always, just as the,
8 the, as the, Jim Desmond, told us in from the beginning
9 that you have always, how should I put it, a close
10 relation between the, the authority, sorry, the local
11 officials and the public.

12 And I have, I have experienced several times
13 emotions, strong emotions, very much pro the project.

14 I mean, I got, you know, questions from
15 especially local entrepreneurs that have told me, but
16 you are stupid, just vote yes.

17 We want it because it's so important for us and
18 for our companies.

19 And then you have to take them back and start
20 to, to talk and discuss and, and discuss issues of, of
21 long-term safety and likely problems and so on.

22 And you have had the contrary, people that are
23 very scared.

24 But that is one of the good things with a long
25 process that you can sort of straighten these issues

1 out.

2 You can discuss and try as much as possible to
3 have an open mind from both sides.

4 After some time and I, I come back again to the
5 the level of trust it it, it is one thing what you say
6 as a mayor, but if let's say the director general of
7 the licensing authorities says something, it's that
8 sort of underlines or supports what the mayor has said.

9 Maybe that that is sometimes makes sense to also
10 a very emotional person.

11 But it's a good question I would say.

12 VESA LAKANIEMI: I have to you about these things
13 what I have heard or, or what is my opinion about
14 emotions.

15 This time we don't have any emotion emotions
16 against the final disposal.

17 And as far as I know when they started to use
18 power plants, of course people doesn't know what is
19 going to how, how those power plants work.

20 But during this over four decades, those power
21 plants has worked very well and and that's how the
22 trust has increased also.

23 Anything horrible hasn't happened and and they
24 know that there is working high-level experts in that
25 area.

1 JACOB SPANGENBERG: And I, I think you can add
2 also that there is a sense of pride in the local
3 community, especially in Eurajoki.

4 You are pioneering in terms of time, it will be
5 the first one.

6 But also for us, you build a pride that you're
7 actually pioneering a very difficult process.

8 And hopefully we can be set examples for maybe
9 the U.S., who knows, and for other countries.

10 And so, so knowledge increases also the, the,
11 the understanding and I would say pride in, in the
12 local community.

13 VESA LAKANIEMI: Of course we are very proud to
14 about those people who are working in the Olkiluoto
15 though it's very high-level technology and, and it's
16 the first place in the, in the world where we're going
17 to have a final disposal.

18 According our law, we cannot export or import,
19 spent fuel and, and, and that's why we have to do it by
20 our own.

21 And, and people, people who are working there,
22 they are also very proud, proud that and, and we find
23 out how to also that we can, you know, create a brand.

24 We, we are the most electrified municipality in
25 the Finland at least.

1 CHRIS WAHL: Well, I, I am going to jump in here
2 and say that that is all the time that we have today.

3 It went quick.

4 We got to most of the questions.

5 I I want to thank Supervisor Desmond for
6 participating and contributing.

7 Wanted to thank both Vesa and Jacob for dialing
8 in.

9 It is dinner time in Finland and Sweden, I
10 believe, and I think it's around 7:00 at night.

11 So thank you very much for taking your time.

12 It's been super informative for us, very
13 helpful.

14 Just a reminder that this video of the webinar
15 will be posted to our website where you and you can
16 also join our coalition there if you haven't done so
17 already.

18 And we will be continuing to do webinars.

19 I'm very proud this is our fifth webinar.

20 We'll continue to be doing additional ones.

21 For those questions that we didn't get to that
22 were in the Q&A, we will also develop answers and post
23 those questions.

24 So thank you very much for everybody and I hope
25 you have a great day and thank you again, especially to

1 our our guest speakers.

2 And I should end with saying congratulations to
3 you for getting as far as you have.

4 You deserve a lot of credit, an acknowledgement
5 for sticking with it.

6 It's been a long process.

7 JACOB SPANGENBERG: Thank you.

8 JIM DESMOND: Thank you very much.

9 It was, it was an honor to be here and to meet
10 you. It was an honor.

11 JACOB SPANGENBERG: Don't hesitate.

12 If you want to know anything else, just call.

13 JIM DESMOND: Thank you.

14 CHRIS WAHL: Thank you very much.

15 We'll see, see you soon, hopefully.

16 Ok, bye now.

17 VESA LAKANIEMI: Bye, bye.

18 CHRIS WAHL: Thank you, Jessica, too.

19 Bye.

20

21

22

23

24

25