

CONDENSED TRANSCRIPT *State 193*

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of) Docket No. 72-22
PRIVATE FUEL STORAGE) ASLPB No. 97-732-02-ISFSI
L.L.C.) TELEPHONE DEPOSITION OF:
(Private Fuel Storage) <u>KRISHNA P. SINGH</u> and
Facility)) <u>ALAN I. SOLER</u>
) (Utah Contention L, Part B)

VOLUME I

Thursday, November 15, 2001 - 2:19 p.m.

Location: Office of the Attorney General
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Salt Lake City, Utah

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CLEAR REGULATORY COMMISSION

cket No. _____ Official Exh. No. 193
the matter of PPS
_____ IDENTIFIED
applicant _____ RECEIVED
intervenor REJECTED _____
Other _____ WITHDRAWN _____
DATE 5-16-02 Witness _____
Clerk AMP

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1 is in the process of making a licensing application, a
2 separate application from our general certificate.
3 MR. GAUKLER: Connie, I think we've gone on
4 far enough on this line. I would appreciate if you'd
5 go to a different line of question that's more
6 relevant.
7 MS. NAKAHARA: Well, I'm getting there,
8 Paul, to show my relevance.
9 Q. (BY MS. NAKAHARA) Did you perform a seismic
10 cask stability analysis for the Diablo Canyon site for
11 an unanchored system?
12 A. (DR. SINGH) To my knowledge, we did not.
13 Q. Dr. Soler, do you have any recollection?
14 A. (DR. SOLER) No, we did not.
15 Q. Did you do a cask stability analysis for
16 Pacific Gas and Electric for an unanchored system at
17 the Humboldt Bay site?
18 A. (DR. SOLER) I believe at one point prior to
19 formal discussions with Humboldt Bay we did evaluate
20 the behavior of a HI-STAR system under a hypothetical
21 earthquake and considered it freestanding.
22 Q. Okay, but not a HI-STORM system?
23 A. (DR. SOLER) Not a HI-STORM system.
24 Q. Okay, thank you. Is it true that HI-STORM
25 100 casks have been loaded with spent fuel at Dresden?

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1 A. (DR. SOLER) Who do you want to answer that?
2 Q. Dr. Singh.
3 A. (DR. SINGH) Lucky me.
4 Q. Either of you. It doesn't matter.
5 A. (DR. SINGH) We unloaded both HI-STARs and
6 HI-STORMs at Dresden.
7 Q. Dr. Singh, are you familiar with the PF
8 proposal to transfer a loaded canister from the HI-STAR
9 cask to a HI-STORM 100 cask using a HI-TRAC cask?
10 A. (DR. SINGH) I'm familiar with the process,
11 yes.
12 Q. Is it true that canisters were loaded at
13 West Valley and transferred to HI-STORM 100 casks at
14 Dresden?
15 A. (DR. SINGH) No, that's not true. I
16 guess -- that statement, you probably --
17 Q. I may have misread it off your web site.
18 A. (DR. SINGH) It's confusing. Are you saying
19 some West Valley fuel was returned to Dresden and then
20 subsequently loaded in HI-STAR or HI-STORM? I guess
21 that's what you want to ask.
22 Q. Yes. If you'll look at one of the pages
23 from your web site which I faxed which at the bottom
24 it's HH 16.15, which is entitled "Dresden Sets an
25 Industry Milestone."

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1 MR. GAUKLER: Give him a second, Connie, to
2 let him find it.
3 A. (DR. SINGH) Will you read the statement
4 from there to us?
5 Q. Let's see. It says, "Dresden cask transfer
6 facility, the first ever designed and built for MPC
7 transfer outside the Part 50 structure, enabled Exelon
8 to load an MPC-68F containing Dresden Unit 1 fuel
9 returned from West Valley and stored in the Unit 2
10 pool."
11 A. (DR. SINGH) Right.
12 Q. And I guess the whole point of my question
13 is if this transfer, this Dresden cask transfer
14 facility, if that's similar to the operations that
15 would occur in the canister transfer building at the
16 PFS site.
17 A. (DR. SINGH) The cask transfer facility at
18 Dresden serves the same purpose as the PFS facility
19 would. The details of the design may be different.
20 They are different. But it's the basic modality of
21 transporting -- transferring the same.
22 Q. At Dresden are they loading -- are they
23 transferring the canister from a spent fuel pool or
24 from another cask?
25 A. (DR. SINGH) Yes, they are loading the

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1 HI-TRAC transfer cask in the pool. They take the cask
2 out of the pool. They prepare the multipurpose
3 canister, they take the water out of the canister, they
4 vacuum dry it. They put helium in it, they weld it
5 shut. And then the transfer cask is brought to the
6 cask transfer facility and stacked on top of the
7 HI-STAR or HI-STORM, as the case may be, and then the
8 MPC is transferred publicly from HI-TRAC into the
9 recipient overpack, which may be HI-STAR or HI-STORM.
10 Q. Okay, thank you. To your knowledge, is
11 there any transfer operations in existence that
12 transfer a canister using the HI-TRAC cask to a
13 HI-STORM cask is that is not coming -- that the spent
14 fuel does not come from a spent fuel pool?
15 A. (DR. SINGH) Well, all spent fuel comes from
16 the spent fuel pool.
17 Q. But at the PFS site it will -- at the PFS
18 site it will start from the HI-STAR cask, and I guess
19 what I'm trying to ask is if there was a transfer
20 operation that is current -- that has occurred that is
21 similar to the PFS site which does not originate at the
22 spent fuel pool.
23 A. (DR. SINGH) Well, you know, the elements of
24 transfer that will occur at PFS are occurring at
25 different places. The transfer of fuel -- at PFS the

1 operation of the transfer from a HI-STAR to a HI-TRAC
2 and then from a HI-TRAC to a HI-STORM. In both cases
3 the arrangement is the same: you set HI-TRAC on top of
4 the cask, the overpack, and the HI-STAR in the first
5 case, you pull the MPC from the HI-STAR, bring it to
6 HI-TRAC. Then you take that HI-TRAC and set it on top
7 of the HI-STORM, and then you lower the MPC.

8 But these operations occur, for example, at
9 Dresden, in basically the reverse matter. There the
10 MPC is being transferred from HI-TRAC into the
11 recipient overpack, which may be HI-STORM or HI-STAR.
12 But the basic operation is the same. The loadings that
13 are occurring using HI-TRAC at our different nuclear
14 plants are, as far as the mechanics of loading and
15 moving the canister is concerned, exactly the same that
16 the PFS will do.

17 Q. If you recall, can you estimate the amount
18 of time that it takes to -- for a canister in a HI-TRAC
19 cask to be loaded into a HI-STORM cask?

20 A. (DR. SINGH) Well, it depends on
21 whether you're using union labor or non union labor.

22 Q. How about an estimate for both?

23 A. (DR. SINGH) A typical transfer operation of
24 an MPC from a HI-TRAC to an overpack, the actual time
25 it takes to transfer should be no more than one or two

1 hours really depends on the crew.

2 MS. NAKAHARA: Okay, thank you.

3 I have finished my background questions for
4 Dr. Singh. I will likely have more questions for
5 Dr. Singh, a few more questions tomorrow. We can
6 either go ahead with Dr. Soler's background or wait
7 until tomorrow. It's up to -- it's at your option.

8 And can we go off the record while we have this
9 discussion.

10 (Discussion off the record.)

11 MS. NAKAHARA: Is it correct that Dr. Singh
12 is leaving the joint deposition?

13 MR. GAUKLER: Dr. Singh is leaving now.

14 MS. NAKAHARA: All right. Thank you,
15 Dr. Singh.

16 DR. SINGH: Thank you. We'll see you
17 tomorrow -- we'll talk to you tomorrow.

18 MS. NAKAHARA: If you will find Dr. Soler's
19 resume, which is Exhibit 2 to Attachment B of the
20 Applicant's Motion for Summary Disposition of Part B of
21 Utah Contention L.

22 A. (DR. SOLER) We have it in front of me.

23 Q. And before I have you look at that,
24 Dr. Soler, what did you do to prepare for today's
25 deposition?

1 hours. The time to sit the HI-TRAC on top of the
2 HI-STORM or HI-STAR, as the case may be, that depends
3 on how motivated the work crew is, and it all depends
4 on the group. But I should expect that if people are
5 practiced and it's a good, well motivated organization,
6 they should be able to do a transfer from a HI-STAR to
7 a HI-STORM via the HI-TRAC in the course of the day.
8 That's my personal guess.

9 Q. You made reference to how motivated the
10 personnel are. Can you give a range on what you've
11 seen at the facilities that are currently transferring
12 canisters?

13 A. (DR. SINGH) I prefer not to answer that,
14 because they are my clients, you know.

15 Q. I understand that, sir. You don't need to
16 specify which facility takes longer than another
17 facility, but if you could give us the range that
18 you've seen, we believe it's relevant to the dose
19 calculations in the canister transfer building.

20 A. (DR. SINGH) Well, the time can vary by as
21 much as 50 percent.

22 Q. So at some facilities it could take as long
23 as a day and a half to transfer?

24 A. (DR. SINGH) Well, a day to a working day is
25 eight hours, so whether it's eight hours or twelve

1 A. (DR. SOLER) I had a brief conversation with
2 Mr. Gaukler yesterday afternoon about depositions in
3 general. Nothing too specific about this one other
4 than going over the reports that I had done and the
5 work that I had done and questions I might be asked.

6 Q. And did you review any reports that you
7 prepared in preparation for today's deposition?

8 A. (DR. SOLER) No, I didn't.

9 Q. Other than counsel for PFS, whom have you
10 discussed the PFS case with?

11 A. (DR. SOLER) Only relevant people at Holtec,
12 and of course outside contractors for PFS.

13 Q. The relevant people at Holtec, is that
14 Dr. Singh?

15 A. (DR. SOLER) It would have been Dr. Singh,
16 Chuck Bullard, John Zhai, and Everett Redmond.

17 Q. And what contractors for PFS have you
18 discussed the PFS case with?

19 A. (DR. SOLER) I believe Stone & Webster,
20 Geomatrix, and the Private Fuel Storage representative
21 person, Dr. Max Delong.

22 Q. And who at Geomatrix did you have
23 discussions with?

24 A. (DR. SOLER) I believe over the phone it was
25 mostly Bob Youngs, and in person during the review