excess funds, delay decommissioning.

CHAIRMAN VOLZ: The paragraph at the top of page 2?

MS. HOFMANN: Bottom of page 2 carrying into page 3.

CHAIRMAN VOLZ: Okay.

MR. YOUNG: This is the bottom of page 2 top of page 3.

MR. VANAGS: Okay.

MR. YOUNG: I want to focus on the last clause because the last clause defines site restoration to mean that the site will be restored by removal of all structures, and, if appropriate, regrading and reseeding the land.

MR. VANAGS: I see that.

MR. YOUNG: Does your proposal to leave foundations in place, is that consistent with removal of all structures to your knowledge?

MR. VANAGS: It --

MR. YOUNG: I'm not asking for legal --

MR. VANAGS: And that's -- it may or may not be, and that's one of the reasons why I tried to clarify this with what I -- the recommendations for the actual decommissioning of the plant to clarify, you know, all
structures. Some people think of all structures just all visible structures, and some people I mean -- and so how I interpret this is though to me all structures means everything. I mean, you know, everything.

So, however, in trying to clarify people's interpretation, expectations of what they see as greenfield condition, which varies broadly, Maine Yankee is considered greenfield to many yet it has, you know, structures that exist still, but it's clean, you know. So I mean this -- what I'm proposing here is to propose the lower dose rate which is about as close to background as you're going to get in a decommissioning project. It's going to be hard to do better than that. It's technically feasible and possible. It was done at Maine Yankee under reasonable circumstances, and removing all structures, if you remove all the foundations, I'm not convinced that that actually is necessary with the added industrial risk that it produces.

You can imagine if it costs a hundred million dollars to deconstruct a foundation, that was one-fifth of the cost of the Maine
Yankee decommissioning cost. That's a great deal more activity. More hours you spend on deconstruction, the more chance there is for industrial risk, and if it's really not necessary for the redevelopment of the property, you have to ask yourself why are you putting workers at risk to conduct this activity, and so that is my logic behind that, and I think a lot of people agree with that. That's why those sites were not -- the Maine Yankee, Connecticut Yankee, and Yankee Rowe were not decommissioned with all structures because there's really little benefit to a lot of risk to workers.

BOARD MEMBER BURKE: Mr. Vanags, if I can just follow up on that for a minute?

MR. VANAGS: Yes.

BOARD MEMBER BURKE: You talked earlier in response to several questions about being able to use the site for anything.

If greenfield is determined to have occurred and the decommissioning fund is expended and/or returned if there's an excess, and I come in with my company and I want to put up several structures and I realize all of
a sudden that there's -- that there's the
remnants of the foundation below three feet
still in the ground there, is it your
assumption then for me that I would have to
bear the cost of excavating that and disposing
of the remnants and the rest of the remnants
of that foundation? Is that what would
happen?

MR. VANAGS: I think it would be a
business decision to whoever wants to build on
that site. That site has very unique
characteristics and if they find it meets
their business plan, the cost of excavation
will be in it and they will accomplish it.

BOARD MEMBER BURKE: Would you agree
with me that it would be a deterrent to the
decision to use it?

MR. VANAGS: It could be. It could be
if it doesn't meet someone's business plan,
yeah.

BOARD MEMBER BURKE: Yeah, the cemetery
is out for sure. Okay.

MR. YOUNG: Let me just follow up
briefly which is I mean if one -- let's say
one wanted to put and use it for similar use,
new power plant, and it would -- would you
think that the current footprint of the plant
might be a reasonable location where one would
want to put the power plant if you're going to
build one there?

    MR. VANAGS: I'm not a design engineer,
no, but I would think that if it's suitable to
hold -- to have a plant there right now, it
would be in the future.

    MR. YOUNG: Do you know whether it would
be feasible if the foundation remained there
down -- was only three feet below whether --
whether the power plant could be built using
that foundation or whether they would have to
completely remove it?

    MR. VANAGS: I don't know. I really
don't know.

    MR. YOUNG: Let me -- let me -- people
refer to the concept of greenfielding here.
Am I correct that the MOU provision that I was
pointing you to is the actual standard that
people have used greenfield to be as the
shorthand?

    CHAIRMAN VOLZ: Here in this proceeding?

    MR. YOUNG: In this proceeding.
MR. VANAGS: Yes, if that's what's termed as greenfield.

MR. YOUNG: Now just getting back to your testimony before let me see if I can recharacterize it slightly. To the extent -- would it be fair to say that your point is to the extent that this condition may have required removal of all foundations, you think the Department thinks that should be modified to instead use a 10 m-rem standard coupled with the removal down to three feet as an alternative?

MR. VANAGS: Yes.

MR. YOUNG: Now, one of the things you've recommended, as we've just discussed, is the 10 m-rem standard. Do you know has there been any assessment done of the incremental benefits of 10 m-rem standard versus a 25?

MR. VANAGS: You mean with regard to public health?

MR. YOUNG: With regard to public health, yes.

MR. VANAGS: 25 millirem the NRC regulation it is protective of public health.
It is the standard. It is protective, however, that's -- again, that is 25 plus ALARA which will more likely take it down, but maybe not down to 10. It all depends how you perform that calculation. There's a risk benefit calculation performed whether it's worth spending the money to a certain dose.

The reason why I'm proposing the 10/4 is because my experience at Maine the public -- many of the public are not satisfied or believe that that dose is low enough to prevent health risks, and to give, you know, the public assurance that this site was cleaned up to the extent possible, and it didn't require that much more effort or money compared to the total costs of the project is a reasonable thing to do to give that assurance to the public that the doses that somebody could possibly obtain at that are as close to background as you're going to get.

Background varies more than 10 millirem a year from location to location. So you essentially negated the radiological risk from that site completely.

MR. YOUNG: Now your testimony mentions
that Connecticut and Massachusetts have more stringent standards than the 25 m-rem standard. Do you know what those standards are?

MR. VANAGS: I'm trying -- Massachusetts I think is 19. I remember talking to my colleague there. I believe it was around 19 and I can't quite remember what Connecticut Yankee's is, but it's not 10. It's not 10. It's not 25 either. It's in between there. Somewheres in between. I can't recall exactly what it is.

MR. YOUNG: Do you have any assessment that if one employed the 10 m-rem standard whether ENVY would need to remove material -- a lot of material below the three-foot minimum that you've recommended?

MR. VANAGS: Oh, in the reactor building all that would have to be cleaned up. All the concrete has to be scapeld and all the radioactivity that does not meet the criteria that will get you to 10 millirem has to be cleaned up, and that's why decommissioning costs so much money because it's not an easy thing to do. Takes a large work force, but
all that is done and it's --

CHAIRMAN VOLZ: By cleaned up you mean removed?

MR. VANAGS: No. Radiologically cleaned up. They -- like, for instance, the concrete in the reactor building you would take off what's called scapeling or shave the first quarter inch off of that. You literally take off, shave it and chisel it out. Then it's surveyed. It's surveyed until it's clean.

CHAIRMAN VOLZ: Because there's more radiation at the surface than further in.

MR. VANAGS: It usually doesn't embed itself very deep. Most of it is -- is usually the first quarter inch.

MR. YOUNG: Just curiosity. The Department and you through your testimony has opposed the idea of rubblization, yet you don't seem to have a problem with leaving solid concrete structures underground. That just strikes me as inconsistent to -- you don't want concrete except if it's solid.

MR. VANAGS: Less surface area.

CHAIRMAN VOLZ: Plus there's less volume, right, total volume?
MR. VANAGS: Well, surface area that the water will come in contact with. If you just have a wall, then you've got -- then you take rubblized concrete, the surface area is enormous. Water filtrates through.

MR. YOUNG: And that's the main focus of the concern is the surface area there?

MR. VANAGS: Yes.

MR. YOUNG: Let me switch to a topic that's not addressed in your testimony, and if you don't know please tell me. You were actively involved in the Maine decommissioning process, correct?

MR. VANAGS: Yes.

MR. YOUNG: Now some of the testimony presented in this case has related to the effects of shutdown on the economy. Through your involvement in Maine do you know whether anyone did -- or are you aware of any studies of the economic effects that have occurred following shutdown?

MR. VANAGS: You know at the time I worked for the Maine State Planning Office and I even asked my colleagues there if there was an economic impact study done for Maine Yankee