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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

OFFICE OF THE SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Before the Atomic Safety and Licensing Board

In the Matter of)	
)	
PRIVATE FUEL STORAGE L.L.C.)	Docket No. 72-22
)	
(Private Fuel Storage Facility))	ASLBP No. 97-732-02-ISFSI

**APPLICANT'S RESPONSE TO STATE OF UTAH'S AMENDED MOTION TO
COMPEL NRC STAFF TO RESPOND TO STATE'S TWELFTH SET OF DISCOVERY
REQUESTS AND TO COMPEL DR. C. ALLIN CORNELL TO ANSWER CERTAIN
DEPOSITION QUESTIONS (CONTENTION L, PART B)**

On November 8, 2001, the State of Utah ("State") filed an amended motion¹ to compel discovery from both the NRC Staff, with respect to certain discovery requests propounded in State of Utah's Twelfth Set of Discovery Requests Directed to the NRC Staff, and from Applicant Private Fuel Storage, L.L.C. ("Applicant" or "PFS"), with respect to certain questions to which the NRC Staff objected during the deposition of Applicant witness Dr. C. Allin Cornell on October 31 and November 1, 2001. Applicant hereby responds to the second part of the State's Motion, which pertains to the information that the State sought to obtain from Dr. Cornell in his deposition.²

¹ State Of Utah's Amended Motion To Compel NRC Staff To Respond To State's Twelfth Set Of Discovery Requests And To Compel Dr. C. Allin Cornell To Answer Certain Deposition Questions (Contention L, Part B), dated November 8, 2001 (hereinafter "Motion").

² While Applicant does not address herein the first part of the State's motion, as it pertains to discovery from the Staff, we note that the basis asserted by the Staff in support of its objection to the requested discovery, i.e., privilege against disclosure of pre-decisional materials, is valid and well recognized. See, e.g., Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-5, 39 NRC 190, 197-98 (1994).

The State is seeking to get Dr. Cornell to testify about the details of his participation in a committee formed by a contractor that was hired by the NRC Staff to make recommendations on potential modifications to 10 CFR Part 72. Cornell Tr. 11.³ The contractor was to provide technical support to the Staff in the preparation of regulatory changes, including a regulatory guide. Id. 31. Dr. Cornell testified that from a committee meeting and two conference calls he learned certain technical information about ISFSIs that he considered in formulating his opinion on the appropriateness of using a 2,000 year return period earthquake as the design basis of the Private Fuel Storage Facility (“PFSF”). Id. 32-33. Dr. Cornell explained that the information that he received consisted of general technical information on fuel storage facilities, and testified that this information was of the type that is publicly available. Id. 69-72, 75-78. The State is now seeking further details on this factual information that Dr. Cornell received. See Motion at 6. However, such information was described by Dr. Cornell in his deposition in response to questions by counsel for both the Staff and the State. No objections were raised to his answering questions on this subject, and the State could have sought to elicit further details, had it desired, as to the factual information Dr. Cornell gained from his participation in the committee. A motion to compel further discovery of such factual information is clearly inappropriate.

In addition to the factual information that Dr. Cornell received due to his participation in this NRC-sponsored committee, the State wants to compel him to testify about the committee’s deliberations. What the State is seeking is “substantive information” Dr. Cornell may have received on the modified Rulemaking Plan (SECY-01-0178) later formulated by the NRC Staff. Id. However, Dr. Cornell testified that he never reviewed any draft of the modified rulemaking plan (Cornell Tr. 11, 13), thus the contents of the plan or any draft thereof could not have

³ Copies of the relevant pages of the transcript of Dr. Cornell’s deposition are provided with this Response.

influenced the opinions he is offering in this proceeding.

Specifically, what the State is seeking to discover from Dr. Cornell are “the substantive discussions in which he participated as an NRC consultant that he then considered in formulating his opinion on the appropriateness of PFS’s exemption request.” Motion at 8. Such discovery is inappropriate for three reasons: (1) Dr. Cornell already testified as what information relevant to his opinions in this proceeding he received as part of his work for the NRC-sponsored committee: it was publicly available, background technical information on ISFSIs; thus, no further discovery from Dr. Cornell is necessary, and the State’s motion is moot. (2) Any additional, “substantive” information that Dr. Cornell may have given or received is irrelevant to this proceeding, since Dr. Cornell did not rely on it as the basis for his opinion.⁴ (3) To the extent that the State is seeking to discover what Dr. Cornell and other members of the committee may have said to each other that may bear on the subsequent modification of the Rulemaking Plan, such information is clearly covered by the predecisional materials privilege. See Vogtle, supra, and cases cited herein. The soundness of the policy behind the privilege is clear in this case, for disclosure of whatever discussions may have been held by this committee would serve no useful purpose and would only create confusion, since Dr. Cornell testified that his committee met before the contractor for whom the committee worked had submitted a report, and before any technical basis document for changes to the rulemaking plan had been developed. Cornell Tr. 14, 73. Thus, the work in which Dr. Cornell was involved provided only the rawest form of technical input to the Staff, and as such should be protected from disclosure both as a policy matter and because of its very limited evidentiary value. Jordan v. Department of Justice, 591

⁴ The bases for Dr. Cornell’s opinions are clearly set forth in the declaration he filed in support of Applicant’s Motion for Summary Disposition of Part B of Utah Contention L. See Declaration of C. Allin Cornell (November 9, 2001).

F.2d 753, 772-73 (D.C. Cir. (en banc)) 1978).

For these reasons, the State's Motion should be denied.

Respectfully submitted,

A handwritten signature in black ink, reading "Matias F. Travieso-Diaz". The signature is written in a cursive style with a horizontal line underneath the name.

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November 16, 2001

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
PRIVATE FUEL STORAGE L.L.C.) Docket No. 72-22
)
(Private Fuel Storage Facility)) ASLBP No. 97-732-02-ISFSI

CERTIFICATE OF SERVICE

I hereby certify that copies of the Applicant's Response to State of Utah's Amended Motion to Compel NRC Staff to Respond to State's Twelfth set of Discovery Requests and to Compel Dr. C. Allin Cornell to Answer Certain Deposition Questions (Contention L, Part B) were served on the persons listed below (unless otherwise noted) by e-mail with conforming copies by U.S. mail, first class, postage prepaid, this 16th day of November, 2001.

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COPY OF TRANSCRIPT

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.) DEPOSITION OF:
(Private Fuel Storage) DR. C. ALLIN CORNELL
Facility))
) Volume I
) (Utah Contention L, Part B)

Wednesday, October 31, 2001 - 4:19 p.m.

Location: Office of the Attorney General
160 East 300 South, 5th Floor
Salt Lake City, Utah

Reporter: Vicky McDaniel
Notary Public in and for the State of Utah



50 South Main, Suite 920
Salt Lake City, Utah 84144

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1 related to the whole process of the supplementing of
2 Appendix A by 10 CFR 100.23 that Reg Guide 1.165 gave
3 guidance to applicants as to how they might meet the
4 regulatory -- the regulation 100.23.

5 Q. Have you relied on that Reg Guide in any of
6 your consulting work?

7 A. I can't think of a specific incident of
8 relying on the document. It's certainly a document
9 that's part of the general milieu in which I do
10 consulting.

11 Q. Are you familiar with a document that's
12 marked Exhibit 14 which is SECY 98-071, which is NRC
13 staff's -- strike that.

14 Go off the record for a second

15 (Discussion off the record.)

16 Q. (BY MS. NAKAHARA) Are you familiar with the
17 staff's original rulemaking plan to allow probabilistic
18 seismic hazard analysis for ISFSIs?

19 A. Yes, I have read that document.

20 Q. Were you involved in any of the drafts or
21 technical reports that supported that plan?

22 A. That led to the rulemaking document?

23 Q. Yes.

24 A. No.

25 Q. Okay. And now we look at Exhibit 12, which

1 is the modified rulemaking plan, SECY-01-0178. Are you
2 familiar with this plan?

3 A. Yes.

4 Q. And were you involved in any technical
5 reviews prior to the finalization of this plan?

6 A. A technical review of this plan, no.

7 Q. Did you receive any drafts prior to release
8 of this plan?

9 A. I did serve on a committee to a contractor
10 that was charged with providing a technical basis for
11 the modification of Part 72.

12 Q. And what was the contractor -- who was the
13 contractor?

14 A. I believe the initials are IFC, if not ICF.

15 Q. And who was your contact at IFC?

16 MR. TURK: I'm going to object, Connie. You
17 know we've produced some information to you in response
18 to discovery. We've indicated, in fact, we produced to
19 you the SECY paper 01-178, but we've asserted privilege
20 for pre-decisional materials leading up to publication
21 of that paper. I don't have any problem with you
22 asking for Dr. Cornell's role in the process in terms
23 of background, but in terms of anything that might go
24 into the substance of the document, I'm going to
25 object.

1 MS. NAKAHARA: Dr. Cornell can't claim any
2 pre-decisional privilege.

3 MR. TURK: No, I can, and I am.

4 MS. NAKAHARA: Then I am going to ask you to
5 answer the question.

6 MR. TURK: Then I'll object and would direct
7 the witness not to answer. To the extent that he
8 served as a consultant to an NRC contract, that the
9 privilege that the staff asserts embraces him as well.

10 MS. NAKAHARA: It goes to what influences
11 Dr. Cornell's opinion, what influenced the rulemaking
12 plan, and we have a right to explore that.

13 MR. TURK: I don't have any problem if you
14 want to ask him for his opinions of the rulemaking
15 plan; but in terms of the pre-decisional give and take
16 and back and forth that went into the development of
17 that, I would assert the privilege. But I have no
18 problem if you want to ask him for his opinion on
19 what's stated in the ruling.

20 MS. NAKAHARA: No, I'm going to request that
21 Dr. Cornell answer.

22 Can you repeat the question?

23 THE REPORTER: "And who was your contact at
24 IFC?"

25 MR. TURK: And I would object on two

1 grounds: relevance and pre-decisional.

2 MS. NAKAHARA: Well, it's 7:40 and Judge
3 Bollwerk's not there. I suggest we call him in the
4 morning.

5 MR. TURK: Well, it's 4:40 p.m. here in
6 Utah, which means 6:40 in --

7 MS. NAKAHARA: 6:40.

8 MR. TURK: Okay. If you want to call him in
9 the morning, no problem.

10 MS. NAKAHARA: And we'll come back to this
11 area.

12 Q. (BY MS. NAKAHARA) Did you receive any
13 drafts from the contractor that provided the technical
14 basis for the rulemaking plan?

15 A. Did I receive a draft of the modified -- --

16 Q. Yes.

17 A. -- rulemaking plan? No.

18 Q. How did you serve on your committee?

19 A. The committee had perhaps two conference
20 calls followed by one meeting of one day. And that was
21 effectively the last -- that was the last time the
22 committee gathered either electronically or personally.

23 Q. Could you clarify what you mean by
24 electronically or in person?

25 A. Conference call.

1 Q. All right. And was your role to give a peer
2 review of the contractor's report?

3 A. The meeting was held before there was any
4 report.

5 Q. So what did you discuss at the meeting?

6 MR. TURK: I'm going to object AND assert
7 the privilege.

8 MS. NAKAHARA: To the scope?

9 MR. TURK: Your question was what did he
10 discuss at the meeting.

11 Q. (BY MS. NAKAHARA) Well, what was the scope
12 of the meeting? What was the purpose of the meeting?

13 A. The meeting was to bring the panel together
14 in one place, to present to us the problem at hand, to
15 present to us background information about ISFSIs, and
16 to discuss ways of solving the problem.

17 Q. What was described as the problem?

18 A. Preparing a revision to 10 CFR 72.

19 Q. To allow --

20 A. To allow the use of probabilistic seismic
21 hazard analysis in lieu of the Appendix A provision
22 that it was based on -- is based on.

23 Q. What was the scope of the two conference
24 calls?

25 A. Basically the same material.

1 Q. What was your role? To give suggestions on
2 how to solve the problem?

3 MR. GAUKLER: When you talk about "your
4 role," are you talking about the committee's role or
5 Dr. Cornell's?

6 MS. NAKAHARA: Dr. Cornell's role.

7 A. My role as a member of the committee was to
8 bring my expertise to the collected expertise of the
9 committee, and that includes the kind of material that
10 I'm familiar with, such as probabilistic seismic hazard
11 analysis and seismic divisions.

12 Q. I don't understand, if you didn't see any
13 drafts or if you didn't make any suggestions on how to
14 solve the problem, how you interacted with the
15 contractor and how it resulted in a rulemaking plan.

16 MR. TURK: I don't remember him saying it
17 resulted in a rulemaking plan.

18 MS. NAKAHARA: It was the basis to support a
19 rulemaking plan.

20 MR. GAUKLER: Well, I think you're getting
21 to the point where you're going to force him to start
22 talking about stuff that Sherwin will object to. Might
23 be best to wait until tomorrow morning to pursue this
24 line of inquiry further. I think you've gotten the
25 basic background.

1 MS. NAKAHARA: I don't understand how the
2 committee worked.

3 Q. (BY MS. NAKAHARA) Have you been a
4 consultant for other ISFSIs, just to support licensing
5 of other ISFSIs?

6 A. No.

7 Q. What is your familiarity with the PFS
8 proposal?

9 A. Would you clarify PFS proposal?

10 Q. Do you understand what they're planning
11 to -- that they're planning to put a spent nuclear fuel
12 facility in Skull Valley, Utah?

13 A. Yes.

14 Q. You understand that they're proposing to
15 place 4,000 concrete storage casks at the storage
16 facility, up to 4,000 concrete storage casks?

17 A. Yes.

18 Q. Are you familiar with the size of the
19 concrete storage casks?

20 A. In acreage? Pardon me, the size of the
21 facility or the casks?

22 Q. The casks in general.

23 A. In approximate terms.

24 Q. And are you familiar that PFS plans to store
25 the casks out in the open?

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P R O C E E D I N G S

DR. C. ALLIN CORNELL,

having first been duly sworn to tell the truth,
was examined and testified as follows:

EXAMINATION (CONTINUED)

BY MS. NAKAHARA:

Q. Good morning, Dr. Cornell.

A. Good morning.

Q. My apologies for starting late and being
mixed up yesterday.

To some extent I'd like to go back and
explore your involvement in the proposed rulemaking
plan, in the modified proposed rulemaking plan, NRC's
proposed rulemaking plan.

A. Yes.

Q. Did you disclose any information to Private
Fuel Storage that you obtained in your meetings with
the -- on the proposed rulemaking plan or telephone
conversations?

A. I did not disclose any information, written
information from the meetings. I was sent subsequent
to the meeting a draft copy of a technical basis for
proposed reg guide, and I presume subsequently changes
of the regulations, Part 72, which, after confirming
with my technical contact, Mr. Hammer, that it was not

1 confidential, I passed to counsel.

2 Q. And is Mr. Hammer an NRC consultant or NRC
3 staff person?

4 A. He was an NRC consultant, contractor to NRC
5 staff.

6 MR. GAUKLER: I'd like to have Dr. Cornell
7 clarify whether he transferred both the technical basis
8 document and the draft Regulatory Guide to counsel.

9 A. No, I did not transfer the draft Regulatory
10 Guide to counsel.

11 Q. Did you have a formal relationship with the
12 NRC consultant, ICF?

13 A. Yes.

14 Q. And can you describe your formal
15 relationship?

16 A. It was what I described yesterday. I was
17 retained along with several others as a group to help
18 them in their preparation of materials for the NRC.

19 Q. Did they ask you whether you were a witness
20 in any licensing proceeding before the Nuclear
21 Regulatory Commission that involved a seismic hazard
22 analysis for a spent fuel storage facility?

23 MR. TURK: Will you repeat the question,
24 please?

25 THE REPORTER: "Did they ask you whether you

1 were a witness in any licensing proceeding before the
2 Nuclear Regulatory Commission that involved a seismic
3 hazard analysis for a spent fuel storage facility?"

4 A. They may have at the time of contract, but I
5 was not in such a position.

6 Q. And when did you contract with -- when did
7 you enter into the contract?

8 A. I would have to review my records to know
9 for sure, but I believe it would have been late '98 or
10 early '99.

11 MR. GAUKLER: I'd like to have the record
12 clarified, which contract you're talking about.

13 MS. NAKAHARA: Contract with ICF -- IFC.

14 A. You're looking at me with a question mark in
15 your eyes, and I told you yesterday I have trouble with
16 ICFs and IFCs and such things, and I cannot tell you
17 for sure which one it is.

18 Q. With the NRC's consultant to support the
19 technical basis for the proposed rulemaking plan to
20 adopt the 2,000-year return period.

21 A. I don't remember the beginning of the
22 question. Now we've clarified who it was. Could you
23 repeat the beginning of the question?

24 MR. TURK: Or can you just ask the question
25 again?

1 MS. NAKAHARA: Which I think he already
2 answered, which was, when did you enter into the
3 contract.

4 THE WITNESS: Yes, I answered that question.

5 Q. (BY MS. NAKAHARA) Since you entered into
6 the contract around 1998, 1999, were you retained to
7 support the original rulemaking plan?

8 A. No.

9 Q. Did you disclose to PFS any verbal
10 discussion in your conference calls or meetings on the
11 proposed rulemaking plan -- the content of, the
12 substance of your verbal discussions?

13 MR. TURK: I'm sorry. Could I ask for the
14 question one more time?

15 Q. Let me rephrase it. Did you disclose to PFS
16 any of the substantive discussion that occurred during
17 any of the two conference calls or the meeting on the
18 proposed rulemaking plan?

19 A. Beyond the written material referred to?

20 Q. Yes.

21 A. Is that the essence of the question?

22 Q. Yes.

23 A. Yes, there would have been some discussion
24 with counsel at which PFS people were present perhaps
25 at one meeting.

1 Q. Are you distinguishing PFS people from PFS
2 counsel?

3 A. Yes.

4 Q. As in PFS contractors? And who were at
5 these meetings?

6 MR. TURK: Objection. He said one meeting.

7 Q. At this meeting.

8 A. Again, I'm not good with names of people I
9 meet once. I recall a Mr. Donnell, who I believe is
10 with Stone and Webster as a contractor to PFS.

11 Q. Do you recall anyone else?

12 A. I recall there were other people. I would
13 have to review my own notes or information from the
14 meeting to give you names. I apologize.

15 MS. NAKAHARA: Have you turned over
16 Dr. Cornell's notes?

17 MR. GAUKLER: No. I as counsel was at the
18 meeting.

19 Q. (BY MS. NAKAHARA) What professional -- what
20 expertise were the other committee members? Strike
21 that. What expertise did the other committee members
22 represent on the proposed rulemaking committee?

23 MR. TURK: Objection. You haven't
24 established that there was a committee, and you haven't
25 established that if there was a committee there was any

1 proposed rulemaking.

2 Q. (BY MS. NAKAHARA) Your involvement with the
3 NRC consultant -- strike that. Were there other
4 professionals involved that were also retained by the
5 NRC consultant to support the technical basis for the
6 proposed rulemaking?

7 A. Yes.

8 Q. What were the areas of expertise that they
9 represented?

10 MR. TURK: I'm going to object. I don't see
11 that this is relevant at all to the particular
12 proceeding that we're involved in.

13 MS. NAKAHARA: And I'm not going to succeed
14 in making an argument, so I'll just go on.

15 Q. (BY MS. NAKAHARA) Based on the discussions
16 in the conference calls and the one meeting, did
17 opinions of other experts influence your opinion on the
18 justification of a 2,000-year rulemaking plan?

19 MR. TURK: You're asking -- at what stage?
20 Can I get a clarification?

21 MS. NAKAHARA: At any stage.

22 MR. GAUKLER: I don't think you've
23 established there was ever a 2,000-year rulemaking
24 plan, at what point there was a 2,000-year rulemaking
25 plan, or whether the meetings or conferences took place

1 before the concept of a 2,000-year rulemaking plan.

2 Q. (BY MS. NAKAHARA) The purpose of these
3 conference calls and the meetings were to discuss the
4 technical basis to support a 2,000-year return period,
5 correct?

6 MR. TURK: Excuse me. The testimony that he
7 said was that he was working on the technical basis for
8 a proposed regulatory guide. That's what he said in
9 his testimony. He said, by the way, there was one
10 meeting, not meetings. So I'm trying for a little
11 precision.

12 Q. (BY MS. NAKAHARA) What was the basis of --
13 what was the reason -- strike that. The purpose of the
14 NRC consultant -- what was the purpose of the NRC
15 consultant's technical support?

16 A. As it was described to me, it was to provide
17 technical support to the staff in their preparation of
18 regulatory changes, including regulatory guide.

19 Q. On which area? What subject?

20 A. The consultant?

21 Q. What areas for changes in rulemaking or
22 regulatory guide?

23 A. The changes that would be in response to the
24 original rulemaking plan.

25 Q. And what changes were going to be made in

1 the original rulemaking plan?

2 MR. GAUKLER: Objection. That's not what he
3 testified to. He said changes in response to the
4 rulemaking plan, not changes to the rulemaking plan.

5 Q. (BY MS. NAKAHARA) What changes were going
6 to occur in response to the rulemaking plan?

7 MR. TURK: I'm going to object, Connie.
8 You're getting now into the substantive issues that
9 were being evaluated.

10 Q. (BY MS. NAKAHARA) Did any of the discussion
11 that occurred in these two conference calls and the one
12 meeting that you are involved with with the NRC
13 consultant to support regulatory changes, did that
14 influence your opinion on PFS's request for a
15 2,000-year return period?

16 MR. GAUKLER: Objection, vague and
17 ambiguous. What do you mean by influence?

18 Q. Did it influence your opinion to
19 understand --

20 A. It certainly gave me additional technical
21 information about ISFSIs.

22 Q. Did you consider this additional technical
23 information in formulating your opinion on the
24 appropriateness of a 2,000-year return period for the
25 PFS facility?

1 A. Yes, I did.

2 MR. TURK: Could have I that question again,
3 please?

4 THE REPORTER: "Did you consider this
5 additional technical information in formulating your
6 opinion on the appropriateness of a 2,000-year return
7 period for the PFS facility?"

8 Q. (BY MS. NAKAHARA) For the moment we'll make
9 everyone happy and move on to another subject.

10 Dr. Cornell, are you familiar with Utah
11 Contention L, subpart B, which is described in
12 Exhibit -- which is laid out by the Licensing Board in
13 Exhibit 1?

14 A. Yes, I am.

15 Q. And is it correct that you've been named as
16 a witness to testify on this contention?

17 A. Yes, I have.

18 Q. And what general areas do you plan to
19 testify?

20 A. They will be related to the appropriateness
21 of using probabilistic seismic hazard analysis and the
22 appropriateness of the level of probability associated
23 with the design ground motion and the conservatisms
24 implied in the design procedures and criteria that will
25 be applied and their implications to safety.

1 MR. TURK: I have a few.

2 EXAMINATION

3 BY MR. TURK:

4 Q. Dr. Cornell, my name is Sherwin Turk. I'm a
5 lawyer with the NRC staff in Washington. I wanted to
6 ask you a few questions which follow on to some of the
7 questions that Ms. Nakahara asked you earlier today.

8 You indicated in discussing the work you did
9 with ICF, as a consultant to ICF, you indicated that
10 you talked to a Mr. Hammer. Do you recall his full
11 name?

12 A. I believe it's Donald Hammer.

13 Q. And by whom is he employed?

14 A. ICF.

15 Q. And you indicated that he indicated that the
16 information which you later passed to PFS counsel was
17 not confidential.

18 A. Yes.

19 Q. Do you know if he spoke with anyone at the
20 NRC staff before he made that determination?

21 A. I don't know whether he did or not.

22 Q. Ms. Nakahara also asked you whether your
23 participation in the ICF project -- maybe I should just
24 refer to it that way.

25 A. Yes.

1 Q. If I say the ICF project, you understand
2 that to mean the work you did as a consultant to ICF?

3 A. Yes, I shall interpret it that way.

4 Q. Relevant to the rulemaking or the regulatory
5 guidance?

6 A. The work was, yes, relative -- yes, I
7 understand what you mean.

8 Q. Was it relative to the regulatory guidance
9 that was being developed?

10 A. Yes.

11 Q. You indicated in response to a question by
12 Ms. Nakahara that you considered additional technical
13 information that you received through that process in
14 forming an opinion on the PFS ISFSI project.

15 A. Yes, I did.

16 Q. What information were you referring to when
17 you stated that?

18 A. For example, at the meeting that was held in
19 March of 2000, to the best of my knowledge, we --
20 presentations were made by individuals I believe I
21 alluded to yesterday about showing diagrams of typical
22 dry storage casks, their typical dimensions,
23 proportions, giving information about what kinds of
24 calculations are required by the SRP with respect to
25 the casks and the canisters, information about the kind

1 of activities, operations that go on in the transfer
2 building, the kinds of assessments that are made under
3 the standard review plan of drop accidents if they're
4 independent of the earthquake. In general, that kind
5 of technical engineering knowledge about the kinds --
6 what the nature and character of these components are
7 that are different from a, for example, that are unique
8 to the ISFSIs as opposed to a nuclear power plant or
9 other nuclear material handling facilities.

10 Q. The type of information that you just
11 described appears to me to be the kind of information
12 that's publicly available.

13 A. Yes, it is. It was the first time I had
14 encountered it in my practice.

15 Q. And when you say that the information that
16 you received through this process was something you
17 considered in forming an opinion on the PFS project --

18 A. Yes.

19 Q. -- were you talking about this type of
20 publicly available information?

21 A. Yes.

22 Q. And that's what you meant?

23 A. Yes.

24 MR. TURK: May I take just a minute, please.

25 Can we take a two-minute break?

1 (Recess from 11:09 to 11:17 a.m.)

2 MR. TURK: I have nothing further.

3 EXAMINATION

4 BY MR. GAUKLER:

5 Q. I have one quick follow-up question to one
6 of the last questions that Ms. Nakahara asked you
7 concerning analysis of potential for cask tipover at
8 longer return periods than the 2,000-year. To clarify:
9 do you believe you need to do analysis of higher or
10 longer return period earthquakes until you find the
11 cask tips over?

12 A. Well, you can do an analysis to a higher
13 ground motion which has a longer return period, and it
14 doesn't tip over, that gives you information about the
15 fact that the risks of its tipping over are smaller
16 than one in 2,000.

17 MR. GAUKLER: No further questions.

18 FURTHER EXAMINATION

19 BY MS. NAKAHARA:

20 Q. I have one follow-up question to Mr. Turk's.
21 In response to Mr. Turk's question, you stated that the
22 information or the presentation at a March 2000 meeting
23 related to the ICF project was publicly available
24 information. Is that correct?

25 MR. TURK: The question I asked is when he

1 was talking about information that influenced or may
2 have affected his consideration of the PFS project, was
3 that publicly available information. That's when he
4 said yes.

5 Q. (BY MS. NAKAHARA) The experts in the March
6 2000 meeting or the conference calls related to the ICF
7 project discussed the technical merits of ICF's
8 technical support for their regulatory guide,
9 development of the regulatory guide?

10 MR. GAUKLER: Objection. It's a vague and
11 ambiguous question. Technical merits of what?

12 MS. NAKAHARA: The technical merits of the
13 support to develop the Regulatory Guide, ICF mission to
14 support the regulatory guide.

15 MR. TURK: I'm not sure that you've
16 established a predicate. I don't understand what you
17 mean when you refer to ICF's support.

18 Q. (BY MS. NAKAHARA) ICF's project was to
19 support the technical merits in developing a regulatory
20 guide; is that correct?

21 MR. TURK: To support the -- I don't
22 understand the question when you say "to support the
23 technical merits."

24 Q. (BY MS. NAKAHARA) Okay, let's start over.
25 What was ICF's mission?

1 A. As I understand it, it was to support the
2 staff and to help provide a document which would be
3 typically called the technical basis for whatever
4 followed, regulatory guide or regulatory changes.

5 Q. Did experts in the March 2000 meeting or the
6 conference calls that you participated in discuss the
7 technical merits of this technical basis?

8 A. There wasn't any technical basis document at
9 that time. The discussions were on the issues or the
10 elements of the problem, of the task before them.

11 Q. And did experts discuss the technical merits
12 of those issues?

13 MR. TURK: The merits of the issues? That
14 doesn't make any sense.

15 A. I'm sorry, I don't understand that question.

16 Q. Did you discuss the technical -- in
17 technical terms you discussed the issues --

18 A. Yes.

19 Q. -- based on each expert's expertise?

20 A. Yes.

21 Q. Did you use any of that discussion to form
22 your opinions on the PFS facility?

23 A. Yes, because those discussions were the
24 kinds of technical knowledge and technical information
25 that I just alluded to.

1 Q. So they didn't rely on any particular
2 expert's own opinion, independent opinion?

3 MR. TURK: Who didn't rely?

4 MS. NAKAHARA: The publicly available
5 information.

6 MR. TURK: I think the trail is so confused
7 at this point.

8 Q. (BY MS. NAKAHARA) Did information that you
9 considered in developing your opinion for the PFS
10 facility, was that based on individual expert opinions
11 that participated in the ICF project meetings or
12 conference calls?

13 MR. TURK: I don't understand. He's already
14 stated that the kind of information that he considered
15 with respect to the PFS project was publicly available
16 information.

17 MS. NAKAHARA: And I'm exploring that.

18 MR. TURK: Are you asking more about the
19 publicly available information, or are you asking him
20 about non-publicly available information?

21 MS. NAKAHARA: I'm asking about what he
22 relied on to form his opinion for the PFS facility that
23 he received through the ICF project meetings or
24 conference calls.

25 MR. GAUKLER: I think he's already answered

1 that, asked and answered.

2 MS. NAKAHARA: I would like to clarify.

3 MR. TURK: But it's not clarifying anything.
4 You're just going to lead to a string of follow-on
5 questions trying to make a clear record out of whatever
6 answer he gives to this confusing question.

7 Q. (BY MS. NAKAHARA) In forming your opinion
8 on the adequacy of the 2,000-year return period for the
9 PFS facility, did you consider individual expert
10 opinions that were given in the March 2000 or
11 conference calls related to the ICF project?

12 MR. TURK: You're asking about expert
13 opinion, not publicly available information?

14 Q. You can answer if you can, please.

15 A. Experts in those discussions, as I said
16 earlier, explained things such as we do an analysis --
17 one does, in order to meet standard review plan does an
18 analysis of the cask, assuming it drops a certain
19 distance, this creates certain accelerations in the
20 canisters, and here's the level of these accelerations
21 that are typically identified by people who do these
22 calculations. And those are important numbers to me.
23 I guess that includes the person's -- he's reporting
24 that information to me. Let's say I trust what he
25 said, put it that way. That in a sense depends on his

1 opinion and my opinion of that person, as well as I
2 know him.

3 Q. And I presume that you were allowed, you and
4 other experts were allowed to ask follow-up questions
5 on the presentation of material at these meetings or
6 conference calls?

7 A. Yes.

8 MS. NAKAHARA: Okay, I have no other
9 questions. Thank you.

10 MR. TURK: Let me take a minute here,
11 please. You're all done?

12 MS. NAKAHARA: Uh-huh, unless I want to
13 follow up on anything you ask.

14 FURTHER EXAMINATION

15 BY MR. TURK:

16 Q. Dr. Cornell, in listening to your
17 questions -- your answers to that last set of
18 questions --

19 A. Yes.

20 Q. -- it's my impression that what you were
21 describing was information provided at the meeting with
22 ICF --

23 A. Yes.

24 Q. -- as to how the process works, as to how
25 cask drop is analyzed typically in meeting the standard

1 review plan. Is that what you were saying?

2 A. That's a good example of the kind of
3 information that I had not encountered before in my
4 professional background. And that is relevant to my
5 forming an opinion about the conservatism implied by
6 design-basis ground motion of 2,000 years.

7 Q. Again, it sounds like what you're describing
8 is, if you will excuse the term, the education that you
9 received in the meeting as to how the process -- how
10 the analysis typically is done in meeting the standard
11 review plan.

12 A. Correct.

13 Q. Is that correct?

14 A. Yeah.

15 Q. And it's that education that you received at
16 the meeting as to the general process that you say you
17 considered when you were evaluating the PFS 2,000-year
18 return period?

19 A. Correct.

20 MR. TURK: Thank you.

21 MR. GAUKLER: I have one follow-up question.
22 In your evaluation of the PFS -- appropriateness of the
23 PFS design level, did you rely upon any particular
24 options or that were considered in terms of standards
25 for setting a design-basis standard for Part 72?

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THE WITNESS: No.

MR. GAUKLER: Okay.

MS. NAKAHARA: I have no further questions.

(Deposition was adjourned at 11:28 a.m.)

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