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STUDY DISPUTE RESOLUTION PANEL
TECHNICAL MEETING
RE: DON PEDRO HYDROELECTRIC PROJECT NO. 2299

TUESDAY, APRIL 17, 2012

9:00 A.M. - 4:35 P.M.

HELD AT:
HOLIDAY INN CAPITOL PLAZA
300 J STREET
SACRAMENTO, CALIFORNIA

REPORTED BY: CAROLE W. BROWNE
RPR, CSR NO. 7351

PANEL MEMBERS

STEPHEN BOWLER
Federal Energy Regulatory Commission

DAVID WHITE
National Marine Fisheries Service

RICHARD CRAVEN
Independent, Third-Party Panel Member

ALSO PARTICIPATING:

FEDERAL ENERGY REGULATORY COMMISSION:

Jim Hastreiter
Jim Fargo
Matt Buhyoff

NATIONAL MARINE FISHERIES SERVICE:

Larry Thompson
Richard Wantuck
John Wooster
Tom Holley
Bill Foster

TURLOCK IRRIGATION DISTRICT:

Robert M. Nees, Assistant General Manager
John J. Devine, HDR
Noah Hume, Stillwater Sciences

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1 National Marine Fisheries Service, NMFS, in the Don Pedro
2 Hydroelectric Project relicensing proceeding is now open.

3 I am Stephen Bowler, the Federal Energy Regulatory
4 Commission's representative to the Dispute Panel and the
5 Panel Chair. The other panelists are David White from
6 NMFS, NMFS's representative, and Richard Craven, the
7 independent third-party member of the Panel.

8 The dispute regards what studies are required in
9 the preparation of an application for a new license, also
10 known as a relicense, by the Turlock Irrigation District
11 and the Modesto Irrigation District, the Districts.

12 The purpose of the meeting today is for the Study
13 Dispute Resolution Panel to gather the information it
14 needs to make a finding with respect to each information
15 or study request in dispute concerning the extent to
16 which each criteria set forth in Section 5.9(b) of the
17 Commission's regulations is met or not met, and why, and
18 make recommendations regarding the disputed study
19 requests based on its findings.

20 Section 5.9(b), which is on the back of the
21 agenda, refers to the section of the Commission's
22 regulations that list the criteria for studies necessary
23 to prepare a license application. The criteria are
24 available on your agenda.

25 Information on the Panel is provided in folders

1 near the sign-in. None of us have had any involvement in
2 the Don Pedro Hydroelectric Project prior to our role on
3 this Panel.

4 We previously worked together on the Yuba River
5 Hydroelectric Project dispute; however, we've approached
6 the Don Pedro Hydroelectric Project study dispute from a
7 fresh perspective and a new review of its records.

8 As a Panel, we have carefully assessed our role
9 and the context for our work. The regulations make it
10 clear that our recommendations are to be based on the
11 criteria set forth in 5.9(b).

12 Further, when considering the recommendations, the
13 Director's determination will be made with reference to
14 the study criteria in 5.9(b) and any applicable law or
15 Commission policies and practices.

16 The Panel's role is to develop technical
17 recommendations. To the degree we must consider these
18 technical matters in the context of policy and practice,
19 our findings and recommendations must rest in the context
20 of existing Commission policy and practice within which
21 the Director will consider them.

22 While the Panel recognizes that Don Pedro Dam is
23 likely to influence flows and water quality and thus
24 affect anadromous fish from the base of La Grange Dam
25 downstream, the Panel will make no recommendations or

1 findings in regards to whether such effects create a
2 nexus to issues related to fish passage above Don Pedro
3 Dam. This matter is one of policy and law and clearly is
4 beyond the intended scope of the dispute resolution panel
5 process.

6 In reviewing the material, we've also determined
7 that two specific aspects of the dispute are outside of
8 the Panel's purview and they will not receive detailed
9 attention today or in our findings and recommendations.

10 First, NMFS Study Request 1, Element 4. In this
11 request NMFS disputes the exclusion of a Draft Recovery
12 Plan from the list of comprehensive plans relevant to the
13 project.

14 The listing of comprehensive plans is not a
15 technical study-related issue under 5.9(b) of the
16 Commission's regulations. Such listings are governed by
17 Section 10(a)(2) of the Federal Power Act and by two
18 Commission orders.

19 The Panel is -- I'll move on to the second one.

20 The second one is, in NMFS Study Request 1,
21 Element 5, NMFS refers to the Commission's jurisdictional
22 review of the La Grange water diversion dam and
23 hydropower facility and requests that Commission staff
24 present, quote, a report, during the Technical Conference
25 on the progress of this review and provide a schedule for

1 its completion.

2 Such a response cannot be provided either by the
3 Panel via the Chair nor the project relicensing review
4 staff, because to report would violate directly the
5 Commission's regulations.

6 According to 18 CFR 3c.2(b), "The nature and time
7 of any proposed action by the Commission are confidential
8 and shall not be divulged to anyone outside the
9 Commission. The Secretary of the Commission has the
10 exclusive responsibility and authority for authorizing
11 the initial public release of information concerning
12 Commission proceedings. Additionally, a jurisdictional
13 determination is not a technical, study-related matter
14 under 5.9(b). Jurisdiction is covered under
15 Section 23(b)(1) of the Federal Power Act and 18 CFR 24.1
16 of the Commission's regulations.

17 That said, there's a great deal to cover today.
18 The Panel has designed the meeting format in the
19 following ways to gather the information we need the most
20 in the time that we have.

21 We commit to NMFS, the Commission project staff,
22 as parties to this dispute and to the Districts as the
23 applicant who will carry out the studies, that we will
24 give them each time for a closing statement at the end of
25 the meeting, at the end of the day, if they wish to use

1 it. If we have remaining time, we'll invite others to
2 make additional comments.

3 We may have a tight schedule. If we are falling
4 behind, we will defer some topics to the end of the day
5 or to written responses.

6 And we want to reiterate the importance of
7 sticking to the study criteria and to this project. We
8 ask everyone to be as concise and focused as possible.
9 And, of course, we expect everyone to be treated with
10 respect.

11 David and Richard will describe the agenda and our
12 organizational strategy for the day; then we'll ask
13 people to introduce themselves and we'll get to work.

14 MR. WHITE: Okay. You should each have a copy of
15 the agenda, and beginning at the top, from 9:00 to 10:00
16 we will open the meeting, introductory statements, and
17 take some general questions -- or the Panel will ask some
18 general questions. 10:00 to 10:45 we will cover NMFS
19 Study Request Number 1. 10:45 to 11:00 we'll take a
20 15-minute break. We'll start punctually at 11:00. 11:00
21 to 12:00 we'll address NMFS Study Request Number 2.

22 We'll have an hour and 15 minutes for lunch on
23 your own. There is a restaurant at the bottom of this
24 hotel that's pretty fast and efficient.

25 From 1:15 to 2:45 we'll address numbers 3 and 4,

1 then another 15-minute break. From 3:00 to 4:00 we have
2 three issues to address, number 7, 8 and 9, but there
3 should be some overlap from the earlier issues and
4 hopefully those will go relatively quickly.

5 From 4:00 to 4:30 we've left 30 minutes to revisit
6 some issues that we may not have completely wrapped up
7 the first time around. And from 4:30 to 5:00 we'll have
8 closing statements from the two parties and we'll address
9 next steps. And 5:00 we will adjourn the meeting.

10 MR. BOWLER: I'd just add that we will modify as
11 we go through the day, and if we get ahead, we'll move
12 faster, and if we start to fall behind, we'll move some
13 things to the end of the meeting, so if you have to leave
14 for any period of time, don't count on these exact times
15 lining up when you come back.

16 MR. CRAVEN: Concerning the study requests and the
17 format that we've evaluated these requests, we've looked
18 at -- for each study request we'll go through the title
19 of the request and then state what we feel the request is
20 in a general way, maybe with some specifics, but not all
21 of the detail.

22 We'll then mention what the Districts' proposal is
23 to those requests from NMFS. Then we will mention what
24 the FERC determination is, based on the study plan
25 determination, and then continue with clarification

1 questions from NMFS or FERC, and back and forth, based on
2 the written information that we've had. And then we'll
3 have technical conference questions to discuss, and we'll
4 do that for each one.

5 MR. BOWLER: And before we move on to the
6 introductions, I wanted to mention that the obvious last
7 thing that we could potentially summarize is the most
8 recent filing from NMFS, which obviously we don't have --
9 didn't have time to digest. I think it just went into
10 the record this morning.

11 So to the degree that any of that information is
12 brought in today in the discussion, you guys will have to
13 bring -- NMFS staff will have to bring it in at the
14 appropriate point. We're focusing on the technical
15 aspects of it.

16 And also, because that filing came in so late,
17 we -- and we, the Panel, has about until May 4th, I
18 believe, to deliver our recommendations, in order for us
19 to digest that and give anybody a chance to respond to it
20 in writing, we'd like to offer it until a week from
21 today, which will give us time beyond that to use any
22 response comments in developing our recommendations.
23 After that it will be difficult for us to incorporate
24 them.

25 MR. GODWIN: Excuse me. Are you referring to the

1 filing made last Friday or the one yesterday?

2 MR. BOWLER: The one that was made yesterday --
3 was it yesterday or today?

4 MR. GODWIN: It was filed yesterday, accepted
5 today, I think, this morning.

6 MR. BOWLER: In FERC terms, it was filed today.

7 MR. DEVINE: Wasn't there also one filed on
8 Friday? Is it just one filing that we're talking about?

9 MR. BOWLER: There's a filing today that is a
10 response to the Commission's clarification. It's a
11 response to the Commission's response to the Panel's
12 request for clarification. And there was one earlier,
13 the end of last week, regarding La Grange.

14 MR. GODWIN: Okay. I was just curious which one
15 you were referring to.

16 MR. BOWLER: We're most interested in the comments
17 on the one filed today that deals with our clarification
18 questions to the Commission staff.

19 MR. SEARS: Can you give us a date, Stephen?

20 MR. BOWLER: Well, it's Tuesday, a week from
21 today, so the 24th.

22 MR. DEVINE: Was the filing on Friday made in the
23 docket for the Don Pedro relicensing proceeding or was it
24 made in the docket for the La Grange --

25 MR. BOWLER: I know it was filed in the Don Pedro

1 docket. I assume it was filed in La Grange docket as
2 well, but I don't know.

3 MR. GODWIN: Yes, it was.

4 MR. DEVINE: So to the extent we think it's
5 important to respond to those within the scope of this
6 Panel, we will be able to do that.

7 MR. BOWLER: You're welcome to respond in this
8 docket. And we're, of course, interested mostly in the
9 technical items as a Panel.

10 MR. DEVINE: Understood.

11 MR. WANTUCK: Just as a matter of ground rules,
12 NMFS understands that this process is a dispute between
13 the disputing agency, in this case, NMFS, and Federal
14 Energy Regulatory Commission; it is not a dispute between
15 us and the Districts, and I'd like you to clarify that,
16 that the presence here is welcome of the Districts, but
17 this is primarily a dispute between FERC and NMFS with
18 the Panel mediating the discussion.

19 MR. BOWLER: Well, as I said in the opening
20 statement, the parties to the dispute are NMFS and the
21 FERC project staff, but the Districts who will carry out
22 the studies, and they're part of the -- obviously,
23 they're central to the negotiations and the study plan
24 process are critical in terms of their technical
25 contribution and their negotiation with the other party,

1 with the disputing party. So while we recognize their
2 formal roles, it's important to have their input today as
3 well.

4 MR. WANTUCK: My comment was not to try to exclude
5 the Districts. They're important in this proceeding.
6 I'm just pointing out that the central focus of this is
7 our dispute with the FERC study plan determination, not
8 anything that the Districts have put on the record.

9 (Interruption by the court reporter.)

10 MR. BOWLER: We're going to do our introductions
11 now. And also, I apologize for failing to introduce our
12 reporter, Carole Browne, we especially requested, and so
13 let's -- why don't we start with Larry.

14 MR. THOMPSON: Larry Thompson, National Marine
15 Fisheries Service in Sacramento.

16 MR. WOOSTER: John Wooster, National Marine
17 Fisheries Service, Sacramento.

18 MR. WANTUCK: Richard Wantuck, National Marine
19 Fisheries Service, Santa Rosa.

20 MR. HOLLEY: Tom Holley, National Marine Fisheries
21 Service, Sacramento.

22 MR. FOSTER: Bill Foster, National Marine
23 Fisheries Service, Sacramento.

24 MR. MARTIN: Ramon Martin, U.S. Fish & Wildlife
25 Service.

1 MS. O'HARA: Kerry O'Hara, Department of Interior.

2 MR. GIGLIO: Debbie Giglio, Fish & Wildlife
3 Service.

4 MR. BUHYOFF: Matt Buyhoff, Federal Energy
5 Regulatory Commission.

6 MR. HASTREITER: Jim Hastreiter, Federal Energy
7 Regulatory Commission, project coordinator, relicensing,
8 Don Pedro.

9 MR. FARGO: Jim Fargo, Federal Energy Regulatory
10 Commission.

11 MR. FURMAN: Donn Furman, San Francisco City
12 Attorney's Office.

13 MS. LEVIN: Ellen Levin, San Francisco.

14 MR. SEARS: Bill Sears, San Francisco.

15 MR. GODWIN: Arthur Godwin, attorney for Turlock
16 Irrigation District.

17 MS. WARREN: Joy Warren, Modesto Irrigation
18 District.

19 MR. NEES: Robert Nees, Turlock Irrigation
20 District.

21 MR. DEVINE: John Devine, HDR, consultant to the
22 Districts.

23 MR. HUME: Noah Hume, Stillwater Sciences,
24 consultant to the Districts.

25 MS. MANJI: Annie Manji, California Fish & Game.

1 MR. EDMONDSON: Steve Edmondson, NMFS.

2 MS. WILLY: Alison Willy, Fish & Wildlife Service.

3 MR. ROSEKRANS: Spreck Rosekrans, Restore
4 Hetch Hetchy.

5 MR. SHUTES: Chris Shutes, California Sport
6 Fishing Protection Alliance.

7 MS. GUTIERREZ: Monica Gutierrez, National Marine
8 Fisheries Service.

9 MR. JACKSON: Zac Jackson, U.S. Fish & Wildlife
10 Service.

11 MS. MONHEIT: Susan Monheit, State Water Resources
12 Control Board.

13 MR. MAHER: Michael Maher, State Water Resources
14 Control Board.

15 MS. WHITE: Anna White, observer.

16 MS. WHITE: Kate White, public policy.

17 MR. WHITE: Rick White, resident, Novato.

18 MR. WHITE: Steve White, Turlock Irrigation
19 District.

20 MR. PARIS: Bill Paris, Modesto Irrigation
21 District.

22 MS. BOROVSANSKY: Jenna Borovansky, HDR consultant.

23 MS. LOY: Carin Loy, HDR.

24 MS. EVRY: Barbara Evry, State Water Resources
25 Control Board.

1 MR. BOWLER: Thank you.

2 Are there any other procedural questions before we
3 start?

4 MR. DEVINE: Stephen? John Devine, HDR.

5 You had asked if we might bring some maps that
6 would show the watershed and the project, and we have
7 done that. They're over on the table here. There's
8 about six copies of them. I just wanted to let you know
9 that.

10 MR. BOWLER: Okay. Thank you. We left one
11 sitting out for general reference, and people can help
12 remind me if we get to a point in the conversation where
13 a visual would be helpful, we can lay a couple of them
14 out on the tables and use those as a reference.

15 MR. THOMPSON: Larry Thompson, NMFS.

16 We also -- NMFS also brought information today for
17 reference, and it occurred to us that we did not have
18 electronic media to project, for example, our study
19 requests, so we put these binders together. We provided
20 the panelists each with a binder, we provided the
21 licensees a binder and FERC staff a binder.

22 And one of the reasons we had a late filing is we
23 wanted to be able to say today that everything that's in
24 this binder has been filed in the Don Pedro ILP. And
25 that's correct.

1 So at the front of this binder is the filing that
2 we made that was accepted by FERC today, and we would
3 like to use it to guide ourselves through the process as
4 we go.

5 I want to make one more statement and that's that
6 one of the reasons we filed this in writing was that our
7 NMFS legal assistants could not be here today and there
8 are some legal views that are placed in this filing. We
9 had to place those in writing, and so, thus, the lateness
10 of the filing.

11 So to the extent that we can use these binders, if
12 a question arises about a study request or about the FERC
13 study plan determination, which is in this sleeve, front
14 sleeve, with regard to NMFS studies, we can use it.

15 MR. BOWLER: Thank you.

16 MR. THOMPSON: That's it.

17 MR. DEVINE: Question.

18 MR. BOWLER: Yes.

19 MR. DEVINE: John Devine, HDR.

20 So all of the material, Larry, that is contained
21 in the binder has already been filed under the ILP,
22 including these legal -- you said legal views? There's
23 nothing new in that entire filing that hasn't been filed
24 before?

25 MR. THOMPSON: That's correct.

1 MS. WARREN: You mean before Friday?

2 MR. DEVINE: I mean filed -- yeah, filed before
3 Friday.

4 MR. BOWLER: There was --

5 MR. DEVINE: Let me clarify that.

6 MR. BOWLER: There's a package that was filed
7 today.

8 MR. DEVINE: But I mean my impression was that --
9 my impression was that Larry was saying that all of the
10 material here had been previously filed. My impression
11 of that was meaning that it had been -- MID had the
12 opportunity to review it prior to, say, filing it on
13 Friday.

14 We haven't had the opportunity to review anything
15 that was filed on Friday or today, so we are somewhat at
16 a disadvantage if we're bringing new information into the
17 record of the Don Pedro that we have not even been able
18 to review.

19 MR. BOWLER: Let me express our view of that -- or
20 at least mine.

21 There are items in this filing that are new, and
22 we don't expect that anybody's reviewed those and would
23 be able to comment on those today. And that's why we are
24 offering a week for anything, especially technical things
25 that the Panel needs to deal with, to file those so we

1 can see your comments on today's filing and Friday's, to
2 the extent you want to comment on that.

3 One of our intentions today was to follow up on
4 the FERC project staff's response to our request for
5 clarification by asking NMFS some questions about their
6 response to it. And some of that they've put in
7 writing -- much of that they've put in writing in this
8 document.

9 So we'll be asking those questions today, and
10 we're basically asking for a verbal response, although
11 they've already given a written response.

12 So essentially the dialogue that they've filed
13 somewhat in writing we intend to have verbally today and
14 just as part of the natural course of the logical path of
15 the proceeding.

16 But as far as any details that are in here, we
17 don't expect any comment on those today, only what's
18 raised verbally.

19 MR. DEVINE: The disadvantage to the Districts is
20 that if this is an item of discussion today, that without
21 us having had a chance to digest any of this material, we
22 don't even know -- we don't know context, we don't know
23 how it's explained, we don't know the full presentation.
24 Are we able to ask questions about the filing then so
25 that we can participate in that discussion?

1 MR. BOWLER: You can ask -- we can talk about --
2 you can ask the Panel, if you want, if you have
3 questions, whether we will discuss those, but my
4 intention today is that we carry out the discussion we
5 intended originally, which was to follow up on where we
6 are in the process basically as of the day before
7 yesterday.

8 And we're not using information that is in here
9 except to the extent that they're going to explain
10 verbally what they wrote on the technical matters, which
11 we would have expected anyway. They might have thought
12 it out more fully because they've written it, but we're
13 not asking things that we wouldn't have asked two days
14 ago.

15 MR. CRAVEN: Yeah. Richard Craven.

16 We just saw this last night and we looked over it
17 for maybe 30, 45 minutes, just kind of going through it
18 to see what's there. And basically, I don't think that
19 Stephen is suggesting that we use that as a basis for
20 discussion today at all.

21 MR. DEVINE: Thank you.

22 MR. CRAVEN: Is that correct?

23 MR. BOWLER: Yes.

24 MR. CRAVEN: Yeah. And so, however, there may be
25 things in there that are also in the responses that we've

1 already received here in our documents that we have,
2 so -- but I don't think anything new is going to come up
3 based on what was filed yesterday.

4 MR. DEVINE: Thank you.

5 MR. BOWLER: Any other procedural questions before
6 we get started?

7 MR. WANTUCK: Yeah, I have one, Stephen.

8 MR. BOWLER: Yeah.

9 MR. WANTUCK: Richard Wantuck, National Marine
10 Fisheries Service.

11 You pointed out at the outset that you do not
12 intend to speculate on the jurisdictional review for
13 La Grange facilities, which is fair, because this is
14 still pending before the Commission.

15 With respect to La Grange, we need to point out
16 that this petition has been before the Commission for
17 nearly a year. We have filed substantial scientific
18 information recently that supports the idea that
19 jurisdiction ought to be seriously considered.

20 Because the disposition of the jurisdictional
21 question is central to the nexus argument here, if you
22 don't wish to speculate on what the jurisdictional
23 question is, we request that you consider it for the
24 purposes of this discussion as reasonably foreseeable
25 that La Grange will be licensed in some fashion or

1 another.

2 And we have substantial science now on the record
3 to support that position based on technical arguments
4 that I understand is the heart of this conference.

5 MR. BOWLER: Well, that's an area of speculation
6 that we can't wander into. The Panel has to deal with
7 what the -- with the firm set of facts that exist today
8 and not on what we might, no matter how convincing or not
9 the argument is, what it might be at some point down the
10 road, whether it's next week or in a year.

11 So we just -- I mean, the reality is that we can
12 only deal with what we have. And the fact right now is
13 that there hasn't been a decision on that matter, and
14 we're not here to discuss the facts of that matter or the
15 technicalities of that matter, but the technicalities of
16 what are before us in this hydropower licensing
17 proceeding.

18 MR. WANTUCK: Just a follow-up comment, Stephen,
19 on that.

20 Again, the petition has been before the Commission
21 for nearly a year. There is voluminous scientific
22 information in support of the petition. If we're not
23 going to entertain that today, that's within the purview
24 of the Panel.

25 However, we assert, on behalf of NMFS, that our

1 Section 18 prescriptive authority does not hinge on
2 whether or not La Grange is found jurisdictional or not.

3 So when we get to the nexus question, this will
4 come up.

5 MR. BOWLER: And at the end of the day you're
6 welcome to recap any of your concerns or thoughts about
7 these broader matters.

8 MR. WANTUCK: Okay.

9 MR. DEVINE: May we comment on that?

10 MR. BOWLER: Briefly.

11 MR. DEVINE: The Districts' concern about whether
12 something is -- has been substantial scientifically is --
13 again, that was filed on Friday. We have not had a
14 chance to even thoroughly look at it. There's no -- the
15 judgment of whether it's substantial scientifically would
16 be FERC's. We looked forward to reviewing it very
17 thoroughly and providing our comments, whatever they may
18 be.

19 I guess I'm moving to a question in that; that's a
20 separate process before FERC. It's not subject to this
21 Panel's consideration. We're not going to be held to the
22 same seven-day comment period, will we, on this filing on
23 this jurisdictional?

24 MR. BOWLER: The seven-day comment period is only
25 for matters under the Don Pedro relicensing proceeding

1 under the dispute issues filed by NMFS in order for the
2 Panel to read it and file our recommendations timely.

3 So on anything else that's outside of this, you
4 can comment anytime you want that's appropriate under
5 whatever staff are doing that analysis guidelines, but we
6 just need to know if you have comments on the technical
7 matters that are -- as they're written in order for us to
8 finish our recommendations on time.

9 MR. DEVINE: The technical matters that are
10 written where?

11 MR. BOWLER: The technical matters that were filed
12 related to the dispute.

13 MR. DEVINE: Okay.

14 MR. BOWLER: We don't need to hear, for our
15 decision, about the jurisdictional issue.

16 MR. DEVINE: Thank you.

17 MR. BOWLER: Any other? Okay. We'll start in.

18 So let me just run through the list of what I
19 understand to be the disputed studies just to make sure
20 we're on the same page and then we'll start in with what
21 I understand to be the first one.

22 So we're here today to discuss -- many of these
23 relate to studies proposed by the District, but I'm going
24 to use the NMFS reference system.

25 We've got NMFS 1, Study Request 1, and I think

1 it's Elements 3, 4, 5 and 6. And then --

2 MR. HASTREITER: Stephen, didn't you earlier say
3 something about Element 4?

4 MR. BOWLER: Oh, yeah. Yeah. They're the
5 disputed elements, and 4 and 5 were basically breezed
6 through, based on our earlier statement.

7 MR. HASTREITER: Okay.

8 MR. BOWLER: NMFS 2, Study Request 2, Elements 1,
9 2, 3 and 4; NMFS Study Request 3, Elements 1 through 5.
10 I think there's another one on the next page. NMFS 4,
11 Elements 1 through 6. NMFS Study Request 5,
12 Elements 1 -- no -- we don't have anything on 5, right?
13 Or 6?

14 MR. CRAVEN: Or 6.

15 MR. WHITE: Skip to 7.

16 MR. BOWLER: Let me read off this sheet.

17 So it's 1.3 through 1.6, 2 is 2.1 only, right?
18 Right. 3 is 3.1 through 3.5. 4 is 4.1, 4.2, 4.3 and 4.4
19 and 4.5. 7 is 7.1 through 7.4, and 8 is 8.1, 8.2, and 9
20 is 9.2 through 9.5.

21 So starting with NMFS Study Request 1,
22 Element 1.3, this is a description of potentially
23 affected environment in the vicinity of the La Grange
24 complex.

25 The NMFS request was for information with respect

1 to the La Grange complex, including descriptions of the
2 potentially affected environment near the complex,
3 including a list of items, including project releases,
4 La Grange water uses, instream flow uses, water rights,
5 water quality standards, water quality data bathymetry,
6 fishes, essential fish habitat, life histories, ESA
7 species.

8 In the District proposal they did not accept this
9 request because of the nexus issue, and the FERC
10 determination stated that the existing and proposed
11 sources of information would be adequate for cumulative
12 effects analysis.

13 In NMFS's dispute they asserted that NEPA requires
14 direct, indirect and cumulative effects analysis and
15 asserted that FERC did not explain how existing and
16 planned studies will be provided, would provide the
17 needed information to evaluate project effects, including
18 stranding and redd dewatering.

19 NMFS also asserted the cumulative effects to be
20 studied over a larger footprint.

21 The Panel asked FERC to identify the location of
22 the reference data that would be available to address
23 this request, and we also asked about the use of whether
24 the data was being obtained to support only cumulative
25 effects or also direct and indirect effects.

1 The FERC clarification emphasized that the
2 decision was based on general information that the
3 project staff may require in the initial study report,
4 the provision of all the available existing information
5 to support this request on NMFS Element 3 and coming up
6 on 6, again, to inform cumulative effects analysis.

7 And regarding that, they emphasized that the
8 cumulative effects analysis was the appropriate analysis
9 for this situation because the direct effects are not
10 those attributable to the Don Pedro project itself and
11 its operation.

12 It's the Commission's policy to address cumulative
13 impacts to the fullest extent so they do not require the
14 direct and indirect for a nonproject facility such as the
15 La Grange complex.

16 So our line of questioning here really I think one
17 aspect is going to focus on the issue of whether we're
18 talking about the same thing when we talk about the
19 cumulative versus direct and indirect effects. I think
20 everybody is on the same page in what a cumulative effect
21 is.

22 But the question I have is, when we're talking
23 about the effects of the operation of the Don Pedro
24 project as they transmit downstream, could there not be
25 effects that are direct or indirect of the Don Pedro

1 project acting -- by influencing the La Grange project or
2 passing through the La Grange project on the -- either
3 through operational responses at La Grange that are
4 direct response to operational -- if they're operational
5 change at Don Pedro. Let's explore that one first.

6 Let me ask the Districts this question: Are there
7 potential operational changes at Don Pedro that influence
8 the operation at La Grange in a way that could change the
9 conditions below La Grange?

10 Are there decisions that -- is there a decision
11 path in the operation of La Grange that's dependent on
12 the operation of Don Pedro or does it just operate with
13 what it gets?

14 MR. DEVINE: It might be helpful just to explain
15 the purpose of La Grange Dam and the La Grange project
16 first, I think, as a preface to answering that question.

17 The purpose of the La Grange project is to raise
18 the water level in the vicinity of La Grange so that
19 canals can be fed by gravity, the canals serving the
20 Districts' systems, and customers can be fed by gravity,
21 and the purpose of La Grange diversion dam is to divert
22 water. So that's the purpose.

23 How it is operated is only dependent on what
24 waters it's trying to move to the MID's, Modesto
25 Irrigation District's, and TID's, Turlock Irrigation

1 District's customers. The rest of the water is passed
2 downstream.

3 So the quick answer, the brief answer is no, that
4 decisions of how to pass water downstream at La Grange
5 are made on the basis of the La Grange project
6 facilities. That's all. They divert the water that's
7 needed for the customers and the demand that they're
8 servicing at La Grange -- at the MID and TID service
9 territory and the rest of the water passes downstream.

10 MR. BOWLER: So the major decisional factor is the
11 delivery of the water supply rather than an operational
12 response to the Don Pedro operations?

13 MR. DEVINE: Right. Don Pedro operations feed
14 water downstream, of course. That's its purpose is store
15 and feed water downstream. But -- and, of course, the
16 Districts and their operation of La Grange want to make
17 sure that they operate the facilities responsibly and, to
18 the extent they can, control the flows going downstream
19 in a responsible manner.

20 But the main purpose of it is to divert water out
21 of the Tuolumne River and then pass that water downstream
22 that's not being diverted. And they're passing the water
23 downstream in a, you know, in a fashion that -- so that
24 it can be controlled.

25 But those decisions are made on the operation of

1 La Grange. They don't have anything to do with the
2 operation of Don Pedro.

3 And, you know, an example is the example that NMFS
4 actually brought up in one of their filings about the
5 occasion of a change in operation at the powerhouse that
6 might have affected redds in the vicinity, and there was
7 a change done at La Grange, only La Grange, to ensure
8 that that kind of circumstance would not happen again.
9 That did not depend on anything to do with Don Pedro.
10 That decision was made at La Grange how to operate
11 La Grange facilities.

12 Those aren't jurisdictional facilities. The
13 Districts operate them in a way that services their
14 customers, and the rest of the water passes downstream
15 under a controlled fashion.

16 MR. WHITE: In case everyone isn't familiar,
17 La Grange is located downstream of Don Pedro. There are
18 two dams separated by about two miles.

19 And my question is a similar question, and that
20 is, getting at the interrelatedness or interdependence of
21 the two facilities.

22 Are operations at Don Pedro ever changed to -- or
23 modified or varied to accommodate purposes of La Grange?
24 So it's -- I'm asking from the bottom up instead of the
25 top down, I guess.

1 MR. DEVINE: Well, the purpose of the Don Pedro
2 reservoir is to store water and control water so a
3 portion of it can be used in accordance with the
4 Districts' water rights at -- or to service their
5 customers.

6 So certainly, you know, Don Pedro is operated in a
7 way to help serve the Districts' customers. The water is
8 diverted for those purposes at La Grange Dam.

9 Is that answering your question?

10 MR. WHITE: I think so. So operations at
11 Don Pedro would be modified to accommodate the purposes
12 of La Grange?

13 MR. DEVINE: I don't know about "modified." I
14 mean, of course, the operations are coordinated, because
15 it would be irresponsible to not coordinate the
16 operations of the Don Pedro project with the diversion of
17 water at La Grange Dam. It's not helter-skelter.
18 There's a schedule for water. There's demand on
19 irrigation, M&I water. That demand is estimated and
20 those are the waters that will be diverted at La Grange
21 to service the customers.

22 Then Don Pedro, the operation of Don Pedro has to
23 also then compute what its requirements are for water
24 downstream, Don Pedro's requirements for water downstream
25 of La Grange, not La Grange's requirements. It would add

1 that or it's -- there are flood control, flood management
2 responsibilities at Don Pedro as well, not at La Grange.

3 The Districts will take into account what those
4 other responsibilities are separate from its need to
5 divert water at La Grange for its customers. And then
6 that's the water that's delivered out of Don Pedro.

7 La Grange diverts the water it needs for its
8 customers and passes the other water downstream. The
9 other water is just passed downstream.

10 MR. WHITE: Thank you.

11 MR. BOWLER: The only other question I have along
12 those lines is the La Grange pool has relatively little
13 storage, and so basically when the flows that are
14 released from Don Pedro and to the degree they're not
15 diverted for water supply or irrigation pretty much flow
16 on through, as you've said.

17 Are there times where the Don Pedro is
18 releasing -- when the release is carried through in a way
19 that can affect downstream resources either immediately
20 below La Grange or further downstream, essentially, where
21 it's almost as if La Grange weren't there because it's
22 just passing it through? I mean, is it sort of a
23 linear . . .

24 MR. DEVINE: There's essentially no active storage
25 in La Grange, at the La Grange pool, so it's a river, if

1 you want to call it that. And so the water that's not
2 diverted is going to be passed downstream.

3 The Districts do make decisions at La Grange of
4 how to best control that. If you're a responsible water
5 resource manager, you're controlling the water that comes
6 to your dam and that has nothing to do with Don Pedro; it
7 has to do with the efficient operation at La Grange.

8 And depending on the condition of the facilities
9 at La Grange at any particular time, the Districts will
10 decide, you know, once it knows how much water is coming,
11 where that water should be. Do you divert X amount and
12 there might be Y left over?

13 The Districts will want to -- the District
14 operators will want to make a decision about the best way
15 to release that water.

16 That's not -- that's a nonjurisdictional facility.
17 It's not subject to FERC's jurisdiction. The Districts
18 will decide whether to release it. Say if they have a
19 small powerhouse there and if it's -- will they release
20 it at the powerhouse? Will they release it at the gates
21 adjacent to the powerhouse on the TID side? Will they
22 release it over at the MID side at a gate release over
23 there? Depends on the condition of the facilities at the
24 time and how much water is there.

25 MR. BOWLER: What's the typical daily variation in

1 Don Pedro's release regime?

2 MR. DEVINE: I don't know that there would be a
3 "typical" daily variation. It's usually quite -- fairly
4 constant once the operations are in for its irrigation
5 diversions. Once those irrigation diversions are set for
6 the irrigation season in terms of a daily use or a demand
7 that needs to be fulfilled, then those are relatively
8 constant.

9 When you're in flood management operations, those
10 operations at Don Pedro, you know, could be adjusted
11 during the day, but usually it's a daily schedule that's
12 set, and there are limitations within the license of
13 Don Pedro about fluctuations and what's allowed under
14 fluctuations -- those, of course, would be met at
15 Don Pedro -- the water diverted that's going to be
16 diverted at La Grange, and then the rest of the water
17 passed through and make sure that those fluctuations are
18 not exceeded.

19 The local effects of water delivery at La Grange
20 are La Grange effects. They're La Grange's direct
21 effects. It depends on where the Districts decide how to
22 decide to release any extra water that might be coming
23 from Don Pedro and that's not going to be diverted at
24 La Grange. So the effects would depend on where
25 La Grange releases that water. But that's strictly a

1 La Grange decision. Has nothing to do with the operation
2 of Don Pedro.

3 MR. WANTUCK: May we have some dialogue here?

4 MR. BOWLER: Yeah. Do you want explain your
5 interpretation?

6 MR. WANTUCK: Well, you know, this is a long
7 explanation of how La Grange and Don Pedro interact is
8 classic evidence of just how interrelated these
9 facilities are.

10 Also, we want to point out that Article 37 of the
11 Don Pedro license requires minimum flow requirements
12 downstream, so any waters diverted, Don Pedro needs to
13 make that up and adjust, so there are direct operational
14 considerations at Don Pedro that need to be taken into
15 consideration here.

16 Mr. Devine's description struck me as good
17 evidence of why there are actually direct effects in the
18 vicinity of the La Grange complex.

19 MR. DEVINE: Well, they're the direct effects of
20 the operation of La Grange.

21 And related to the article that Mr. Wantuck had
22 mentioned, there's nothing in that article specifying by
23 FERC how to release the water at La Grange because
24 La Grange is not a jurisdictional facility.

25 The requirement is to have X amount of water at a

1 location downstream at the monitoring point, which is the
2 Tuolomne River at La Grange gauge.

3 There's nothing in the article that tells the
4 Districts how to release the water at La Grange because
5 La Grange is a nonjurisdictional facility. It's not
6 subject to FERC's jurisdiction or direction on how to
7 operate the La Grange facility.

8 MR. THOMPSON: Could I just comment on that?

9 You know, Rick is correct. Article 37 is existing
10 license. We're here in a relicensing proceeding or
11 seeking a new license. And there may be a different
12 license article that would apply to Don Pedro in the
13 future for the new license.

14 So what we're seeking is information about how
15 Don Pedro and La Grange are coordinated in order to
16 provide the flows downstream.

17 I think Mr. Devine correctly said they are closely
18 coordinated. We're asking, "How?" That's the
19 information we're seeking so that we can better
20 understand the effects of the project that we're
21 licensing on areas at La Grange and downstream.

22 MR. BOWLER: Let's take the example of the
23 dewatering of redds and stranding and such that's been
24 raised as a concern. How would the information generated
25 by the study support an analysis of that issue?

1 MR. THOMPSON: Well, as Mr. Devine was speaking of
2 this, I thought of -- there are -- I believe he stated
3 that only La Grange could be manipulated to provide -- to
4 prevent that redd dewatering.

5 Clearly, if you added more water at Don Pedro, it
6 would spill over the top of La Grange Dam. It would
7 water the entire channel downstream.

8 The redd dewatering that occurred occurred because
9 there was little to no water, probably no water passing
10 over the top of La Grange, it has no gates, the dam, that
11 I'm aware of, so the fish began to spawn in the channel
12 below the La Grange powerhouse. And then those flows
13 were interrupted, and at that particular time the flow
14 was added from the Modesto side spillway, the flow was
15 diverted into the Modesto canal and then spilled down the
16 side to provide lower flows, but they did not water up
17 the area that got dewatered. That was the problem.

18 Clearly, Don Pedro could have released more water,
19 it could have gone over the top of the dam, kept the
20 entire channel wet and prevented the incident from
21 happening. Just one example of the nexus between
22 Don Pedro and a condition downstream is what I just
23 described, a potential new license condition.

24 MR. BOWLER: To what degree is that -- the
25 information that would support an analysis of a situation

1 like that and how it could be avoided, to what degree is
2 that in what's being provided in the Commission's
3 determination at this point?

4 I mean, I think it required a good bit of
5 information about the La Grange project or the La Grange
6 complex. What is it that's not in there that you would
7 need to do an analysis like that?

8 MR. THOMPSON: I'd have to look at -- can we look
9 at the FERC study plan determination --

10 MR. BOWLER: Sure.

11 MR. THOMPSON: -- and see what was ordered? I
12 think on page 71 of the study plan determination it
13 stated that the existing information in the PAD is
14 adequate for this analysis. So I think the Panel then
15 turned around and asked for identification of that
16 information, and I'm not sure you got it, so are you
17 asking me for it?

18 MR. BOWLER: Well -- Jim, did you want to . . .

19 MR. HASTREITER: Yeah. I mean, when we received
20 the Panel's question, obviously we hadn't taken the time
21 to identify all that information, as we said in the
22 response to the Panel.

23 And knowing that we want to understand what is
24 happening to the river below La Grange and how La Grange
25 is operated we've asked the Districts to provide that

1 information.

2 So I'm a little bit confused, because we've told
3 the Districts to provide that information -- well, we're
4 going to recommend to the Director, and there's no reason
5 to doubt that he isn't going to require that. And we're
6 going to require the Districts to provide that
7 information both for NMFS 1, 3 and 6.

8 So I'm still trying to understand at this point
9 what the dispute is about.

10 MR. DEVINE: A comment on Mr. Thompson's and then
11 I'll address that question that's been raised about
12 existing information.

13 There is as an issue at La Grange and in that
14 particular case there wouldn't be a condition that in
15 order to affect the operation of La Grange somehow FERC
16 would have to condition the operation of La Grange under
17 those circumstances. It's not subject to FERC's
18 authority.

19 So even if somehow you have to condition --
20 somehow you have to condition Don Pedro, and then how --
21 but then the Districts would still be operating, of
22 course, La Grange in the best way to operate La Grange
23 during any particular flow out of Don Pedro.

24 It's not -- Don Pedro -- La Grange is not subject
25 to FERC's jurisdiction. It's a nonjurisdictional

1 facility, and the Districts make decisions about how to
2 operate it based on the condition of the facilities at
3 the time.

4 To take one example and say, okay, that proves
5 somehow that conditions at Don Pedro would affect, in
6 effect, everything that goes on at La Grange is not
7 reasonable. It's the Districts will operate La Grange as
8 befits the condition of the La Grange facilities at any
9 particular time and what those conditions are and what
10 the demand for the water is to be diverted.

11 To comment on Mr. Hastreiter's is the Tuolomne
12 River is one of the most studied rivers in the country.
13 The PAD is replete with information and references about
14 the studies that have been done below La Grange Dam all
15 the way to the mouth of the river. There's over
16 150 studies have been done since 1992 alone on the Lower
17 Tuolomne River.

18 And I have a filing here I'd like to make and hand
19 to the Panel so they understand --

20 MR. HASTREITER: Can you speak up a little, John?
21 I'm having trouble hearing you.

22 MR. DEVINE: Sure.

23 I have information here I'd like to hand to the
24 Panel that describes all of the information that is used
25 and useful for analysis below La Grange Dam. This was

1 covered in the PAD, and it -- of course, it's been
2 available and filed with FERC under the existing license.
3 Again, over 150 individual studies.

4 We met last week under the W&AR-5 study plan,
5 which was a workshop where all relicensing participants
6 were invited to share the information and review
7 information that we're providing for models, salmon
8 models below on the Lower Tuolumne River, and we provided
9 this list to the relicensing participants before that
10 meeting and then reviewed it in the meeting.

11 And I will -- is it proper to give you that copy
12 now or . . .

13 MR. BOWLER: You can give it to us at some point
14 and then -- is it in the record already?

15 MR. DEVINE: Well, the information will be in the
16 record when we make the filing for the workshop
17 consultation meeting notes. It is in the record in other
18 fashions, but not in the fashion -- we've tried to
19 outline it a little more precisely what will be used for
20 the W&AR-5 study plan.

21 But there are references in the PAD to over -- you
22 know, these over 150 studies that have been done
23 downstream, so it's a substantial amount of existing
24 information on this issue.

25 MR. BOWLER: Okay. So to go back to your

1 earlier -- the beginning of this response, is your
2 position that there's no situation in which the operation
3 of Don Pedro -- there's no condition in which the
4 operation of Don Pedro is influencing the habitat below
5 or near -- just below or downstream of La Grange complex
6 that isn't completely controlled by the La Grange complex
7 itself?

8 MR. DEVINE: No. There will be -- well,
9 completely controlled by La Grange complex, La Grange
10 facilities have certain capacities, each of the
11 facilities that might pass water, the diversion
12 facilities, the small hydro facilities, the gates at TID
13 and the gates at MID and the spillway.

14 So, depending on the amount of flow that's
15 released at Don Pedro, you know, within the capacity of
16 the gates, that's then a decision by the operators of
17 what's the safest way to pass that flow downstream that
18 they aren't diverting. That has to do with routine dam
19 safety. Has nothing to do with FERC or anybody else.
20 It's just routine dam safety.

21 There are times when the gates are not of
22 sufficient capacity to pass all the flow downstream, so
23 it goes over the spillway. Certainly, those occasions, I
24 mean, the water's being delivered downstream, it flows
25 down past La Grange and affects the habitat downstream.

1 So, I mean, it's still within, say, the control of
2 La Grange operations, and the Districts have to
3 recognize -- will recognize how to deliver that water
4 downstream safely.

5 Sometimes it will go over the spillway when it
6 exceeds the capacity of the gated facilities, or
7 depending on -- or the powerhouse -- and depending on
8 what the conditions of those are.

9 I think also what I'm saying is that there's a lot
10 of existing information, including stranding studies,
11 including spawning habitat studies of this area NMFS
12 referenced in the vicinity of La Grange Dam.

13 We're not sure what that exactly means or exactly
14 where that is, but there is a tremendous amount of
15 existing information, as referenced by FERC staff in
16 their response.

17 That's listed in the PAD. Most of it's -- a lot
18 of it is described in the PAD. You can't describe
19 150 studies in the PAD. It's been filed under the
20 previous license and the Tuolumne River technical
21 advisory committee, so it's -- it is readily available.

22 MR. BOWLER: And what's the frequency of the spill
23 over the dam at La Grange? I've forgotten.

24 MR. DEVINE: Yeah, I don't have the precise
25 information on what that frequency is. It would occur

1 during flood management times.

2 MR. BOWLER: So the flood stage.

3 MR. DEVINE: Yeah, flood stage. So, you know,
4 some years it will be very, very infrequent and some
5 years it will be -- it would be greater, depending on
6 conditions in the watershed.

7 MR. WHITE: Dave White, NMFS.

8 Can National Marine Fisheries Service explain the
9 kinds of information they'd like to get related to what
10 sorts of problems below La Grange?

11 I know you cited a dewatering instance that's on
12 record from Fish & Game. Are there other types of
13 effects of Don Pedro that are beyond the control of
14 La Grange that you'd like to look at and to those sorts
15 of effects that you'd like to see studied or are we not
16 getting it?

17 It's direct, indirect and cumulative or just
18 direct in the vicinity of La Grange? Can you elaborate a
19 little bit on what your -- what the conditions are that
20 you need to study in the vicinity of La Grange and what
21 the vicinity of La Grange means?

22 MR. THOMPSON: I think there are several ways that
23 water can be released at La Grange that affect the
24 environment right below it, in the vicinity of it, and we
25 don't understand what all those are.

1 Now, I think what Mr. Hastreiter is saying is that
2 on page 71 of the FERC study plan determination that
3 we're going to get that, but it's laid out in a rather
4 general way. It says that they are going to require
5 information about water flow-related facilities that
6 affect the flow of water into, through and past La Grange
7 Dam, so it may be, depending on what we get, that that
8 will be satisfied there.

9 MR. HASTREITER: Well, then, as well as the
10 response from the Panel --

11 MR. THOMPSON: Yeah.

12 MR. HASTREITER: -- in addition to that.

13 MR. THOMPSON: So I think, David, what you're
14 asking is -- maybe I can answer it by -- what I'm trying
15 to do is think about a potential license condition for
16 Don Pedro that we could have that would prevent things
17 like the redd dewatering from occurring below La Grange
18 Dam.

19 And I can think of, just offhand, a water surface
20 elevation requirement at a particular point below
21 La Grange. Regardless of how La Grange is operated,
22 Don Pedro project meets that.

23 If that happens, the channel is wetted across the
24 river during the spawning time. There's no redd
25 dewatering. So it isn't something you order La Grange to

1 do.

2 La Grange is -- if La Grange is diverting water,
3 fair enough. Don Pedro releases enough water to meet
4 that water surface elevation requirement. To me that
5 seems like a downstream issue.

6 MR. DEVINE: To meet a water elevation requirement
7 at La Grange pool is a La Grange condition. It's not a
8 Don Pedro.

9 MR. THOMPSON: Farther down from the La Grange
10 pool. Possibly below the La Grange powerhouse where the
11 stranding occurs.

12 MR. DEVINE: That would be dependent on how
13 La Grange is operated, and FERC is not subject --
14 La Grange is not subject to FERC's jurisdiction.

15 MR. BOWLER: Richard's got a question.

16 MR. CRAVEN: I've got a question. And we've
17 talked about this for what, two months now, I guess --

18 MR. HASTREITER: Years.

19 MR. CRAVEN: -- about the project. Yeah. And my
20 question is, the way the NMFS question is posed is for an
21 impact on La Grange, of La Grange, and really, to me
22 anyway, it's an impact of Don Pedro downstream.

23 And so when you do your impact analysis, will you
24 look at direct and indirect impacts of Don Pedro up to
25 the base of La Grange Dam? Is that . . .

1 MR. HASTREITER: That's right.

2 MR. CRAVEN: That's right?

3 MR. HASTREITER: That's correct.

4 MR. CRAVEN: Okay. So how does the cumulative
5 impact analysis come in in terms of La Grange?

6 In other words, I think part of our confusion has
7 been it appears you're not doing a full direct/indirect
8 impact analysis all the way to the base of La Grange Dam,
9 based on whatever happens at Don Pedro.

10 So how does the cumulative impact analysis fit in
11 with La Grange?

12 MR. HASTREITER: Well, the way we look at this is
13 La Grange is affecting the flows below La Grange Dam most
14 times. There may be times when flows that are released
15 from Don Pedro and at the gauge below La Grange during
16 times when maybe the Districts aren't diverting water,
17 there could be some direct effects, but we don't have
18 that information to make that determination at this
19 point. But the issue we're --

20 MR. CRAVEN: Excuse me just a second. Let me ask
21 one question right there.

22 Now, what information is that exactly? Is that
23 the operational impacts of La Grange or what? Or,
24 rather, the operational scenarios of La Grange. Excuse
25 me. Not the impacts, but the operational scenario.

1 MR. HASTREITER: Right. I mean, as John
2 explained, La Grange affects the release of flow to the
3 river.

4 MR. CRAVEN: Okay.

5 MR. HASTREITER: And I think what we're talking
6 about here is the reach of river from right below
7 La Grange Dam down to the gauge. It's about a half a
8 mile. That's what this dispute is all about and the
9 information that NOAA is asking of the Districts and us
10 to provide concerning that reach.

11 MR. CRAVEN: Do they go all the way to the
12 San Joaquin?

13 MR. HASTREITER: Well, the Districts are, as John
14 has pointed out, proposing many, many studies to look at
15 the river from La Grange gauge down to the confluence
16 with the San Joaquin River.

17 So, you know, in my mind, that's not at issue.
18 They're going to study that. Okay?

19 But where we're coming from is the Commission
20 can't address the operations at La Grange and the choices
21 that they make at La Grange put water in which channel,
22 because we don't have jurisdiction.

23 MR. CRAVEN: Right.

24 MR. HASTREITER: So that's why it becomes a
25 cumulative effect.

1 MR. CRAVEN: Okay. But you can address those
2 operational changes? Those will be identified, I assume,
3 in your analysis?

4 MR. HASTREITER: Right. I mean, that's what
5 we've -- we asked for that even in NMFS 2.

6 MR. CRAVEN: So how far downstream does your
7 analysis go then? You confused me a little bit on your
8 direct and indirect impact analysis.

9 MR. HASTREITER: Well, our analysis goes from
10 La Grange gauge down to the confluence of the Tuolumne
11 River. That's what we're looking at for the Districts to
12 be responsible for study in detail.

13 MR. CRAVEN: Okay. That's sort of the base of the
14 dam? Is that what you're saying?

15 MR. HASTREITER: No. From the gauge.

16 MR. CRAVEN: Okay. Now, I asked about the base of
17 the dam earlier. I said did the direct impacts analysis
18 go from the base down, and I thought you said it did.

19 MR. HASTREITER: No, I didn't. I'm sorry if I
20 misspoke. That would be --

21 MR. CRAVEN: So from the gauge.

22 MR. HASTREITER: -- cumulative effect analysis
23 from the base of La Grange Dam.

24 MR. CRAVEN: To the gauge.

25 MR. HASTREITER: Yes. And that's because of the

1 effect of the La Grange project and how it's operated.

2 It's squirrely. I agree. But -- and in my mind
3 it's -- I'm calling it the La Grange shadow. It's the
4 effect of operation of La Grange, because there's two
5 separate channels, we can't direct the Districts to
6 release flow in this channel or that channel.

7 You know, Larry's making a point that, you know,
8 he feels that maybe that compliance point can be moved
9 upstream, but the Districts then make a point, well,
10 you're trying to control releases at La Grange Dam, and
11 that's where the problem lies.

12 MR. DEVINE: Even higher flows, the Districts can
13 modify the spillway at La Grange pool -- La Grange
14 project. They could expand it, they could contract it,
15 they could modify it, they could add gates, they could do
16 what they need to do to feel how they need to best divert
17 water to meet its customers' needs and to control water
18 responsibly as a water resource manager at the La Grange
19 project. So there's no -- it doesn't meet the nexus
20 criteria or inform development of license conditions.

21 If you're suggesting that you can put a condition
22 on Don Pedro which is going to control the flows under
23 any circumstance at La Grange, the Districts are free to
24 modify their operations at La Grange.

25 And even to the extent that flows do go over the

1 spillway at times because it exceeds the gate capacity or
2 the powerhouse capacity or the MID gate capacity or the
3 tunnel capacity, they can be modified in the future.

4 That's still a capacity issue at La Grange. It
5 depends on the La Grange configuration, changes that are
6 made at La Grange. All of those are not subject to FERC
7 jurisdiction.

8 FERC does not approve those. They don't seek to
9 approve those. We don't file them with FERC. So those
10 are free to change in the future.

11 And that's direct effects of La Grange because the
12 La Grange operations affect that immediate reach below
13 there, depending on the configuration of the project
14 currently and possibly in the future, which FERC is
15 not -- cannot dictate.

16 MR. BOWLER: Just to make sure I'm a hundred
17 percent clear, Jim, so the La Grange reach, that between
18 the base of the dam and the gauge, in which the staff is
19 proposing cumulative effects, only to address cumulative
20 effects that are the accumulation of La Grange with other
21 factors, with Don Pedro and whatever other --

22 MR. HASTREITER: Based on what we know right now
23 on how La Grange is operated and how Don Pedro is
24 operated.

25 MR. BOWLER: And then below that gauge where the

1 flow that's released from La Grange comes back together,
2 the Commission staff is looking at all effects,
3 cumulative --

4 MR. HASTREITER: All effects.

5 MR. BOWLER: -- indirect and direct.

6 MR. HASTREITER: That's right. Because there may
7 be a time when the Districts aren't diverting into the
8 canals, and the releases from Don Pedro are equal to the
9 gauge at La Grange.

10 And in that case it's -- I don't know if you
11 brought it up, that essentially -- or John did maybe --
12 that La Grange is invisible.

13 And that same evaluation was done at Merced by the
14 Commission after, you know, the second go-around.

15 MR. CRAVEN: Could there be operational scenarios
16 at Don Pedro that would impact flows to the base of the
17 dam at La Grange? In other words, flows over the dam or
18 whatever, backwater impacts from releases over spillways
19 and so forth that might push fish, for example, or
20 attract fish back to the dam base?

21 MR. HASTREITER: Well, again, that would depend on
22 the operation at La Grange, not what happens at
23 Don Pedro, because, I mean, La Grange totally changes the
24 influence of flow in the river.

25 MR. CRAVEN: Okay.

1 MR. WANTUCK: Can I ask for a clarification when
2 we're talking about operations of La Grange Dam?

3 To my knowledge, the primary modes of operation
4 are whether or not either the Turlock or Modesto
5 irrigations are taking place and to what degree they are,
6 and also water could -- in non-irrigation demand times
7 water could spill or does spill over the dam, and the
8 only other alternative is for water -- and this is a
9 normal mode of operation -- to be passed through the
10 unlicensed hydropower facility and discharged downstream.

11 So there really are two modes of downstream --
12 maintaining downstream flow, that's over the top of the
13 dam and through the unlicensed power plant, and that's
14 what I understand to be the major operations that we're
15 talking about.

16 The Districts are not always diverting.
17 Mr. Hastreiter just called it sometimes La Grange becomes
18 invisible, at which time Don Pedro is the primary
19 determinant of instream flow and conditions downstream.

20 And finally, just to make one more point, this
21 whole discussion reminds me of an analogy here where most
22 people have direct experience.

23 If you go and you're taking a shower in a house
24 and you have good water pressure and nice, hot water,
25 because someone turns on the faucet in the bathroom and

1 diverts a certain amount of water out of that, if you
2 want that pressure to be maintained, you have to go back
3 to the source, the pump, and turn up the pressure, if
4 that's a problem.

5 This is a direct analogy for what's happening at
6 Don Pedro. It is the source water. It's the pump. If
7 you siphon some water off at some other point, you have
8 to make it up at the source. This is the direct impact
9 downstream that Don Pedro is exerting on the Lower
10 Tuolumne River.

11 MR. BOWLER: John, can you respond to the
12 operational?

13 MR. DEVINE: Yes. Thank you.

14 With respect to the operational aspects of that,
15 there may be times when little water is being diverted at
16 the -- by La Grange Dam, but all the decisions about
17 where, how to pass the water downstream safely at
18 La Grange are still made based on the condition of
19 La Grange area's outlet works and discharge gates at
20 La Grange. So it just -- there's not just two
21 possibilities; there's many possibilities.

22 There's La Grange, in addition to, you know,
23 whether there's water being diverted at MID or TID, you
24 have sluice gates adjacent to the powerhouse at -- on the
25 TID side of the river, the Turlock Irrigation District

1 side of the river. You have the powerhouse, the small
2 powerhouse on the Turlock side. You have -- on the MID
3 or Modesto Irrigation District side there is a gate
4 that's at the abutment that passes about 200 cfs. And
5 then there's the MID gates adjacent to the canal just
6 downstream from their tunnel.

7 There's a whole variety of ways that the La Grange
8 operators can decide what the best way at the -- at that
9 time, depending on the condition of the facilities, the
10 amount of flow, will pass that water downstream. So
11 there's many more than two possibilities, either the
12 powerhouse or over the spillway.

13 The question is, the Districts want to make sure
14 they do it safely, they control it as best they can.

15 And again, this could change. They could expand
16 the gates in the future. They could increase or decrease
17 spillway capacity. Those are all decisions about how
18 best to control water at La Grange.

19 So there's much more to it than just, gee, it's
20 either the powerhouse or it's over the spillway. And
21 those are decisions that are made at La Grange every day
22 based on the condition of the facilities and the amount
23 of water that's being diverted and then passed.

24 MR. WHITE: I guess sort of a basic question. You
25 mentioned there are a-hundred-some-odd studies being

1 proposed below -- for the Tuolomne below La Grange,
2 various study reaches, and then I'm hearing that the
3 shadow of La Grange, immediately below La Grange to the
4 La Grange gauge is going to be evaluated under a
5 cumulative effects basis.

6 Are there any studies proposed for performing the
7 tasks that would inform these sorts of conditions in the
8 La Grange shadow?

9 MR. DEVINE: Can I?

10 Just for clarification, David, the 150 studies
11 that I referenced are actually prior studies from 1992 to
12 2011 have been done under the current license, so those
13 have all been filed with FERC, monitoring studies, fish
14 studies of the Lower Tuolomne River. Then there are
15 studies that are from 1971 to 1992.

16 Any estimate, Noah, of how many?

17 I mean, dozens and dozens.

18 MR. HUME: Many dozens.

19 MR. DEVINE: Dozens of studies over this time that
20 have been -- that are in the record under the existing
21 license and can be used to form the foundation for any
22 sorts of analysis that would be done.

23 That includes information and studies that have
24 been done between the La Grange gauge and upstream to --
25 towards the La Grange project vicinity that Jim is

1 defining.

2 Some of those are stranding studies, I think, from
3 19 -- well, yeah, spawning surveys, stranding studies.
4 They're in the record. That area has been habitat,
5 mapped for habitat.

6 So these -- this is all existing information.
7 It's very robust. It's solid information that's been
8 filed with FERC and open for review prior to filing with
9 FERC and it's -- that database is fully available.

10 MR. HUME: I want to offer just a -- this is Noah
11 Hume, Stillwater Scientists.

12 So the richest source of information begins at
13 kind of the La Grange gauge and down. And there have
14 been work done upstream of that to a lesser degree, but
15 there are examples of that in, you know, surveys and
16 mapping and those sorts of things.

17 To my knowledge, historical spawning surveys
18 typically began in the vicinity of the La Grange gauge or
19 just upstream of that, and it's really only been in the
20 past several years, perhaps dating back to about 2005,
21 Fish & Game biologists started noticing fish were
22 spawning in the tailrace of La Grange Dam, and then that
23 became a regular survey location for them from that point
24 forward, but prior to that period, Fish & Game never
25 searched that area, so it's never been mapped as spawning

1 habitat in earlier history.

2 MR. DEVINE: And just one other clarification for
3 David. Again, the studies, we're proposing about
4 20 studies under the relicensing proceeding on aquatic
5 and water resources for the Lower Tuolomne River. Some
6 of those will involve information, development of
7 information near and somewhat above the La Grange gauge.

8 MR. THOMPSON: Just real briefly, speaking to the
9 existing information and the many studies that Mr. Devine
10 refers to, and this isn't NMFS's words, these are the
11 Commission's words in a comment letter on the ten-year
12 report, summary report issued in 2005, which summarized
13 all the studies Mr. Devine mentioned, if I could read it
14 real briefly:

15 "Staff stated that for the most of the
16 required monitoring the data were
17 insufficient to reach any valid conclusions
18 about the effects of the modified stream
19 flow releases and restoration efforts on
20 the fisheries resources of the Tuolomne
21 River. Staff added that some of the
22 monitoring efforts were improperly designed
23 or executed and could not, therefore,
24 produce data that would allow valid
25 conclusions."

1 So I want to point out that this large base of
2 information, FERC staff has determined that it was not
3 suitable for use in determining how to modify stream flow
4 releases.

5 MR. DEVINE: That's worth a lot of comments.

6 Noah, do you want to start?

7 MR. HUME: That's very much withdrawn from the
8 context by which the ten-year summary report was
9 constructed, which was to answer specific questions about
10 population goals, resiliency.

11 There were very particular questions laid out in
12 the -- what was called the FERC settlement agreement
13 signed in '95 and included in the 1996 FERC order. That
14 ten-year report was answering very specific questions.

15 So just to say -- I don't mean to be too sensitive
16 about insufficient data and whatnot, but, you know,
17 information not being sufficient to reach valid
18 conclusions, it was with regard to very targeted
19 questions.

20 And much of the point of that ten-year report was
21 insufficient time has elapsed in order to assess the
22 effects of various changes in flows, habitat restoration,
23 things of that nature, not, you know, no information or
24 study is, you know, valid or for any other purposes ever
25 kind of a thing.

1 MR. DEVINE: And that was insufficient time
2 between the settlement agreement and the time of study
3 that Noah's referring to. That's not -- that's taken out
4 of context.

5 It was not -- if the question that was being asked
6 wasn't "Is this information useful for cumulative effects
7 analysis?" I think the answer would be completely
8 different.

9 It's very detailed information. It has a -- it
10 can serve many purposes.

11 The specific purpose that Mr. Thompson's referring
12 to there, as Noah said, is around a very specific
13 detailed issue. It has nothing to do at all with its
14 suitability for cumulative effects analysis.

15 MR. BOWLER: I want to hear this first -- or did
16 you have something?

17 MR. HASTREITER: No. Go ahead.

18 MR. BOWLER: You guys are requiring the
19 information about the La Grange complex.

20 MR. HASTREITER: Right.

21 MR. BOWLER: And you're requiring -- and then
22 there's also downstream temperature studies. So what
23 we're talking about now is other studies that have been
24 done, and the question -- you're raising the issue of
25 whether the impacts -- you're proposing that there's not

1 enough existing information to understand the indirect
2 and direct impacts of Don Pedro?

3 MR. THOMPSON: No, I think the comment that we're
4 hearing a lot about, the most studied river, I'm just
5 pointing out FERC's view of much of the information that
6 was collected, they did not find that they could amend a
7 license based on that information when they were faced
8 with it. It's FERC's staff's view, not ours.

9 And I just want to add, with all these studies I'm
10 not sure there were any -- were there stranding studies,
11 for example, in what we're now calling the La Grange
12 shadow? If there were, this is the kind of information
13 we might need.

14 MR. HASTREITER: You know, and I picked up on
15 Larry's comment concerning staff having made those
16 conclusions, but yet they didn't point out exactly all
17 the shortcomings.

18 I agreed with what Noah's saying. This was very
19 specific points. But to try to get at Larry's concern, I
20 was comfortable with the Districts' study W&AR-5 where
21 they're going to go through all the existing information,
22 and I'm assuming -- my expectation is the parties are
23 going to discuss that information and determine what's
24 useful and what isn't, and if there's information that
25 isn't useful, for whatever reason, it gets discarded. So

1 I think we're going to address that issue as well.

2 MR. BOWLER: At this point do you have any other
3 questions about the impacts or effects?

4 MR. CRAVEN: Just one question to NMFS, I guess.

5 Is that your understanding of the -- what did you
6 call it? The La Grange shadow, from the gauge up to the
7 base of the dam? That's the cumulative impact analysis
8 location or the location for the cumulative impact
9 analysis? Is that what your understanding is?

10 MR. THOMPSON: It's confusing to us as well.

11 You're talking about the cumulative impact
12 analysis of the La Grange facilities or --

13 MR. CRAVEN: No, no.

14 MR. THOMPSON: -- the cumulative impact analysis
15 of the Don Pedro?

16 MR. CRAVEN: Don Pedro. Yeah. Don Pedro.
17 They're doing the direct impact analysis, as I understand
18 it, from the La Grange gauge downstream to the
19 San Joaquin, direct and indirect impacts and so forth.
20 But for the cumulative effects analysis it is for the
21 La Grange gauge upstream to the dam, the La Grange Dam.

22 MR. THOMPSON: As well as points downstream.

23 MR. CRAVEN: Yeah. But the La Grange complex,
24 though. So is that -- is there a problem with that, I
25 guess? I'm trying to figure out if there's a problem

1 with that.

2 MR. THOMPSON: Well, maybe, because if we use the
3 example here of this redd dewatering, but we could have
4 used another example and that's the temperatures, river
5 temperatures that occur all the way down to the
6 confluence of the Tuolumne and the San Joaquin, those
7 would also be effects of Don Pedro in conjunction with
8 La Grange.

9 Clearly, if you fix the diversions at La Grange,
10 more water released at Don Pedro would make the river
11 colder farther downstream.

12 So it seems to me there's an effect of -- there's
13 a cumulative effect of these two facilities on downstream
14 temperatures.

15 So I don't think we can just accept a cumulative
16 effects assessment from the base of La Grange Dam to the
17 gauge. I think it would have to continue down with
18 respect to temperature.

19 MR. HASTREITER: And that's what the Districts are
20 proposing to do, so that's part of their study proposal
21 on water temperatures.

22 My guess is, and what I recall is, I doubt the
23 water temperature released from Don Pedro project and the
24 water temperatures immediately below La Grange you're
25 going to find any sort of difference any time of the

1 year.

2 MR. BOWLER: Okay.

3 MR. WOOSTER: John Wooster with NMFS.

4 But that might -- that could be very dependent on
5 how much water is coming through the different conduits.
6 If you have, you know, a trickle over in the spawning --
7 or the powerhouse channel, if the powerhouse went
8 off-line, you're not going to have the water temperature
9 in that channel that you're getting out of Don Pedro.

10 MR. HASTREITER: And I agree. And that was
11 pointed out in the Cal Fish & Game survey. But again,
12 that gets to how the District operates La Grange.

13 MR. DEVINE: That's a direct effect of La Grange.

14 By the way, I just wanted to point out that this
15 one example everybody's using is one in 45 years. One
16 example in 45 years. And it was -- it's been addressed
17 by modified operations at La Grange. Has nothing to do
18 with Don Pedro. It's been fully addressed by a change in
19 operations at La Grange Dam.

20 MR. WOOSTER: How can you state that the stranding
21 of the redds that occurred that year only happened one in
22 45 years when Noah pointed out that Fish & Game didn't
23 start looking for spawning there until 2005?

24 MR. DEVINE: There's been no --

25 MR. BOWLER: Let's move forward, okay, because --

1 MR. WOOSTER: Can I just have -- Noah, I think,
2 was going to answer this question a little bit ago about
3 whether there were any stranding studies in the La Grange
4 shadow.

5 MR. BOWLER: I have a question for Noah, which
6 is --

7 MR. WOOSTER: I think he was going to go there.

8 MR. BOWLER: -- whether the more recent studies
9 address some of the -- you said there's more activity
10 in -- looking in the stretch below La Grange to the gauge
11 since -- what did you say? 2005 on?

12 MR. HUME: Yeah. A few geographic locations. I
13 think people are pretty familiar, I think. So base of
14 La Grange Dam, for our purposes we're going to call 52.0,
15 the foot of the tailrace we'll call 51.8, and then the
16 gauge itself may be 51.5.

17 There's been a lot of confusion about the labeling
18 of locations in terms of the numbering systems of
19 spawning riffles and things like that.

20 At the completion of Don Pedro Dam there was some
21 channel reconstruction in the river. There was a --
22 there was some vestigial gravels that were small bars up
23 somewhere in the vicinity of the tailrace.

24 The Districts labeled -- or initially didn't
25 consider that habitat and began their spawning surveys

1 further downstream. They later relabeled it as the
2 A section, and A-1 referred to a small riffle downstream
3 of the tailrace, upstream of the gauge.

4 There was small amounts of spawning recorded at
5 different times in that A-1 riffle by the District
6 surveys. Those riffles were destroyed in the 1997 flood.
7 So moved off. So there is some shallow area there, but
8 no spawnable gravel.

9 The A-3 riffle --

10 MR. BOWLER: Let me cut you off, because it's more
11 detail --

12 MR. HUME: Too much?

13 MR. BOWLER: -- than we can digest right now.

14 MR. HUME: So there is -- in other words, there is
15 activity that goes on up there by Fish & Game, by the
16 Districts. The spawning surveys are summarized in a
17 report called -- from the annual FERC report 2000-6. It
18 summarizes all of the stranding survey history,
19 locational. Those are mostly foot surveys following
20 planned or unplanned ramp-downs of -- at La Grange to the
21 lower river. And so there's documentation of incidences
22 of stranding that occurred in that reach.

23 MR. BOWLER: Okay.

24 MR. HUME: So there is plenty of information.
25 There's mapping and things like that.

1 MR. BOWLER: Let me ask, thinking downstream of
2 the gauge where the FERC staff has identified that
3 they'll be carrying out cumulative direct and indirect
4 impacts analysis in the context of the study process
5 requiring information to support those analyses, is there
6 a dispute about the information that's being required for
7 that purpose? Direct, indirect and cumulative effects
8 analysis down below the gauge?

9 MR. CRAVEN: From the gauge to the San Joaquin?
10 Is that what --

11 MR. BOWLER: Yeah. As Jim said earlier, it's
12 basically between the gauge and the base of the La Grange
13 Dam.

14 Is that correct?

15 MR. HASTREITER: That's how I read this issue.
16 You know, and it's described as the vicinity of La Grange
17 Dam, and I wasn't really sure what that meant.

18 And, you know, through a process of elimination,
19 there are anadromous fish above La Grange, so I just
20 assumed it was in that reach from La Grange Dam where
21 there are split channels down to the gauge.

22 And reading in the Cal Fish & Game letter, it
23 sounds like the split channels really only occur for
24 about a quarter mile.

25 MR. HUME: That's right.

1 MR. HASTREITER: And then it's one channel down to
2 the gauge.

3 MR. HUME: Right. And that really begins this
4 spawning reach right at that first constriction there,
5 what's called Riffle A-3 by the Districts.

6 MR. THOMPSON: I would just respond that it's --
7 the FERC study plan determination is pretty brief on
8 this. And the Panel asked for identification of what
9 this information would be that would be collected.

10 MR. BOWLER: That's my next line of questioning.
11 Right now I just want to know where the dispute
12 lies geographically and I want to confirm that it's --
13 you're okay generally -- if we can get comfortable with
14 what information that's being required.

15 MR. THOMPSON: Well, I think the debate over
16 whether --

17 MR. BOWLER: What Jim has said the intention of
18 FERC staff is acceptable down below the gauge.

19 MR. THOMPSON: I think that the effects are
20 evaluated. I'm not sure if they're called direct,
21 indirect or cumulative. Those labels may not be as
22 important, as long as the effects are assessed.

23 One thing that we will say, generally speaking,
24 about FERC's environmental assessments is often
25 cumulative effects are sort of shoved to a third tier and

1 sort of given very short analysis. In fact, in many
2 cases we see cumulative effects mentioned and that's the
3 analysis. They're essentially identified, but the
4 analysis isn't there. So if we get a good analysis, I
5 think we would be okay with that.

6 MR. BOWLER: So the second question I have is, I
7 think what we've verbally heard from both -- we've heard
8 in writing in the study determination and the response to
9 the Panel's request for clarification and then from Jim
10 today, is there a disagreement over the information
11 that's being requested or is it a disagreement over sort
12 of the surety of what you're getting or the clarity of
13 what you're getting? I mean, you don't see anything
14 that's counter to what you want; it's just that you're
15 not quite exactly sure of what you're getting.

16 MR. THOMPSON: I think clarity is one thing.

17 I want to add one thing about scope. I think FERC
18 has scoped this project into -- to the delta, to the
19 confluence of the San Joaquin River and the delta, so I
20 think this cumulative effects analysis would have to go.
21 I mean, that's what we recommended as well.

22 And this is because there are studies -- we've
23 cited them in our filings -- that show that this project
24 can affect delta conditions, San Joaquin River flows and
25 delta conditions. It was a FERC-commissioned study we

1 cited. So I just want to clarify, on scope it would be
2 all the way to the delta, and more clarity would
3 certainly help.

4 MR. BOWLER: Okay. As far as scope, are the
5 existing -- when you're talking about cumulative effects
6 on that scale, aren't the existing studies primarily what
7 you would rely on? Isn't there pretty ripe literature
8 for that level of analysis?

9 MR. THOMPSON: I can't answer that. I would have
10 liked to have seen the identification of PAD information
11 as you did.

12 MR. BOWLER: Okay. Back to the clarity question.

13 So FERC has proposed -- or FERC staff has proposed
14 that they might recommend to the Director --

15 MR. HASTREITER: Not "might."

16 MR. BOWLER: -- will recommend to the Director --
17 tell me again. I know it's in here, but to provide more
18 clarity.

19 MR. HASTREITER: To provide all existing
20 information that they're aware of and that they have on
21 NMFS 1, Study 1, Element 3 and 6.

22 And that request also goes to the agencies. In
23 our scoping document we asked for information. I had no
24 idea that Cal Fish & Game had done spawning surveys in
25 the reach between La Grange and the gauge. I had no

1 idea. And I did a search and found some documents of
2 those spawning surveys.

3 So we're pointing the finger at the Districts to
4 provide that information, but we'd also like the agencies
5 to provide anything they have as well.

6 MR. BOWLER: So what would bring you clarity
7 beyond that, what the staff has requested?

8 MR. WOOSTER: I do have some questions regarding
9 the hydrology, but I'm deferring those until we get to
10 the hydrology study, which is the question of providing
11 flow data under NMFS Study 4, so I'm deferring that.

12 MR. HASTREITER: Stephen, may I just add one other
13 thing?

14 MR. BOWLER: Yeah.

15 MR. HASTREITER: I'm hoping this will make Larry
16 and FERC a little more comfortable. You know, and you've
17 heard this before, but our ILP study process doesn't just
18 start and end. So the Districts will provide this
19 existing information in the initial study report, we'll
20 look at it and you'll look at it, and we'll need to
21 decide, you know, if it's sufficient to describe what's
22 going on between La Grange and the gauge. And then if
23 it's not, we need to address it in some way.

24 MR. BOWLER: As I understand it, the outstanding
25 dispute issues here are, one, that the Commission staff

1 intends to collect the information, require the
2 information for only cumulative effects from La Grange to
3 the gauge and that, in addition, and that the NMFS staff
4 wants more clarity on what information is available and
5 being required under these determinations. Those are the
6 two fundamental disputes that the Panel can deal with.

7 MR. THOMPSON: I think so, because I think I
8 understood that Jim is saying existing information is
9 what will be provided, but there would be no study of
10 La Grange effects performed. Is that correct?

11 MR. HASTREITER: At this point, that's our
12 intention. And it goes back to the cumulative effect as
13 well as how those effects can be addressed by the
14 applicant at Don Pedro. And from our perspective,
15 they're addressed at La Grange and how La Grange has
16 operated. Now, when we get this information, maybe it's
17 going to show something different than that.

18 MR. DEVINE: Our view is very consistent with
19 that. It's that studying direct effects of La Grange
20 does not just meet the bare, base requirements of
21 Criteria 5. It would not inform licensed conditions at
22 Don Pedro. La Grange is not -- a nonproject facility,
23 not subject to FERC's jurisdiction. FERC, under Federal
24 Power Act, can't impose conditions on La Grange. So if
25 there were direct effects to La Grange, the Districts

1 will still operate La Grange in the current time and in
2 the future in accordance with the way it feels it needs
3 to operate La Grange to be safe and to meet its project
4 purposes, which is diversion of water at that location,
5 so . . .

6 MR. BOWLER: Let me just ask -- we got that, and
7 we're clear on your position on that.

8 MR. HASTREITER: Speak up, Stephen.

9 MR. BOWLER: I'm saying we're clear on the
10 position that John stated.

11 What I wanted to ask is, is there anything that
12 you understand about the dispute that I've
13 mischaracterized in those two items being the main items
14 under dispute? I know it's between the two agencies, but
15 you've been in the game, so . . .

16 MR. DEVINE: No, I think we understand it. And
17 our thoughts on it are there's a rich source of
18 information, existing information about this area and
19 these cumulative -- for this to serve and inform the
20 cumulative effects analysis; plus, we have the operations
21 model, which we'll talk about later, but, of course, the
22 operations model deals with flow, and there will be
23 that -- that under all future scenarios will at least
24 deal with what flow is being diverted, what comes out of
25 Don Pedro, what flow is diverted at La Grange and then

1 what goes downstream, so that's additional information
2 that will inform that cumulative effects analysis.

3 MR. BOWLER: Okay. I'm going to wrap this one up.

4 Are there any last comments from FERC staff?

5 MR. HASTREITER: I don't have anything.

6 MR. WANTUCK: I just wanted to reiterate that
7 Article 37 of the existing license has requirements for
8 Don Pedro to maintain its flows downstream of La Grange
9 Dam. It is a source water regardless of whether or not
10 there are any diversions taking place or the magnitude of
11 those diversions or whether or not the water is put
12 through any number of permutations that were discussed in
13 terms of gates, canals, unlicensed discharges from the
14 power plant and so on.

15 Don Pedro must maintain the conditions downstream
16 according to current license conditions. This seems to
17 me to be a direct impact, if it fails to do so,
18 downstream of the dam. So regardless of what goes on at
19 La Grange, Don Pedro must compensate and provide enough
20 source water to meet the license conditions downstream.

21 MR. CRAVEN: Downstream of La Grange?

22 MR. WANTUCK: Downstream of La Grange and further
23 down in the system through the existing compliance
24 points. We are seeking in this licensing for the
25 Commission to take a hard look at whether or not those

1 instream flows and temperature compliances are sufficient
2 for the next license.

3 MR. CRAVEN: That's one of the license conditions
4 now? Is that what you're saying?

5 MR. WANTUCK: Yes. Article 37.

6 MR. CRAVEN: If that's one of the license
7 conditions now, why isn't the project area for direct
8 impacts all the way up to the base of La Grange Dam? I'm
9 asking.

10 MR. HASTREITER: Because La Grange -- you know,
11 we've beaten this one to death quite a bit, but the
12 effects from La Grange Dam down to the gauge are
13 cumulative because La Grange affects those releases.

14 The Commission's minimum flow requirement, the
15 Districts have to make sure they release enough water up
16 at Don Pedro to meet the requirement at the gauge, and
17 essentially the La Grange project is invisible for that
18 minimum flow requirement.

19 MR. BOWLER: Very quickly.

20 MR. WANTUCK: Which is an operation of Don Pedro
21 in order to make it so, and contingent on the release at
22 Don Pedro.

23 MR. DEVINE: What the FERC license specifically
24 requires is a flow to be met at a point downstream of
25 La Grange. What it specifically does not require it

1 tells the District how to operate La Grange Dam.

2 MR. WANTUCK: Understood.

3 MR. DEVINE: It's not subject to FERC's
4 jurisdiction. It purposely left that completely out of
5 it, because it was not under its authority under the
6 Federal Power Act to direct the District how to operate
7 La Grange Dam. What's required is X amount of flow
8 downstream.

9 MR. BOWLER: Thank you. We're a little behind,
10 but let's take about a 15-minute break. We'll come back
11 at ten after 11. And since we're doing 15 minutes,
12 please be back to start promptly.

13 (Recess taken, 10:55 to 11:14 a.m.)

14 MR. BOWLER: Let's resume, please.

15 At this point I think we're just about ready to
16 move on from Study Request 1. As we said in our opening
17 statement, Elements 4 and 5 are beyond the Panel's
18 purview, and so I don't think there's any technical items
19 remaining on Items 4 and 5.

20 On Item 6, we've pretty much wandered into that in
21 our discussion of Item 3. The Panel is comfortable.
22 We'll move on from that.

23 During the break the Panel was asked by Fish &
24 Wildlife if they could ask a couple clarification
25 questions, and we could use some more clarification, too,

1 so we will allow that.

2 If there's time later, we'll allow additional
3 questions based on the time available, but at this point
4 we're happy to have the input.

5 MS. WILLY: Thank you. Alison Willy, U.S. Fish &
6 Wildlife Service.

7 The question is, I'm familiar with working with
8 cumulative effects analysis in various types of
9 documents, and there's two ways that I commonly see
10 cumulative effects analysis, and one is cumulative
11 effects as sort of an unrelated effect, it really has
12 nothing to do with the action under consideration, it
13 just happens to be in the action area that we're looking
14 at, and the other way of looking at cumulative effects is
15 when there's two effects that are combined, we look at
16 their combined effects in the system to see what the
17 combined effects are. And so the same term "cumulative
18 effects" is used in two very different ways.

19 And I wanted to ask the Panel, what is your
20 understanding of how -- of which type of cumulative
21 effects analysis FERC would be considering for the area
22 between La Grange and the gauge?

23 MR. BOWLER: Well, the Panel is still working on
24 the issue of all of these types of effects and what
25 analysis is appropriate in each region.

1 MR. HASTREITER: If I could comment?

2 MR. BOWLER: I'd ask the FERC staff what they
3 intend.

4 MR. HASTREITER: It would be combined. I mean, we
5 can't ignore what's going on at La Grange. Obviously,
6 there's an effect at La Grange.

7 MR. CRAVEN: Could you speak up, please?

8 MR. HASTREITER: Yes. Obviously, there's an
9 effect at La Grange in how it's operated that we need to
10 consider the direct effect of Don Pedro and then the
11 cumulative effect below La Grange of Don Pedro, so it's
12 combined.

13 MS. WILLY: So if I could restate it, you'll look
14 at the combined effect of Don Pedro and La Grange
15 downstream of La Grange?

16 MR. HASTREITER: Yes.

17 MS. WILLY: Great.

18 MR. HASTREITER: Is that what you wanted to hear?

19 MS. WILLY: I just was not sure. Things change.
20 And I'm familiar with both.

21 MR. CRAVEN: And when you say downstream of
22 La Grange, is that from the dam or is that below the
23 gauge?

24 MS. WILLY: Oh, I'm sorry. Downstream of the dam.

25 MR. CRAVEN: Okay.

1 MR. HASTREITER: It's both.

2 MR. CRAVEN: Okay.

3 MR. BOWLER: John, briefly.

4 MR. DEVINE: There is a Section 6 provided in the
5 revised study plan that detailed out the cumulative
6 effects analysis and cumulative effected resources. We
7 received no comments, adverse or otherwise, on that
8 section of the revised study plan.

9 I think it paints out pretty clearly what the
10 cumulative effects assessment and resources are
11 downstream of La Grange, La Grange, reach of La Grange.

12 And I thought the scoping document, too, did a
13 good job of saying what -- identifying what the
14 cumulative effect of resources were and the geographic
15 scope of those cumulative effects analysis.

16 MR. BOWLER: And this is Section 6 of . . .

17 MR. DEVINE: Our revised study plan. The
18 Districts' revised study plan was a preliminary
19 assessment of cumulative effects. And there were no
20 comments provided on that, negative or positive.

21 MR. WOOSTER: Which specific study within the
22 packet?

23 MR. DEVINE: Revised Study Plan Section 6.

24 MR. WOOSTER: But not part of a specific technical
25 study?

1 MR. DEVINE: No. It was a preliminary assessment
2 of cumulative effects, because we provided that in the
3 PAD as well and then had discussions of that during
4 various meetings, brief discussions, and so we updated
5 that in the revised study plan.

6 MR. BOWLER: How does it comport with Jim's
7 description?

8 MR. DEVINE: Yeah, it's just -- very well, I
9 think.

10 And I would only say to Alison's comment that
11 there's -- it identifies all of the factors that are
12 cumulative affecting the resources in the Lower Tuolumne
13 River, not just La Grange and not just Don Pedro, but
14 Hetch Hetchy operations, gravel, legacy gravel and gold
15 mining in the river, channel modifications to, you know,
16 the channel itself, predation, other kinds of issues, so
17 it's truly a cumulative analysis of the resources that
18 are affected by all of those factors.

19 MR. BOWLER: That would go towards your second
20 definition, I think.

21 MS. WILLY: Well, to me that actually sounds a
22 little bit like the first definition, when you look at
23 all the things that happen within the action area and
24 say, oh, yes, all these things are happening, too.

25 MR. BOWLER: I had them in the wrong order, but

1 that's -- you know.

2 MS. WILLY: Yeah. Maybe I can -- I'm sorry. It's
3 this idea of whether we're weaving the two actions
4 together and looking at those, and that's what I was
5 wondering. Sounds like the answer is yes.

6 MR. BOWLER: Mm-hmm.

7 Okay. On to NMFS Study Request 2, which only
8 deals with Element 2.1. And this is about simulation
9 modeling of the hydroelectric project water balance, the
10 operations model.

11 NMFS requested a HEC-ResSim model, and the
12 District proposed an Excel-based model. FERC accepted
13 the Excel-based model, but NMFS mainly disputed the
14 sampling, the issue of sampling frequency of accretion
15 and depletion below the Don Pedro project.

16 NMFS requested additional nodes downstream,
17 upstream of the Dry Creek confluence and others as
18 specified in their comments.

19 We asked FERC for a clarification on how many
20 nodes were required in the operations model and where
21 they were to be located, and Commission staff responded
22 that the plan required six nodes: Don Pedro reservoir,
23 Don Pedro powerhouse, Don Pedro Dam, City and County of
24 San Francisco upstream reservoirs, La Grange dam, and
25 Tuolumne River at Modesto, and at least one additional

1 node in the Lower Tuolumne at the confluence with the
2 San Joaquin River.

3 They also said that depending on the results of
4 the accretion and depletion measurements in the lower
5 Tuolumne, they may require additional nodes after the
6 first year study report.

7 They also stated that the study plan determination
8 required accretion and depletion measurements during the
9 time period of one study year but did not specify the
10 exact number of measurements and that they may require
11 the Districts to consult with NMFS on revising the
12 Districts' proposed plan W&AR-2 to set a specific number
13 and timing of measurements and file a revised plan for
14 Commission approval.

15 That's where things stood up until your most
16 recent filing. What's outstanding in the dispute at this
17 point?

18 MR. WOOSTER: I think that's a fair
19 characterization of where it stands, that there's still a
20 dispute over the number of nodes in the water ops model
21 and a dispute over the -- or I guess maybe a question of
22 clarity over the number of measurements needed to
23 characterize accretion or depletion terms would still be
24 remaining issues.

25 MR. BOWLER: Did I characterize the dispute

1 appropriately, first?

2 MR. FARGO: Yeah. I mean, I believe there's still
3 a dispute over the number of nodes. It's kind of tough
4 to get into the accretion and -- it being a dispute when
5 you look at the NMFS 4. I really can't talk about NMFS 2
6 without looking at NMFS 4, which is the Element 5, which
7 is the element that talked about the possibility of
8 needing additional measurements. So would you like to
9 talk about these two together?

10 MR. WOOSTER: Jim's right. The measurement was
11 originally NMFS Study 4.

12 MR. BOWLER: Okay. So there's -- the modeling and
13 the measuring, they're together?

14 MR. WOOSTER: The measuring was in the hydrology
15 request, but that information was needed in the water ops
16 model.

17 MR. BOWLER: So are we mixing apples and oranges
18 or are we talking about two kinds of apples here?

19 MR. FARGO: Well, let me just give you my take
20 when I was making the determination. I know this is kind
21 of difficult.

22 Every time we have a modeling exercise, try to
23 come up with a model like this, of course, principally
24 the model is going to be looked at to come up with and
25 study how various operations of a project are going to

1 affect reservoir elevations and then downstream parts of
2 the river channels that are affected, and you always have
3 to be constrained by the fact that where the gauges are,
4 because those are the long-term information sources that
5 you're going to need.

6 And here NMFS Element 4 -- or I'm sorry -- NMFS
7 Request 4, Element 5, where it got into this accretion
8 and depletion, it seemed to get to a point and express
9 their frustrations at the fact that in 52 miles there's
10 only two gauges, the Modesto gauge and La Grange gauge.

11 And the wording says that, well, if there's
12 existing information available, then maybe the Districts
13 can use that to model, citing from the last paragraph
14 under Element 5 in their Study Request 4.

15 MR. BOWLER: Okay.

16 MR. FARGO: If there's not existing information
17 available, then additional measurements likely might be
18 necessary. This is the kind of language that was in
19 Element 4.

20 It goes on to say that maybe you'll need four
21 sites at five levels and/or time periods. So I guess you
22 could -- even by their own element, you could go out
23 there and measure the discharge, exact same discharge
24 five times.

25 I mean, my question when looking at this was what

1 would be the purpose. You know, you've got the fortunate
2 situation that the only tributary in that whole stretch,
3 Dry Creek, is already recorded at the Modesto gauge, so
4 you've got the flows from Dry Creek already recorded.

5 Also, going down from Modesto to the confluence,
6 you've got next to no intervening drainage area, so
7 you're not going to be expecting all that much flow.

8 Now, would you be seeing something in that
9 stretch? Sure. I mean, there's a lot of -- I've looked
10 at one research report and there's a bunch of small
11 diversions for irrigation, those types of things, but the
12 fact of the matter is you don't have a gauge and you're
13 not going to duplicate a gauge-type information within a
14 FERC study period.

15 I'm sure the District wouldn't mind a 30-year
16 study on data down in that area. You'd come back with
17 something comparable to what's at Modesto and La Grange,
18 but, I mean, it's -- you're not going to get anything
19 within a one study year or two.

20 So I did look at what the District proposed, to go
21 out there a single time and do a few measurements to see
22 if there's anything out there that would make a tweak in
23 their model so that the flow at the confluence might be
24 whatever the flow is at La Grange plus some fixed number,
25 because that's the only change or modification you could

1 possibly hope to get out of these accretion measurements
2 that NMFS is saying might be likely.

3 But between the Districts that went out one time
4 and NMFS saying, well, maybe it would take four, but NMFS
5 also says specifically right in their requirement that
6 "the number of flow-sampling sites and the frequency
7 should be determined in consultation with ILP
8 participants."

9 And so I sort of booted to that. I just said,
10 okay, go out there, these are the nodes, add a node at
11 the confluence, it could be the same exact flow as at
12 Modesto or there could be some small intervening amount,
13 and then, through the normal consultations that are going
14 to be involved in these model workshops that are already
15 planned in the study plan, then determine if there's a
16 need to go out. If there is a need to go out, please
17 talk about the purpose of what that need is supposed to
18 accomplish and then how many times. That's what I got.

19 So that's why it's read like it does in the study
20 plan determination.

21 MR. BOWLER: So the goal of the effort is to come
22 up with a way to estimate the flow in between the gauges,
23 the minor -- potentially minor change.

24 MR. FARGO: To do the best you can, because
25 obviously you're only going out there, even if you went

1 out there every day, which is nobody's plan, but if you
2 took NMFS's approach and went out there five times during
3 the study year, or the Districts', to go out there once
4 during the study year, it wouldn't be the same as the
5 gauge data that's every day.

6 I mean, all you're getting is five measurements
7 during the course of one study year. Your first four
8 study years could be dry years, you know.

9 So you're never going to get data that's going to
10 be in any way, shape, or form of the same type that's at
11 the long-term record gauges, Modesto and La Grange.

12 So frustration, yes, that maybe you don't have a
13 gauge every five miles, but you don't on most rivers, so
14 you take what you've got.

15 I mean, this model's not supposed to be something
16 where the expectation is there's gauges all over, because
17 there just isn't.

18 So the most you could ever do is maybe come up
19 with some little modifier to modify the flows from
20 Modesto downstream since Dry Creek is already included at
21 Modesto. But even then you'd be doing it on a limited
22 number of measurements. It doesn't change much.

23 MR. CRAVEN: Are you concerned about accretion and
24 depletion between Modesto and the San Joaquin? Is that
25 the study area?

1 MR. WOOSTER: Both that reach that Jim is
2 describing as well as the reach from La Grange to
3 Modesto, both reaches, not just Modesto to San Joaquin.

4 MR. BOWLER: And what sort of magnitude of error
5 do you -- are you concerned is in the estimate without --
6 with just going on one measurement or just going on some
7 basic assumption? What degree of error are you concerned
8 is being propagated by that and what spins off of that in
9 terms of other modeling exercises or areas where that
10 error compounds or something?

11 MR. WOOSTER: You're asking if they just do the
12 one measurement as opposed to . . .

13 MR. BOWLER: Yeah. I mean, even if they just
14 assumed there was no accretion, how much error would that
15 introduce to the other estimates that are being . . .

16 MR. WOOSTER: Well, if they assumed no accretion,
17 you know, I have at this point no information to judge
18 whatsoever really how much could be lost moving
19 downstream of Modesto gauge or in between the two
20 reaches.

21 At this point you have your gauge up at La Grange,
22 you have your Modesto gauge, which is, what's that, 30,
23 let's see, well, 52 to 16, so you've got almost 36 miles
24 there.

25 Within those reaches you have ag return flow, you

1 have small diversions. You don't have any information on
2 what's happening with instream flow conditions between
3 those two gauges. You've got some cumulative water
4 balance, but you don't have any incremental information
5 to say what's happening at Roberts Ferry, about 13 miles
6 downstream of the La Grange gauge.

7 It's not so much the error propagation if it's
8 just one measurement. I expect these values -- I think
9 it's reasonable to expect these values to be different at
10 different times of the year based on the level of the
11 minimum instream flow, based on climactic conditions,
12 based on the level of shallow water, shallow groundwater
13 recharge that you might see in June versus September.
14 There's a lot of different factors in play here. So the
15 using just one single measurement and then adjusting
16 flows with kind of a constant factor that Jim was talking
17 about, I don't expect that one factor to be the same at
18 all months all year long; hence, the request for multiple
19 measurements.

20 MR. BOWLER: Jim?

21 MR. FARGO: Let me clarify that NMFS 5 did not
22 request this kind of detail in their -- in your NMFS -- I
23 mean, I understand that what you're saying is probably
24 what would be nice to have, but it says will be -- flow
25 samplings -- it's anticipated that the number of flow

1 sampling sites.

2 First of all, anticipated, in the sentence before
3 said this will be done in consultation with relicensing
4 participants, will be at least four sites and in five
5 different discharge levels and/or time periods.

6 So it doesn't specifically need to be at different
7 time periods; it could just be five discharge levels
8 within a week. There's no specificity in the request
9 itself.

10 So you've got the Districts saying, well, they'll
11 try to satisfy NMFS by going out there once, and then
12 you've got the NMFS request saying, well, four sites and
13 maybe five discharge levels and/or time periods.

14 That's why we said one year study period and let
15 them talk and see if there's anything reasonable that
16 could be done and then what's the expectation if you do
17 something like that.

18 You can't make a new gauge out there, I don't care
19 how many times you go out there in one study year.

20 MR. WHITE: Are there -- this would be a question
21 to the Districts. Is there an easy way to get at the
22 predominant conditions in the accretion or depletion zone
23 and typify that over a year?

24 MR. DEVINE: Yeah. This deserves a little
25 explanation. So, of course, the accretion measurements

1 are intended to supplement what we have for gauge
2 information. They're very -- the only permanent stream
3 that enters between La Grange gauge and the mouth is
4 Dry Creek.

5 It's generally reported that the -- this is a
6 gaming stream because of groundwater levels on the
7 Modesto and Turlock side of the river, Modesto to the
8 north and Turlock to the south.

9 So you've got to remember -- so since this is a
10 groundwater accretion that we're trying to measure, it's
11 generally anticipated that it's going to be quite low
12 compared to the flow in the river at any particular time.
13 So you also have to deal with what the accuracy limits
14 are of any measurement in the stream.

15 So once flows rise, say, above, you know, pick a
16 number, 300 or 400 cfs and if you're doing stream flow
17 measurements that are, you know, six or -- six percent
18 accurate, something in that level, you're talking about
19 trying to pick up flows that are 18 to 20 cfs at each
20 individual site you would do a stream flow measurement
21 at. So that's a lot of groundwater accretion.

22 So the way we had approached this and -- the way
23 we approached this is to say this is a good year to get
24 out and try to get a base load measurement of what the
25 groundwater accretion is at different locations along the

1 river by going out during a low flow time because there's
2 a relatively dry year and the minimum flows are going to
3 be in the area of 100 cfs, I mean, something at that
4 level, so we can get out there this year, and the
5 groundwater levels should be relatively high, because it
6 was a wet year last year, very wet year last year, so
7 we're thinking this is a good time to go out under low
8 flow conditions and relatively high groundwater to get a
9 sense of accretion and even be able to just measure
10 accretion along the stream, so -- and our approach was
11 that we would measure it during those conditions and
12 along the stream and we would preliminarily pick like
13 five locations -- I'll go into that in a minute -- and
14 see what those accretion measurements are and let them
15 inform future need for measurements.

16 Because say we do pick up zones where we're
17 getting higher accretion, we can go back out under, like,
18 maybe the fall, as John was saying, and get another
19 accretion measurement to see if there's much variability
20 seasonally like that.

21 So we let our first measurement that we propose --
22 and it's not just one measurement. It's a measurement
23 along the entire stream. It's one series of measurements
24 along the entire stream.

25 And we agreed that this should be done in

1 conjunction with the ILP participants, so last week when
2 we had our meeting in hydrology, in our hydrology
3 workshop, this issue was on the table. We talked about
4 accretions, and what we had indicated we would do is
5 we're providing a map to relicensing participants of
6 where these accretion measurements we propose they occur
7 and we'll probably be out there in the June time frame
8 because the flows will have dropped down to the minimum
9 flow levels and we'll get this series of accretion
10 measurements and that will inform the need for -- we'll
11 have to see what we get, can we actually measure any
12 accretions.

13 One of the requests was Roberts Ferry bridge, a
14 node at Roberts Ferry bridge, with respect to -- and that
15 would be a point of change in flow, because the only
16 reason to have another node somewhere is to represent a
17 change in flow.

18 If the flow is the same from Point A to Point B,
19 you don't need a node there because the Point B flow is
20 the same as the Point A flow. So a node would represent
21 a change in flow.

22 We also submitted to the relicensing participants
23 at the hydrology meeting last week, the workshop, our
24 schematic of where all the nodes are. In fact, all the
25 nodes -- we do meet all the nodes on this table here

1 (indicating), except for possibly a node at the mouth of
2 the river, but that's why we're doing the -- one of our
3 accretion measurements will be between Modesto gauge and
4 the mouth, and if there is seemingly a change in flow
5 because of accretion, then we'll put a node down there.

6 Nodes are easy. You know, as long as we can say
7 there's a change in flow, then we can add a node to the
8 model. It's very straightforward.

9 So this is what we shared with ILP participants
10 last week at the meeting. NMFS did not participate, so
11 we couldn't get their input on that. So we think we have
12 this kind of surrounded a bit.

13 We're going to do a node measurement at river
14 mile 45, which is above Turlock Lake, and then river
15 mile 40, which is basically river mile 39.5, which is
16 Roberts Ferry bridge, which is between Turlock Lake and
17 Modesto Reservoir, and then below Modesto Reservoir,
18 which is river mile 35, and then probably one other above
19 Dry Creek -- we've got to locate that precisely, more
20 precisely -- and then one between the Modesto gauge and
21 the mouth.

22 And so we're trying to capture that accretion
23 flows, inflows along the river, and we're trying to get
24 them all, if we can, in one day or two days, so we're
25 trying to keep those flows, you know, at a relatively

1 constant level, because noise could wipe out just, you
2 know, the accuracy of the gauges and the accuracy of the
3 measurements and the noise and any kind of water level
4 changes.

5 We will be monitoring the spills. There are two
6 areas of potential spill in that reach above Modesto, but
7 they don't spill this time of year, generally. But we'll
8 capture those if there is any, so we know what that is
9 and we can take that out of the accretion. It's not a
10 usual vent, so we don't expect it occurred, but we will
11 monitor that.

12 So we recognize the need and we're trying to take
13 an approach that is incremental and see what our first
14 group of information tells us and then say is that
15 telling us to do additional searches for accretion flow
16 or is it just part of the noise and it's really not an
17 inaccuracy of the measurements.

18 When we're dealing with modeling, of course, we're
19 dealing with flows that range from 100 up to, you know,
20 5,000 or 6,000 cfs, accretion measurements at 5,000 cfs,
21 five or six cfs is not going to be -- is going to be in
22 the noise of what the accuracy of those original numbers
23 are, but we can add them, but it's not -- they're
24 meaningless at that point.

25 I think -- and this was also in NMFS's original

1 study request -- a suggestion to get them at the low
2 flows, and we completely agree with that, so we can try
3 to pick up these accretion amounts.

4 We'll also be trying to determine where are the
5 withdrawals there. We don't think there are any above --
6 you know, riparian withdrawals above Modesto. We're not
7 exactly certain. There may be some below the Modesto
8 gauge, and we'll try to make sure we get those when we do
9 our measurements.

10 MR. BOWLER: Okay. This is obviously more detail
11 than is in the original proposal.

12 MR. DEVINE: Well, we said we'd do one measurement
13 and four -- at least four locations along the river at a
14 low flow.

15 MR. BOWLER: I was just -- go ahead.

16 MR. CRAVEN: What's wrong with that?

17 MR. WOOSTER: Well, as Stephen was pointing out,
18 that's a lot more detail than I had when making most of
19 these filings.

20 I see nothing wrong with the five locations that
21 John described. We are in agreement that the purpose of
22 these measurements is to characterize accretions and
23 depletions at low flows. It doesn't have a ton of
24 relevance at the higher flows.

25 And also, the description that he was taking an

1 adaptive kind of scientific approach to this, so do it
2 once, see what you learn, maybe find out where you need a
3 higher distribution of measurements because you'd see
4 more going on, that kind of approach is not in the study
5 plan, and this will be the first time I've heard of that.

6 So if I was to design, you know, a protocol to try
7 to really figure this out, I wouldn't take the
8 recommended one-year approach. I would do this over
9 multi years, a couple years, see what you can learn in
10 the first year, see where you might need to go back and
11 learn more information in your second year.

12 And at this point we don't have any information to
13 kind of guide us, you know, where the flow -- you know,
14 yes, it seems like there's going to be accretions
15 downstream of Modesto based on a couple DWR reports
16 that -- I haven't seen the specific flow measurements
17 that support them, but we don't know that that's going to
18 be the case upstream of Modesto. We don't know if that's
19 a gaining or losing reach. And we do have these various
20 flow inputs and small diversions along the way as well.

21 MR. CRAVEN: Let me ask FERC a question.
22 Actually, who are the participants then in the ILP
23 process?

24 MR. DEVINE: All parties are invited.

25 MR. CRAVEN: Okay. And who are the parties then?

1 Who are we talking about?

2 MR. DEVINE: Well, federal agencies, state
3 agencies, local groups, conservation groups, public.

4 MR. CRAVEN: Okay. So you're developing a study
5 plan.

6 MR. DEVINE: We're implementing a study plan.

7 MR. CRAVEN: Implementing it.

8 MR. DEVINE: This is the first -- we have, right
9 in the study plan of W&AR-2, we have a hydrology
10 workshop --

11 MR. CRAVEN: Right.

12 MR. DEVINE: -- because relicensing participants
13 requested a hydrology workshop, so that was scheduled
14 last week and held. We sent out an agenda and materials
15 for the meeting. And this was one of the areas that --

16 MR. CRAVEN: And FERC is involved in the workshop?
17 Is that the way it . . .

18 MR. FARGO: FERC can always attend the workshop.
19 I mean, we're a relicensing participant. And again, I
20 don't see a dispute at this point because it clearly says
21 in NMFS Element 5 that the numbering of flow sampling
22 sites and the frequency of discharge measurements should
23 be determined in consultation with ILP participants,
24 which is being done, which is what our recommendation was
25 in our study plan, essentially, is that -- take a year.

1 Now, the fact that you might want two years, three
2 years, four years, again, you're still never going to get
3 the same frequency or usefulness in gauge data unless you
4 do 20 years. And other studies have to go on. The
5 modeling study itself only has one year.

6 So I think that, you know, whatever tweaks might
7 be appropriate after one year, I mean, you're going to
8 have to, you know, at one point just decide that, you
9 know, enough's enough for this particular modeling part
10 of this. It's a small part of the total usefulness of
11 this model.

12 MR. WOOSTER: If you're going to take the one-year
13 approach, I would contend that the single measurement is
14 not going to give you enough data.

15 They're proposing at this point to go out in June
16 when the snowmelt recession ends, you hit minimum
17 instream flow, at that point your shallow groundwater
18 should be saturated to a relative maximum.

19 I would also say that you need to go back -- and
20 again, you're going to have to -- if you're only going to
21 do this one year, you need to go back later in the
22 summer, at the minimum instream flow.

23 I would also return in the fall when minimum
24 instream flows come up and see what you can observe
25 during that low flow period.

1 And I think there also could be utility to take a
2 measurement during the fall attraction. There's a --
3 certain water year types there's a fall attraction flow
4 that's more or less meant to replace the loss of fall
5 kind of storm flows. I would look to see what gains or
6 losses you might see during that attraction flow as well.

7 MR. BOWLER: And you'd basically prefer to see
8 that required in the Director's determination rather than
9 go into the ILP study plan implementation process and
10 make those points?

11 MR. WOOSTER: Correct. That would be my
12 preference.

13 And I also -- I was unsure when the determination
14 came out and said study accretion and depletion for one
15 year, what did "one year" mean? Did that mean one
16 measurement or did that mean go look, you know, look for
17 four or five reasonable time periods to sample low flows?

18 MR. DEVINE: We are concerned about the cost of
19 these, and if our measurements of accretion flows at
20 low -- at what is relatively high groundwater and low
21 stream flows shows that there are not -- they're in the
22 noise, we can't really pick up accretion flows, then to
23 do them over and over again is not a useful exercise,
24 particularly at higher flows.

25 The pulse flows that John references in the fall

1 are usually higher flows, and to try to pick up small
2 amounts of accretion flow during high flow events are
3 not -- we don't think are useful, because they're not
4 within the accuracy of the measurement of what we even
5 think the high flow is, the pulse flow is.

6 Let's say it's, you know, could be a thousand cfs,
7 and if we're trying to find 10 cfs of groundwater
8 accretion at different points, we're never going to find
9 that. So that's not valuable information to get.

10 But we did say that we would work with
11 ILP participants, which we did in this last meeting, to
12 show a map of where we'd get these and cover these and
13 how we would go about doing this and how the first sets
14 of measurements would inform the need for any other sets
15 of measurements.

16 MR. BOWLER: And other than in the transcript
17 today, is that memorialized in the meeting notes?

18 MR. DEVINE: We have meeting notes that are in
19 draft. We have, according to the protocols that we --
20 FERC required us to develop a consultation workshop
21 protocols and procedures. We filed that with relicensing
22 participants early March.

23 We then had a meeting on March 20th with all
24 invited -- all relicensing participants invited. We had
25 a couple of comments, no written comments on that.

1 So we're finalizing those protocols and we're
2 carrying out the workshops in accordance with those
3 protocols, which includes providing information to the
4 relicensing participants in advance of the meeting with
5 all of the agenda materials or the bulk of the agenda
6 materials and then covering these issues in this workshop
7 consultation process and then providing meeting notes,
8 asking for review of those meeting notes, addressing
9 issues in the meeting notes, and then filing those with
10 FERC.

11 And the schedules all weighed out in our workshop
12 consultation protocol that we submitted to relicensing
13 participants over a month ago and then had a meeting on
14 on March 20th.

15 MR. HASTREITER: And in addition to what John
16 said, I just wanted to make this clear that as a part of
17 that process of documenting the meeting and comments that
18 were received, and suggestions, the District also has to
19 address recommendations that they didn't adopt and why.

20 So part of the problem is, is when -- and I'm not
21 pointing any fingers, because we're all very busy -- but
22 when the resource agencies can't participate, for
23 whatever reason, the hope would be that maybe they could
24 do it, you know, in a letter or something, that way. But
25 without their input, you know, it just doesn't help the

1 process.

2 MR. CRAVEN: To me it seemed like a surprise to
3 Mr. Wooster, you know, about the level of detail, and I'm
4 just trying to figure out how could that be, if there's
5 documentation along the way, in notice and so forth, so
6 what -- I mean what's the disconnect, I guess, which may
7 be the subject of some other discussion somewhere else.

8 But you don't have the information? Is that my
9 understanding? Of what they're talking about or --

10 MR. WOOSTER: I have what was posted regarding
11 last week's workshop on the website. That's what I have.
12 And I did not learn the detail of what was discussed
13 there from what I saw on the website.

14 MR. CRAVEN: Okay.

15 MR. DEVINE: And also, the protocols. We
16 submitted the workshop -- consultation workshop protocols
17 which the hydrology workshop and the W&AR-2 study plan
18 are part of. We submitted those in early March to all
19 participants, including National Marine Fisheries
20 Service, and held a meeting on the 20th to discuss those
21 protocols and how these meetings would be conducted as
22 well.

23 MR. BOWLER: And the meeting notes are still in
24 draft and will be --

25 MR. DEVINE: The meeting notes for the -- because

1 that's -- the protocol requires these meeting notes. We
2 spelled out time frames for getting the material,
3 information to relicensing participants, then the meeting
4 notes out and then comments on the meeting notes and then
5 filing with FERC. That's all spelled out, and they're in
6 process.

7 MR. THOMPSON: If I may just jump in? What's not
8 here is what is FERC ordering the licensees to do?

9 It sounds like what John Devine is describing is a
10 process to work it all out in a workshop.

11 MR. BOWLER: As I understand it, it's what the
12 Commission staff required -- or the Director required.

13 MR. THOMPSON: But I heard the Commission asked,
14 "Are you participants there?" and their answer was, "We
15 can be." But they're not. Always.

16 And if they're not involved, then NMFS is asked to
17 go to a series of workshops, meetings, look at meeting
18 notes, respond again to meeting notes that we may
19 disagree with. It becomes very contentious.

20 So what we're asking for here is for FERC to tell
21 us -- and they did not do so in their study plan
22 determination -- what it is that's going to be ordered
23 here.

24 And after this Panel, after this conference and
25 the Panel submits its recommendation, we'd like that

1 spelled out in the Director's determination, not simply
2 go to a workshop and try to work it out over -- without
3 FERC's direct participation, over a number of weeks or
4 months.

5 MR. BOWLER: In the consultation process, when the
6 staff reviews the report from the study, the
7 implementation meetings, and reviews the recommendations
8 that weren't accommodated, is there a final issuance --

9 MR. HASTREITER: There will have to be.

10 MR. BOWLER: -- accepting the --

11 MR. HASTREITER: And the appropriate place will be
12 in the dispute determination. That's just how this has
13 all come together.

14 MR. BOWLER: Because this is lining up in that
15 time frame?

16 MR. HASTREITER: Right.

17 MR. DEVINE: I'm sorry. I'm confused by your
18 question. I don't know that Jim actually -- can you
19 repeat that?

20 MR. BOWLER: My question was in terms of the
21 protocol --

22 MR. DEVINE: Right.

23 MR. BOWLER: -- that's been filed and approved.

24 Does the consultation process after each meeting
25 or each update to the details of the plan, when FERC

1 reviews those updates and the comments and the response
2 of the Districts to any recommendations they did not
3 adopt, there's a step where FERC actually approves the
4 update to the plan and deals with those recommendations
5 that weren't adopted. Is that correct?

6 MR. HASTREITER: Right.

7 MR. BOWLER: Even when they're not in -- even when
8 we're not in the dispute mode?

9 MR. HASTREITER: Right.

10 MR. BOWLER: So in this case, because things line
11 up in terms of timing, these initial modifications to the
12 plan will be incorporated into the study determination
13 update in response to the dispute process.

14 MR. HASTREITER: Right.

15 MR. FARGO: And obviously on some types of studies
16 some stuff is left more flexible between the
17 participants. I mean, if we ever had to formalize every
18 assumption about every ongoing study, it would just be
19 endless paperwork on FERC's part to review and decide.

20 I mean, some studies have the interested
21 participants, and we can examine it and see if there's
22 something we want to react to, but not always do we need
23 to.

24 MR. BOWLER: And so the FERC staff, although you
25 might not attend many or even most of the meetings under

1 this process for modifying and updating these plans for
2 four meetings, I guess, you ultimately have to review and
3 approve or change every step of modification to the plan
4 if there's a change.

5 MR. FARGO: If there are changes, yes.

6 MR. HASTREITER: And we're going to participate in
7 the meetings when we can.

8 MR. BOWLER: Right.

9 MR. HASTREITER: It's just that -- I mean, we
10 participated in 20 study plan meetings for the
11 determination. National Marine Fisheries Service didn't
12 attend one of those meetings. And they're busy, and I
13 understand that, but it just makes it difficult. It
14 makes a difference if National Marine Fisheries Service
15 is involved in consulting on those issues. It's
16 important. But we can't do anything for them for their
17 workload issues.

18 MR. BOWLER: I just want to clarify that. So the
19 FERC staff is required to be involved if there's a change
20 to the plan through the meeting process. And obviously
21 we're not going to resolve here today the workload issues
22 of either of the agencies. So is there anything
23 practical that spins off of the dispute directly that
24 you're requesting today other than what Jim has said,
25 they're going to ask the Director to incorporate the

1 latest updates into the determination of the point when
2 he responds to the committee's -- to the Panel's
3 recommendations.

4 MR. WANTUCK: I think what is practical is to ask
5 FERC staff as lead agency to be as active and decisive as
6 possible in terms of providing clarity in decision-making.

7 There is also a point of -- that I'll call a
8 dilemma in the process in that what is official is what
9 is written on the FERC record.

10 In between official filings, the goalposts keep
11 shifting by virtue of these numerous workshops that are
12 held and numerous discussions, so it's very difficult for
13 an agency like ours -- you're looking at the entire staff
14 of our hydropower for the entire state, a total of
15 probably up to 16 ongoing licenses -- this isn't the only
16 one -- it's very difficult for us to respond to what goes
17 on the record as the official filing and then continue as
18 the goalposts shift up to the next filing point according
19 to the ILP process.

20 This is something that we've had a hard time
21 coming to grips with, and we have responded by
22 recognizing that what is on the record is what is
23 official. That's what we must respond to at any given
24 time.

25 So there's a disconnect there. I don't know how

1 to solve it with the resources we have at hand.

2 MR. BOWLER: John?

3 MR. DEVINE: The FERC study plan determination I
4 thought was quite clear on what they were requiring of
5 the Districts on page 24, very specific with respect to
6 accretion measurements. They also were specific with
7 respect to the hydrology workshop and that it would be a
8 hydrology workshop with the study plan determination, and
9 that we would have these workshops for these various
10 purposes, not the only purpose, but this flood accretion
11 was one of the purposes. And so I thought as far as the
12 Districts understood, we felt we understood FERC's
13 direction and guidance on that very specifically.

14 With respect to the moving goalpost, I didn't want
15 it to sound like this thing is shifting all over the
16 place. It's a progress. Because any modeling effort,
17 you come to certain decisions at certain points and then
18 you move on, given the foundation of information that
19 you've established before.

20 This was actually a request by relicensing
21 participants that we also completely agreed with is to
22 have these workshops at points along the process line so
23 that we're just not moving to the end of the study and
24 then dump this on relicensing participants' desks and
25 say, "Okay, we're done, take a look at this draft

1 report."

2 So we had these interim meetings at specific
3 points in the study process to come to present
4 information and come to discussion and hopefully
5 consensus on where we are at that point and then move on.
6 So you don't have to get the end and back up to the
7 beginning.

8 So it's not like a moving, you know, goalpost or
9 anything; it's a process that you come to a point, you
10 try to make a decision on foundational information and
11 move to the next point.

12 MR. BOWLER: That sounds to me like it's an
13 inherent tension between the need to address detail and
14 the workload available to, you know, address every step
15 of the way. And that's the quandary we all face.

16 Something else from Jim?

17 MR. FARGO: Just, again, I'd just stress that if
18 you would look at the last paragraph of Request Element
19 No. 5 and NMFS 4, I really don't see a dispute at this
20 point.

21 I mean, it's asking the participants to decide the
22 flows and where these measurements will take place; it
23 looks like the District is now doing that.

24 FERC's determination left that open because we
25 didn't have any specifics. It wasn't a specific protocol

1 set forth by NMFS.

2 You asked for participants to make these
3 decisions, so it's not like I had one specific protocol
4 here and another one here to choose between. So I really
5 don't see a dispute on this point.

6 MR. BOWLER: Would NMFS like the last word before
7 lunch?

8 MR. WOOSTER: The dispute would be that I see the
9 need for more than one flow measurement in June, when I
10 expect the shallow groundwater tables to be high and
11 likely maximized versus later on in the season when
12 shallow groundwater will be tapped, you'll have longer
13 periods of hot weather where you could see additional
14 depletion in other reaches. That's what the dispute's
15 over. I don't see this as a single measurement issue.

16 MR. FARGO: Did you recommend that? NMFS 1,
17 NMFS 2, NMFS 4, NMFS something?

18 MR. THOMPSON: We're recommending it today. I
19 think we're clarifying it here today.

20 MR. WOOSTER: That was the intent of Element 5,
21 the four or five measurements at four sites. That was
22 the intent.

23 MR. CRAVEN: If you're recommending that today,
24 who are you recommending it -- to whom are you
25 recommending it?

1 MR. WANTUCK: All parties, I think. To the Panel,
2 to the Commission, to the Districts. This is a path to
3 resolution, in our view, of our dispute.

4 MR. CRAVEN: So is there a process for them to
5 consider that recommendation?

6 MR. HASTREITER: Well, John just held his
7 workshop, so I'm assuming he can take this recommendation
8 and incorporate it into his notes.

9 MR. DEVINE: Well, you know, I could, but I'd
10 certainly prefer not to.

11 The reason is that the workshop is the workshop.
12 This is a study dispute resolution meeting.

13 And, you know, we're on a path that relicensing
14 participants have -- there are other relicensing
15 participants involved than just NMFS and us and FERC, you
16 know, to come and say, okay, we're going to come to this
17 dispute and start throwing out, you know, new processes
18 and new study requests. I think that's out of the bounds
19 of, you know, this process.

20 And I think the way to do it is to stay in the
21 process that's been set up for the studies and to
22 participate and then we can deal with those issues and
23 move on.

24 The Districts have been flexible about how one set
25 of measurements will inform the need for another set.

1 It's completely transparent. We provide what the results
2 are, what the conditions were at the time of
3 measurements. We're open to discussing that. But to
4 come to the dispute resolution meeting and say, "Okay,
5 let's agree on a new approach or an additional approach,"
6 without all the other relicensing participants involved
7 in the discussion and without them being informed from
8 the first measurement, that doesn't make sense to us.

9 MR. HASTREITER: Well, it sounds like the Panel
10 gets to make the call.

11 MR. WANTUCK: And I want to remind everyone that
12 this is the integrated license process. It's not
13 necessarily all the meetings and workshops that are set
14 up by the consultant for the Districts. These are the
15 processes that FERC has set forward, as well as all the
16 interim filings and deadlines and everything.

17 You looked at that very complex flow chart.
18 That's FERC's process. That's what we follow.

19 We like to engage in workshops to the degree that
20 we can, but when it comes to choosing between an official
21 FERC process and an optional workshop that's meant to
22 be -- I'll use the term "collaborative" -- among many
23 parties, we have to choose to tend to our number one
24 duty.

25 And I maintain that this is a legitimate FERC

1 process here today. Other parties had their chance to
2 file disputes. They could have shown up. They could be
3 in the background as well and made their ideas known.

4 MR. BOWLER: Yeah, I think I'm going to give it to
5 Dave, who had a question.

6 MR. WHITE: Just real quickly to NMFS, is what I'm
7 hearing your concern is by only having one set of
8 measurements in a year, is that -- a sampler might go out
9 and take one set of measurements in a year and say, "Wow,
10 well, there is no measurable accretion here," but the
11 concern is that it might be entirely different three
12 months later. It might be measurable. It might be
13 significant then. And one measurement just wouldn't be
14 able to characterize that.

15 MR. WOOSTER: That's accurate. That is the crux
16 of this, that the result in June, it's reasonable to
17 expect it may not be the same result in September.

18 MR. BOWLER: Okay. Just a couple more quick ones.
19 Jim?

20 MR. FARGO: Just, again, you've got to go back,
21 and that's what I thought we were disputing was NMFS
22 Request No. 5, is that it says five different discharge
23 levels and/or time periods. So again, we're introducing
24 new stuff today that wasn't in their NMFS request.

25 MR. WOOSTER: I'm not seeing how four sites and --

1 four sites with five different discharge levels and/or
2 time periods is different than what I'm asking for today.

3 The "and/or time periods" is meant to clarify that
4 if the flow happened to be the same in June and in
5 September, meaning the discharge is the same, it still
6 would be reasonable to go take an accretion-depletion
7 measurement because you've got different climactic
8 conditions, you've got different levels of deterring ag
9 flow, you've got different levels of small or riparian
10 diversions happening. That's what the "and/or time
11 periods" that I believe you keep bringing up --

12 MR. BOWLER: I'm going to interrupt you here.

13 I think I can say with confidence that the Panel
14 has this one from here in terms of deciding whether it's
15 a stretch of the original dispute or whether it can be
16 construed as part of the original dispute and whether
17 it's fair to recommend any change to the Director.

18 I'm certain that we're very close to agreement on
19 what's supposed to happen here, and we can feel good
20 going to lunch with that good news. So it's ten after,
21 and let's go ahead and go until 1:25.

22 (Lunch recess taken, 12:09 - 1:29 p.m.)

23 MR. BOWLER: Let's resume with Study Request 3,
24 which involves five elements, including information --
25 and we're treating these together. It involves

1 information about hydraulic conditions and bathymetry,
2 development of conceptual level fish passage
3 alternatives, investigation of reservoir fish passage,
4 fish passage conditions in the Upper Tuolumne River, and
5 pilot experiments for anadromous fish reintroduction.

6 All five of those were undisputed, as I understand
7 it then.

8 And as a group, NMFS requests compilation of
9 information on factors related to fish passage for all
10 life stages of anadromous fish in the river. NMFS
11 justifies the study request based on the need for
12 information to support negotiations between NMFS and the
13 Commission on Endangered Species, fishway prescriptions,
14 Magnuson-Stevens Fisheries Conservation Management Act
15 and Federal Power Act issues.

16 Target species would be Central Valley spring-run
17 and fall/late fall run Chinook salmon, Central Valley
18 steelhead, and Pacific lamprey.

19 Essentially all Don Pedro and La Grange facilities
20 would be mapped particularly to look at attraction and
21 false attraction conditions. Conceptual-level fish
22 passage alternatives would be identified. Reservoir fish
23 passage would be evaluated. Access for fish to habitat
24 above the Don Pedro pool would be assessed. And finally,
25 pilot anadromous fish reintroduction experiments would be

1 conducted.

2 The Districts did not adopt this study, saying
3 that Don Pedro is not the fish blockage.

4 FERC determination also asserted that Don Pedro
5 does not block upstream passage of anadromous fish, there
6 is no nexus between the Don Pedro project and direct
7 effects on passage of anadromous fish, and that NMFS has
8 not shown that passage is reasonably certain to occur in
9 the near future and NMFS has not demonstrated a nexus.
10 So FERC did not require the adoption of these elements.

11 NMFS asserts that Don Pedro would have adverse
12 effects on anadromous fish migration below La Grange Dam
13 that should be studied, including thermal effects.

14 NMFS cites a California Department of Fish & Game
15 document as an example of possible Don Pedro effects
16 below La Grange Dam and asserts that to be consistent
17 with the ESA that these studies need to occur.

18 We asked the technical question about what was
19 included in the -- oh, no. I'm sorry. We did not cite
20 any clarification questions on this one.

21 Have I characterized the dispute adequately?

22 MR. THOMPSON: I would just add to that that you
23 mentioned the Fish & Game report about passage-related
24 issues directly below La Grange.

25 I would add that temperatures are affected,

1 including migration temperatures, both immigration and
2 emigration temperatures for Chinook and steelhead at
3 points well downstream of there. That would be due at
4 least in part to the project releases. We think those
5 are fish passage effects. It's migration habitat.

6 MR. HASTREITER: I didn't hear you, Larry. What
7 was that last?

8 MR. THOMPSON: Those are fish passage effects.
9 It's migration habitat.

10 MR. HASTREITER: Okay. Thanks.

11 MR. BOWLER: To what degree are these issues
12 addressed in the temperature studies that are -- study
13 that's proposed, that's approved in the study
14 determination versus them needing to be addressed
15 separately for some reason?

16 MR. THOMPSON: I don't think they need to be
17 separate. I think if we get a good evaluation of the
18 temperature effects, we'll have it. But we didn't want
19 to leave it out of this one. In other words, there's
20 some redundancy there. And that's good.

21 MR. BOWLER: And I'm talking about downstream
22 temperatures.

23 MR. DEVINE: Stephen, you had mentioned something
24 right at the beginning of --

25 MR. HASTREITER: We can't hear you.

1 MR. DEVINE: Stephen had mentioned something about
2 fish passage as an item that was not going to be
3 discussed or something right at the beginning of the
4 meeting.

5 MR. BOWLER: Yeah.

6 MR. DEVINE: Could you just refresh my memory of
7 what that was about or what that said?

8 MR. BOWLER: Yeah. In terms of -- generally,
9 we're not going to discuss the nexus and the issue of
10 fish passage above the dam, but here we did want to cover
11 the temperature issue which is occurring below the dam,
12 which is being raised as a fish passage issue as well as
13 was addressed in the temperature study. So in a sense
14 we're clarifying that matter to make sure that there's no
15 dispute left on that account because it's in the other
16 model, in the other study.

17 MR. DEVINE: Okay.

18 MR. BOWLER: And then we're basically searching to
19 see if there's any other issues that remain in dispute
20 that are below the dam.

21 MR. WANTUCK: Stephen, I had a question.

22 Has the Panel prejudged the issue of fish passage
23 authority and has the Panel substituted its judgment for
24 the judgment of the mandatory conditioning agencies to
25 determine whether or not we have such authorities?

1 MR. BOWLER: The Panel hasn't judged that. The
2 Panel will leave that to discuss it in a different forum.

3 MR. WANTUCK: And that's at the heart of the nexus
4 argument, so by denying the discussion, you're
5 essentially making the judgment.

6 MR. BOWLER: We're saying that that's the existing
7 policy as we understand it and we're not in a position to
8 re-evaluate that.

9 MR. WANTUCK: One other question. Where does the
10 Commission staff's determination that passage must be
11 reasonably certain, where does that standard come from?

12 The NEPA standard is "reasonably foreseeable."
13 We're very confused where the "reasonably certain"
14 standard comes in.

15 MR. HASTREITER: Yeah, the reasonably certain
16 standard is under the Endangered Species Act and
17 cumulative effects for private actions.

18 MR. WANTUCK: But this isn't an ESA proceeding.

19 MR. HASTREITER: No, I understand that. But
20 La Grange is a private facility, and we're looking at
21 providing fish passage at La Grange. And it seemed to me
22 that was more appropriate language than "reasonably
23 foreseeable" for a cumulative effects analysis.

24 Both I think probably apply, but I was looking at
25 it from the perspective of La Grange being a

1 nonjurisdictional facility for FERC, from that
2 perspective, and the standard in the Endangered Species
3 Act for cumulative effects is what I had, "reasonably
4 certain." That's where it came from.

5 MR. WANTUCK: We have one technical matter to
6 resolve in relation to this, because it seems like the
7 discussion is revolving around the assumption that there
8 are no anadromous species in the project area.

9 It may be true that no species are expressing an
10 anadromous life history, but we believe it's not true
11 that there are no anadromous species in the project area.

12 In fact, if I could be permitted to have Ramon
13 Martin of the Fish & Wildlife Service give some
14 testimony, we can show that there are O.mykiss in the
15 project area and that there are also Chinook salmon above
16 the project area in the Don Pedro reservoir and that we
17 believe these species are being prohibited from
18 expressing an anadromous life history by the project
19 facilities.

20 So if I could, Ramon has evidence to support this.

21 MR. BOWLER: We're going to counsel for a second.

22 (Panel conferring off the record.)

23 MR. BOWLER: Rick, is this information in the
24 record already?

25 MR. MARTIN: Ramon Martin, Fish & Wildlife

1 Service.

2 We cited in our dispute notice that --

3 (Interruption by the reporter.)

4 MR. MARTIN: This is Ramon Martin, Fish & Wildlife
5 Service.

6 We're disputing the determination on NMFS No. 3,
7 fish passage, stating that there is O.mykiss population
8 in the La Grange reservoir and also upstream as well, and
9 there's been some genetic analysis done to evaluate that
10 there is some historical ancestral lineage that are very
11 similar to what the steelhead population used to look
12 like. And so we referenced Nielson, et al., 2005, and we
13 also have another report from Garza and Pearce that kind
14 of determines the same findings in regards to such
15 genetics upstream of Don Pedro versus downstream.

16 MR. DEVINE: That's in the record?

17 MR. THOMPSON: I can answer that.

18 John, I believe I responded to a request from you
19 for PAD information.

20 MR. DEVINE: Mm-hmm.

21 MR. THOMPSON: And I provided that paper to you.

22 MR. DEVINE: The Garza and Pearce paper?

23 MR. THOMPSON: Yes.

24 MR. HASTREITER: Stephen, I have a question.

25 How does this relate to the Fish & Wildlife

1 Service dispute that the Commission -- the Director
2 turned away?

3 MR. BOWLER: I'm just making sure that there's not
4 an issue aside that's different from the one that we've
5 characterized in our preparations for the meeting.

6 MR. HASTREITER: Okay.

7 MR. DEVINE: And we would comment that there has
8 to be -- we feel there has to be evidence of anadromous
9 fish actually seeking upstream or downstream passage, not
10 the presence of O.mykiss that's a resident -- or a
11 resident rainbow trout or a resident O.mykiss with no
12 evidence that such expressions of anadromy are occurring.
13 This is just hypothetical of are they or could they
14 express anadromy if passage was there. There's no
15 evidence that there's any anadromous fish or expression
16 of anadromy.

17 With respect to fish planted, anadromous fish
18 planted in Don Pedro reservoir, this is a California
19 Department of Fish & Game procedure and practice that's
20 been going on for years and years without any
21 determination that this was for the purpose of upstream
22 and downstream migration or feeding and protecting the
23 resident fish population downstream.

24 These fish have been planted as resident Chinook.
25 There's been no -- in all the years they've been planted

1 there's been no indications that these are trying to
2 express anadromy or are considered an anadromous species.

3 They are resident Chinook salmon. They're for
4 sport fishing. They may or may not move upstream at any
5 kind of pattern. There's no evidence of that. There's
6 just some observations and some anecdotal information.

7 I think the fundamental issue remains the same.
8 It's not a barrier to anadromous fish because anadromous
9 fish, which are moving in and out of the Tuolumne River
10 are blocked by La Grange Dam.

11 And I'm going to have to look up that paper,
12 because I don't remember actually getting a submittal
13 from NMFS.

14 MR. THOMPSON: I sent you -- I think I sent two
15 papers.

16 MR. BOWLER: I remember reading the summary of the
17 issue.

18 MR. THOMPSON: It's widely available, the paper.
19 It's a report that's probably on the NMFS websites as
20 well.

21 The comment I had -- well, I kind of had a
22 question of Jim.

23 Going back to this "reasonably certain" argument,
24 I think I heard you say because La Grange was a private
25 dam and you were saying that fish passage would occur

1 there. Well --

2 MR. HASTREITER: And that's what's blocking
3 anadromous fish, so I just came to that conclusion, not
4 because La Grange, which is a private dam, is lacking
5 fish.

6 MR. THOMPSON: Unsuitable temperatures may also be
7 preventing the immigration of fish or the successful
8 outmigration of fish at points well downstream of
9 La Grange. I'd like to make that point.

10 The other point is that on page 4 of our request,
11 our original information study request on fish passage,
12 we pointed out that we may determine to exercise our
13 Section 18 authority by collecting fish at a point well
14 downstream of La Grange Dam.

15 So, Jim, don't assume La Grange Dam is the dam
16 we're going to pass fish over. We may determine to
17 collect fish -- I'm thinking, where are steelhead
18 collected today that are immigrating and fall-run Chinook
19 that are immigrating into Tuolumne River?

20 The answer is that about river mile 24.5 at a
21 pressure board resistance weir. That's a logical place
22 that one would collect steelhead or salmon and pass them
23 over Don Pedro Dam. Passing them over Don Pedro Dam
24 would also pass them over the nonproject La Grange Dam.

25 So please don't assume that yes, La Grange is the

1 dam that blocks fish passage. Clearly, Don Pedro doesn't
2 allow any fish passage. Anadromous fish or fish, it
3 doesn't allow anadromous fish passage.

4 And if we were to collect fish at a point
5 downstream, we would have to pass them over the Don Pedro
6 facilities and we would need information about those
7 facilities.

8 We would also need to know information about how
9 to get the fish that spawned and produced young up there,
10 how to get those young back downstream. That's what
11 we're seeking.

12 MR. BOWLER: And you can discuss the rest of that
13 if you want to cover the nexus issues in the closing
14 statement.

15 MR. THOMPSON: So I guess I'm asking the same
16 question Rick did. So the Panel is saying that there's
17 no nexus between what?

18 MR. BOWLER: The Panel is saying that in order for
19 us to -- the nexus issue involves huge matters of policy
20 that would affect basically issues that are far beyond
21 the technical bounds of the Panel.

22 And while we are trying to investigate every issue
23 surrounding it, the effects that transmit downstream,
24 we're trying to make sure there's no other issues that
25 are within the technical bounds of our role.

1 We can't -- we just don't have the authority to
2 look into new interpretations of Section 18 or --

3 MR. THOMPSON: We don't need that.

4 MR. BOWLER: -- or anything, you know, along those
5 lines, so . . .

6 MR. THOMPSON: Well, I agree with you. I don't
7 think we're asking for that.

8 But the purpose of the Panel is to look at the
9 5.9(b) criteria and determine how the study plan
10 determination comports with those.

11 And so if you're maintaining that criterion 5 is
12 not met or if FERC maintained that in the study plan
13 determination, it seems like that's an issue here.

14 MR. BOWLER: Well, we can consider issues of
15 technical study elements that the Commission staff has --
16 and the Director has made a determination on, but
17 something that is a fundamental policy surrounding the
18 way the Supreme Court has dealt with Section 18 is not
19 something the Panel is going to review.

20 So we're trying to go as far as we can in letting
21 everything get out on the table, but we have to draw a
22 limit somewhere. Otherwise, we won't be able to do
23 anything.

24 MR. THOMPSON: I understand that. I'll just stop
25 by just saying it's frustrating that the Commission can

1 just simply make an assertion there is no nexus. And we
2 are here disputing that. And it doesn't sound like we're
3 getting the opportunity to do that. Am I misinterpreting
4 something?

5 MR. BOWLER: I'd say that there may be
6 opportunities to do that elsewhere, but this isn't the
7 forum for it.

8 And while the Panel recognizes that there's
9 important, you know, fundamental issues that it would be
10 very nice to have comprehensive solutions to, and while
11 we wish we had the wisdom and the authority to get in
12 there and find those solutions, we might think we have
13 the wisdom but we don't think we have the authority.

14 MR. THOMPSON: I see.

15 MR. MARTIN: In regards to -- I'm sorry. Go
16 ahead.

17 MR. CRAVEN: John over here had a question.

18 MR. DEVINE: We can't really let this go now that
19 it's started without at least saying something.

20 And, you know, the purpose of -- historically, the
21 purpose of a study of fish passage at a FERC-licensed
22 project is to look at the effect on anadromous fish of
23 not having fish passage at a project.

24 And if a lack of fish passage at a FERC-licensed
25 project is having an effect on the anadromous fish

1 population, then FERC feels there is a nexus between the
2 anadromous fish population and moving that population
3 upstream and looks at the cost and the benefit of
4 providing fish passage.

5 That's with respect -- within FERC's Federal Power
6 Act authority, which is also associated with Section 18
7 authority, which applies to a FERC-licensed project.

8 This is the first time I've ever heard anybody
9 express -- and I'd like to hear other examples -- that
10 the mandate or the authority vested in a Section 18
11 prescription at a licensed project under review applies
12 to the entire watershed, which is basically what's being
13 said here.

14 That's the first time I've ever heard that
15 argument. I think it's kind of a unique view of
16 Section 18 prescription authority.

17 And, you know, I think that that's a legal matter
18 and it's certainly one the Districts don't agree with.
19 And we don't think there's some broad mandate that once
20 there's a FERC-licensed project under review that a
21 Section 18 prescription applies to picking up fish
22 60 miles downstream or 80 or ten and sending them
23 40 miles upstream around other projects whether they're
24 licensed or not.

25 We just -- we think that certainly is a legal

1 matter and it would be inappropriate for the Panel to
2 undertake this discussion.

3 MR. BOWLER: Well, that's why we're going to cut
4 it off and give Steve Edmondson and then FERC staff one
5 more chance.

6 MR. EDMONDSON: I was just going to do what you
7 did, Stephen, and try to cut it short.

8 (Interruption by the reporter.)

9 MR. EDMONDSON: Steve Edmondson.
10 The Districts' consultant opining on FERC's
11 authority and legal opinion is really part of, I guess,
12 the process, so I agree with you.

13 MR. BOWLER: Okay. FERC staff, do you have any
14 comments?

15 MR. HASTREITER: Well, you know, we took our
16 position in the determination, and that speaks for
17 itself.

18 MR. WANTUCK: One more comment.

19 Mr. Devine said a little while ago that while he
20 admitted that there are O.mykiss and Chinook salmon in
21 the project area that there's no evidence they're trying
22 to exhibit anadromous fish habitat, anadromous fish life
23 history.

24 I would say that there is also no evidence that
25 they are not. And that fact that they are there begs for

1 the study of whether or not they are trying to exhibit
2 this life history. This would be squarely within the
3 province of FERC study request.

4 (Panel conferring off the record.)

5 MR. BOWLER: Actually, in the corner?

6 MS. WILLY: Oh, thank you. Alison Willy, Fish &
7 Wildlife Service.

8 I have another definition question, because we're
9 talking about upstream passage here, but I would like to
10 know when the resident fish -- when does the Panel
11 consider a resident fish to be anadromous, if you could
12 give an example there.

13 MR. BOWLER: I don't think we're going to go this
14 direction.

15 MS. WILLY: Okay. So downstream migration is off
16 the table for discussion?

17 MR. BOWLER: That's the reason we covered this
18 subject at all was that we thought it included downstream
19 migration.

20 MS. WILLY: Okay.

21 MR. MARTIN: In that regard, and that was one of
22 the things we had asked for.

23 UNIDENTIFIED AUDIENCE MEMBER: Can you speak up,
24 please?

25 MR. MARTIN: Ramon Martin with Fish & Wildlife

1 Service.

2 One of the things that we had asked for in our
3 dispute process regarding NMFS Request Number 3, Study
4 Number 3, was to follow the entrainment of -- or
5 downstream passage at the bed of the project into
6 La Grange.

7 There is O.mykiss in La Grange that's not stocked,
8 and so those fish, the only way they came into La Grange
9 is either through the federal project works or pretty
10 much those fish already existed there, you know, prior to
11 La Grange being built.

12 There's only been one spill, back in '97, where
13 fish could have gone in and around the spillways, and so
14 that would be the only other time that the fish might
15 have been able to get around the project at Don Pedro.

16 So that was the other element that we were
17 interested in as well, not just upstream passage but
18 also downstream passage from the Don Pedro project works
19 and the effects of that to just all fish, not just
20 anadromous, but all fish.

21 MR. DEVINE: We need to keep this in the actual
22 dispute issues that are on the -- whatever that is,
23 that's not a question that's under dispute.

24 MR. BOWLER: I'd like to move on, but on my own
25 accord.

1 Did you want to ask a question?

2 MR. WHITE: Are there issues of nexus that NMFS
3 hasn't addressed in their filings so far that they would
4 like to bring up today, including what was -- have we
5 seen what we need to see regarding nexus? I was
6 wondering if there was an additional line of reasoning
7 you'd like to make.

8 MR. WANTUCK: May we have a minute?

9 (NMFS staff conferring off the record.)

10 MR. WANTUCK: I don't know if Mr. Thompson wants
11 to add to this, but just in answer to your question, and
12 for each of our petitioned items and each of our study
13 requests, we're quite sure that we added an explanation
14 of the nexus. It's typical of what we do. So it's in
15 the record.

16 So we're not sure, unless Larry can think of
17 something we may have left out that's just come to our
18 attention in the record, we habitually, consistently
19 provide the rationale for nexus, because we follow the
20 5.9 regulation point by point and we answer each one.

21 So whether you find that rationale sufficient or
22 convincing, telling, whatever, it's up to you, but I
23 think it's in there in each case.

24 MR. WHITE: Is that true for the "reasonably
25 foreseeable" issue as well?

1 MR. THOMPSON: Well, I don't think so. I would
2 just say that, you know, looking at the FERC study plan
3 determination, there are two arguments that are made:
4 One is that the La Grange Dam is not a Commission-
5 licensed facility and the other is that we have not shown
6 that fish passage would be reasonably certain; therefore,
7 no nexus.

8 And to me that's just an inadequate explanation of
9 the lack of nexus. I don't see it.

10 So I would just agree with Rick that it is in our
11 study requests, we explained nexus. I think we've done a
12 little bit more of it here as far as the Panel would let
13 us go, and . . .

14 MR. CRAVEN: Well, maybe, would it be possible for
15 FERC to describe nexus in FERC terms?

16 MR. HASTREITER: There is no nexus. La Grange
17 Dam --

18 MR. CRAVEN: No, what is your definition of the
19 word, the term "nexus"?

20 MR. HASTREITER: Oh, a connection to the project,
21 an effect of Don Pedro.

22 MR. CRAVEN: Does that mean a physical connection
23 or what does it mean exactly?

24 MR. HASTREITER: La Grange Dam is not a facility
25 of the Don Pedro project. We talked about that at length

1 this morning.

2 MR. CRAVEN: Yeah. Right.

3 MR. HASTREITER: And La Grange is a blockage of
4 upstream movement of anadromous fish. It's not part of
5 the project. So there's no nexus to project effects
6 because of La Grange Dam.

7 Larry brings the point up about water temperature.
8 He may have a point. We didn't see any information
9 presented that said water temperature blocks anadromous
10 fish.

11 We've seen information that the State Water
12 Resources Control Board said water temperature impairment
13 is occurring, but we haven't seen information that
14 suggests there's a blockage somewhere in the Tuolumne
15 River based on water temperature.

16 MR. CRAVEN: That would be a blockage of fish
17 movement up to La Grange, though.

18 MR. HASTREITER: Correct. And we're saying we
19 haven't seen that information.

20 MR. CRAVEN: Okay. But not over La Grange.

21 MR. HASTREITER: Right.

22 MR. WHITE: Just one last question. If studies
23 came out that Don Pedro effects were influencing safe,
24 timely and effective migration of fish as they headed
25 towards La Grange, is there a second process through

1 which additional studies could be generated? And I guess
2 that's a question -- not a question for us, that's a
3 question for FERC, I guess.

4 MR. CRAVEN: Yeah.

5 MR. HASTREITER: Well, okay. So are you relating
6 this to temperature?

7 MR. WHITE: Yeah. If it came out that temperature
8 or flows as managed at Don Pedro were influencing fish
9 below La Grange, what then?

10 MR. HASTREITER: Well, the operations model, water
11 temperature model, as Larry pointed out earlier, should
12 assist us in evaluating that situation. And if there is
13 some sort of temperature blockage below La Grange Dam, we
14 would try to address it based on an operational change at
15 Don Pedro.

16 MR. CRAVEN: Does that make it a nexus or what?

17 MR. HASTREITER: Because there's an operational
18 change, yes, related to Don Pedro. I mean, that's --

19 MR. BOWLER: Downstream.

20 MR. CRAVEN: To downstream. Yeah. Not to fish
21 passage.

22 MR. HASTREITER: Right. To a temperature effect
23 based on operation.

24 MR. BOWLER: I think we all agree on that.

25 MR. CRAVEN: I have one question for FERC on

1 "reasonably certain," "reasonably foreseeable" and so
2 forth.

3 It seems like on page 74 of the study plan
4 determination that you've defined it as -- in terms of
5 fish passage plans have been developed, approved or
6 funded. Is that the way you define "reasonably certain"?

7 MR. HASTREITER: Yeah, there's a component of that
8 in "reasonably certain." We need to know what the action
9 is, the specific action.

10 MR. CRAVEN: But is there a specific definition of
11 "reasonably certain" and is this it here? I mean, I'm
12 just trying to read between the lines a little bit.

13 MR. HASTREITER: "Reasonably certain" comes from
14 the description of cumulative effects under the
15 Endangered Species Act.

16 MR. CRAVEN: Right. I heard that earlier.
17 Can you look at page 74 maybe?

18 MR. HASTREITER: Yeah, I'm there.

19 MR. CRAVEN: Yeah. You know, that penultimate
20 paragraph. "No specific fish passage plans have been
21 developed, approved or funded."

22 MR. HASTREITER: Right. And that has a lot to do
23 with "reasonably foreseeable" as well. I mean, we don't
24 know when it's going to happen, what it's going to look
25 like.

1 These are the same arguments that happened on
2 Yuba.

3 MR. CRAVEN: Yeah.

4 MR. HASTREITER: You know, this is identical to
5 the arguments at Yuba.

6 MR. CRAVEN: Okay. But I'm just trying to
7 clarify, is that -- so if you don't have fish passage
8 plans developed, approved and funded, it's not reasonably
9 certain?

10 MR. HASTREITER: Yes.

11 MR. CRAVEN: Okay. So you have to have all three?

12 MR. HASTREITER: Yes.

13 MR. CRAVEN: It doesn't say "and." It says "or."

14 MR. HASTREITER: All three.

15 MR. CRAVEN: But it says --

16 MR. HASTREITER: I made a mistake. It's all
17 three.

18 MR. CRAVEN: So it's really "and funded."

19 MR. HASTREITER: Correct.

20 MR. CRAVEN: Okay. Thank you.

21 MR. HASTREITER: You're welcome.

22 MR. THOMPSON: Could I ask a question about
23 "reasonably foreseeable," just since it's related to
24 this?

25 Is it reasonably foreseeable that the jurisdiction

1 determination could be completed within the temporal
2 scope of this licensing?

3 MR. BOWLER: Is that legal for us to answer?

4 MR. THOMPSON: How about FERC?

5 MR. HASTREITER: No, we can't answer that. As
6 Stephen cited the regulations that we can't spill the
7 beans, even if we knew.

8 I've been poking at them. It would make my job a
9 lot easier.

10 MR. THOMPSON: Okay.

11 MR. WANTUCK: Can I ask a question? Mr. Craven
12 cited something in the study plan.

13 MR. BOWLER: We just canceled and we're ready to
14 move on.

15 MR. CRAVEN: You've been canceled.

16 MR. WANTUCK: Okay.

17 MR. BOWLER: We need to break away from this and
18 move on.

19 MR. WANTUCK: Okay.

20 MR. BOWLER: NMFS Study Request 4, Element 1, this
21 is under the Study Request 4 is Effects of the Project
22 and Related Facilities on Hydrology for Anadromous Fish:
23 Magnitude, Timing, Duration, and Rate of Change. And
24 Element 1 is Data Development and Statistical Analysis.

25 NMFS requests that the Districts model and analyze

1 three hydrologic scenarios, including current conditions,
2 unimpaired or natural flow, and partially unimpaired,
3 with current conditions with the Don Pedro and La Grange
4 complex removed.

5 A number of common hydrologic statistics would be
6 calculated for each scenario across ten locations ranging
7 from the Upper Tuolumne to the San Joaquin, including six
8 sites with state or federal gauge data.

9 The Districts propose to develop a data set
10 starting with unimpaired flow data and applying current
11 conditions.

12 The Director determined that neither the
13 unimpaired nor the partially impaired models need to be
14 analyzed by the Districts.

15 And NMFS wants an unimpaired flow scenario model
16 run and wants statistical outputs required by the
17 Commission.

18 And we asked FERC: The Panel assumes the
19 consultation process described in the determination
20 applies to these model -- to the modeling meetings which
21 were described earlier by the Districts, and the FERC
22 staff responded that yes, that is correct.

23 So this goes back to essentially the -- in the
24 front of the study determination there's a description of
25 what "consultation" means and that the process -- the

1 meeting process that the District described includes
2 those, the requirements of the FERC staff, the FERC
3 determination by the Director.

4 So I guess my -- we've already asked the staff
5 about whether that applied and then is that incorporated
6 into the framework for your meetings? The staff's -- the
7 consultation requirement process.

8 MR. DEVINE: That's a question?

9 MR. BOWLER: Yes.

10 MR. DEVINE: Okay. I'd say yes, but we have to --
11 there needs to be dialogue on each one of these to make
12 sure we understand what NMFS was asking for and that the
13 model or the existing data can deliver it.

14 So when we responded in our document, it was -- in
15 our revised study plan that we could do these to the
16 extent that the information was available and data was
17 available and either from the model or from the existing
18 gauge at La Grange. So we would need to talk about each
19 one, I think, to make sure we have a common
20 understanding.

21 But that is what's involved in the workshops, you
22 know, to have that dialogue and to make sure that -- if
23 we can do the analysis and the data's available, we said
24 we would do the analysis.

25 MR. BOWLER: And then ultimately it goes through

1 the step where there's a comment period and then staff
2 gets a copy with any -- an explanation of why any
3 recommendations are not adopted.

4 MR. DEVINE: Yeah.

5 MR. BOWLER: So they can review or approve that.

6 MR. DEVINE: We don't think we have all the data
7 that's been asked for to actually do this, so that's --
8 you know, we have a lot of it, and most of these items
9 have been taken care of, but there's others that the data
10 just doesn't exist.

11 MR. WOOSTER: Two questions for you, John.

12 First would be, you say if we have the data we'll
13 do the analysis. Does that apply to the seven -- I think
14 it was about seven statistical analyses we asked of the
15 flow series? That applies to that?

16 MR. DEVINE: Yes, I think, if I remember the
17 seven, John, they were mean monthly flows, monthly flow
18 ratio curves, one, three and seven --

19 MR. WOOSTER: Min/max, very standard --

20 MR. DEVINE: Yeah. Absolutely. Those are all
21 very straightforward using mean daily flow, the model
22 will have that information, and we're happy to compute
23 that.

24 MR. WOOSTER: Thank you.

25 And the second question would be which pieces of

1 information don't you think you have that you just
2 alluded to a second ago?

3 MR. DEVINE: We don't know -- let's get to each
4 individual one, if we could.

5 I think we addressed number one. Number two -- I
6 don't mean to drag this out, but is this what you want us
7 to do?

8 MR. WOOSTER: I thought you might have had it.

9 MR. DEVINE: Each one has a different answer
10 because they derive -- they need different information,
11 and so I just can't remember them all off the top of my
12 head.

13 MR. BOWLER: Is this a dialogue you guys can have?

14 MR. DEVINE: Sure.

15 MR. WOOSTER: Yeah, I think we could, with FERC
16 present.

17 MR. DEVINE: Well, we started this dialogue in the
18 hydrology workshop and we showed how there was graphical
19 analysis that can be done based on the data.

20 We also showed -- you know, we have issued the
21 entire unimpaired flow record for the Tuolumne River.
22 That was issued at the hydrology meeting. And we went
23 over the development of the -- and I know it's not
24 required, but the reason we did it is because that's how
25 we start our modeling process.

1 We -- maybe I shouldn't go into this. We start
2 our modeling process by developing the unimpaired flow
3 and then we develop our base case by putting development
4 works on top of that to come up with the base case.

5 So we have the unimpaired flow at La Grange.
6 That's been issued. And we discussed it in the last
7 meeting.

8 MR. WOOSTER: Yes. And I have that. We're not
9 disputing the development of the unimpaired flow.

10 MR. DEVINE: So that's available for analysis.

11 MR. BOWLER: I know that there's a staffing issue
12 and we're all under a crunch, but it seems like there's
13 an opportunity to participate in a process that's ripe
14 for you to have your input, and ultimately, if you're
15 unsatisfied with what happens, tell FERC staff about your
16 concerns so they can decide whether your issues are being
17 treated properly.

18 And I know that you can't do everything, but since
19 you have issues that you've raised on this one, this one
20 maybe you could get involved in.

21 MR. WOOSTER: I would agree. But I think, you
22 know, in Jim's recent letter he clarified that yes, the
23 determination was ordering ramp stage change analyses,
24 the -- well, the peak flow analyses was a little
25 confusing, because the original determination said yes,

1 peak flow analyses were being ordered and the letter said
2 it may be.

3 But giving a baseline of yes, some minimum level
4 of analysis is being required as part of the
5 determination is what we were asking for clarification on
6 and bringing it to this dispute.

7 As far as the statistical analyses, pertaining to
8 that, there was no specific guidance that yes, there is a
9 bare minimum of analysis that needs to happen. It was
10 just left to "during a workshop the Districts will
11 discuss with the stakeholders graphical and statistical
12 output." That can range from a lot to very little.

13 MR. BOWLER: And the FERC staff is going to
14 recommend to the Director that the determination
15 update -- be updated based on the status of the meetings.

16 Is that correct?

17 MR. HASTREITER: That's right.

18 MR. BOWLER: So those two items can be in there,
19 the statistics, and what was the first one?

20 MR. DEVINE: Peak flow analysis.

21 MR. BOWLER: The peak flow analysis. So those
22 types of details can be confirmed in the final
23 determination to the point that they've been finalized to
24 that stage.

25 MR. WOOSTER: And what about -- then you have a

1 final determination that might predate the ending of the
2 hydrology workshops.

3 MR. BOWLER: Yeah.

4 MR. WOOSTER: The Director's determination's a
5 month out. I think the next hydrology workshop's in a
6 month.

7 MR. BOWLER: Right. But at that point you still
8 have the Commission's review of any recommendations that
9 you've made that were not adopted by the Districts.

10 MR. WOOSTER: (Nodding head.)

11 MR. BOWLER: Which is called for in the
12 determination.

13 MR. WOOSTER: Yeah. And again, NMFS was asking
14 for at least setting the minimum bar for what would be
15 done as far as hydrology analysis in the determination.

16 MR. BOWLER: And that would be done -- there will
17 be a minimum bar from what's already been proposed and
18 discussed today. Is that . . .

19 MR. WOOSTER: That's what John said that they
20 would do those seven statistical analyses. They're
21 saying that is the minimum bar.

22 MR. BOWLER: Would that work as a minimum bar?

23 MR. WOOSTER: I think it's a fair place to start,
24 yeah.

25 MR. BOWLER: And that's what you heard, that

1 you'll include in the recommendations to the Director;
2 right?

3 MR. HASTREITER: (Nodding head.)

4 MR. BOWLER: Okay. So is this one pretty much
5 resolved?

6 MR. WOOSTER: I think so.

7 MR. BOWLER: Great.

8 MR. FARGO: Stephen, it seems to be -- to conclude
9 several clarifications that had to do with peak flow
10 analysis, rate of change, stage change, and the various
11 flow paths at La Grange, so it would seem to be that if
12 that communication could cover those four, and if there's
13 details or anything that comes back to us that seems
14 unsatisfied by what NMFS is asking, that could be
15 inclusive of all four of those items.

16 MR. BOWLER: That sounds -- do you want to touch
17 on those individually or put them in that group?

18 MR. WOOSTER: I think predominantly they can go in
19 the group with -- now that we have the clarification
20 letter from Jim Hastreiter from April 12th.

21 I did have one question that I was hoping to get
22 clarified by Jim was that in the determination that the
23 Districts should include in their proposal to provide the
24 data NMFS requests and needs elements in the study plan.
25 The previous sentence was referring to peak flows. This

1 is page 24.

2 It seemed there was a definitive statement in the
3 determination that a peak flow analysis would be
4 included. And then in the recent clarification letter,
5 we have: "To address the Panel's concern and pending the
6 final outcome of the study dispute, we may require the
7 Districts to provide peak flow analysis as requested by
8 NMFS and file a revised study plan for Commission
9 approval."

10 So one seems to say we may require it and the
11 original determination seems to say it was being
12 required.

13 MR. FARGO: I'm sorry. Going from the
14 determination to the letter --

15 MR. WOOSTER: The determination was page 24, third
16 paragraph down.

17 MR. FARGO: Right.

18 MR. WOOSTER: Begins with the word "again."

19 MR. FARGO: The distinction, I guess, on page 24
20 in the determination we were just saying under Element 3,
21 which is the first half of that paragraph, it kind of
22 clumsily in that paragraph tried to deal with two
23 elements, but in the first half of that, our reading of
24 the model and what it could do, that this offer was
25 coming directly from the model.

1 The stage changes we're setting out as something
2 that the Districts are going to do outside of the model.

3 So when we got to the determination findings, we
4 set forth the two things that were going to be done
5 outside of the model, which is going to be the rate of
6 change and also the information at La Grange.

7 So that's why 3 kind of fell outside of those two.
8 I don't know if that makes any sense, but 3 we thought,
9 from the description of the model and the response from
10 the Districts in their draft study plan or final study
11 plan critique was that the model itself could be better.
12 It was just a model of what output you would then do with
13 that output, that data. The other two were stuff outside
14 of the model.

15 And so that's why we were -- I was -- we were
16 referring to Element 2 and Element 4 separate from
17 Element 3. And it might have been something crossed up
18 in the final response we just sent back. I'll take a
19 look at that.

20 MR. WOOSTER: Okay. So would a peak flow analysis
21 that's being required of model output data?

22 MR. FARGO: We're saying that the model itself,
23 based on the Districts' description, can already do the
24 peak flow analysis. It's just a matter of what output
25 format that's going to take. And we didn't stipulate

1 output format. We held all output formats in the model
2 workshops.

3 MR. WOOSTER: But the model won't do the peak flow
4 analysis. It will provide the data.

5 MR. FARGO: It'll provide the data to go into
6 the -- right. But the other ones are going to be done
7 outside of the model. They were separate studies for
8 NMFS that the District agreed to do outside of the model.

9 MR. BOWLER: Basically incorporated into the
10 requirements of the model.

11 MR. FARGO: We wanted to in the study plan include
12 any of those studies that the District was agreeing to do
13 so there would be sort of a placeholder within the study
14 itself so that you could see that the District agreed to
15 do Study A, B, C and D, so these things didn't fall
16 through the cracks. But some were things that the model
17 itself was going to do. We're assuming the peak flow
18 could be done as far as the data goes, not the
19 manipulation of it.

20 MR. BOWLER: John?

21 MR. DEVINE: Just to clarify, this is why we need
22 further discussion. I think the databases are different
23 time periods of available record and available intervals
24 of record, so the modeling data that John is referring to
25 was in terms of what the model can do or apply the

1 information to is a mean daily flow model, and so it can
2 do the Log-Pearson Type III analysis of peak flows based
3 on mean daily flows.

4 We don't have a model that does hourly or
5 subhourly or -- they're mean daily flows. That's what
6 we've always proposed. So I just want to make that
7 clear, because it's unclear, you know, within the study
8 request and the response a little bit in terms of, you
9 know, are you going to do 15-minute data or hourly data.

10 We'll use the data that we have. The model is of
11 mean daily flow model. It's not an hourly model or, you
12 know, subdaily, so I just wanted to be clear on that.

13 The rate of stage change is -- to be used is to
14 use the -- you've got me doing it -- La Grange gauge.
15 And we have the flow record. We know for hourly. We
16 think for a certain time period for 15-minute.

17 We don't understand exactly what NMFS was asking
18 for or how to do it or how we even do it the way they
19 suggested, but we're open to further discussion on that,
20 certainly. But we're not sure we can get the stage
21 information in the -- we think we can get it in hourly,
22 but we're not sure for what period of record because the
23 stage changes over time, the rating curves change, and so
24 the stage relationships change with flow.

25 So we know we have flow data, but how accurately

1 can we reconstitute the stage information is still up in
2 the air.

3 So I don't want to seem like later we've backed
4 off anything. I just want to make sure that we have it
5 in front of the Panel that, you know, as long as the data
6 is available and reliable and that we're doing analyses
7 that make sense, you know, like comparing consistent time
8 periods of record or whatever, you know, we're
9 comfortable and willing to do that.

10 MR. WOOSTER: To respond to a couple things that
11 John said, I think in our study request we were very
12 specific about what would be done for peak flow analysis
13 and acknowledge that you would need to use mean daily
14 flow values.

15 To quote:

16 "Where gauge records do not exist or the
17 flow scenario represents a synthesized
18 value, the annual maximum daily value will
19 need to be used. However, the annual
20 maximum daily value should be converted to
21 an instantaneous peak value using the
22 methods outlined by the USGS report
23 reasonable skew for California and flood
24 frequency for sites in the Sacramento/
25 San Joaquin Basin."

1 It's a 2006 -- through water year 2006, USGS 2011
2 publication where they outline direct methods for how to
3 compute the annual maximum mean daily to an instantaneous
4 peak value. And they have specific values for the
5 Tuolumne region. So yes, I am aware you'll be using --
6 you'll need to use mean daily.

7 And so when FERC recommends that they complete
8 NMFS Study Request Element Number 3, I'm assuming they're
9 detailing some of those methods that I put into the study
10 request, which is an adjustment of a mean daily to an
11 instantaneous peak value.

12 As far as the rate of stage change analysis, the
13 important component we're looking for is the stage
14 change, which, if you're using the USGS gauge, they
15 should have that. That's the data that's actually
16 reported in the pressure transducer, not the flow.

17 We're looking for more the stage change versus the
18 flow change. The fact that the rating curve may have
19 changed through time is irrelevant. The conversion of
20 that stage change flow is not the important parameter.
21 It's the instantaneous 15-minute or hourly stage change
22 that we're looking for an analysis of.

23 An inch change 20 years ago is, you know, is still
24 an inch compared to an inch change today is still an inch
25 change in stage, but it may have been a different change

1 in flow because the rating curve has changed, but we're
2 looking for an analysis of rate of stage change.

3 MR. DEVINE: Well, you said rate and flow both.

4 MR. WOOSTER: Okay.

5 MR. DEVINE: So they're not going to correspond to
6 each other.

7 MR. WOOSTER: Maybe the rate of flow change may
8 not be able to be consistently done through time. I can
9 appreciate that. But should be able to look at the rate
10 of stage change consistently through time with the USGS
11 record.

12 MR. DEVINE: If we can get the stage data -- to
13 the extent we can get it, we'll do it. Yeah.

14 I think there was a time period that was --
15 different time periods were suggested, too, and one of
16 the data sets was post-settlement and the other one back
17 to 1971.

18 So I'm not saying there's any inconsistencies
19 there; it's just something we need to make sure that what
20 we're trying to do and what we're looking for and what
21 period of record makes sense.

22 MR. BOWLER: So with Jim's help I think we just
23 took care of 4.1 and 4.3 and 4.4.

24 MR. DEVINE: Could I just add one little thing?

25 The vision of this, in our mind, was that this

1 would be what we do in the workshops. And really, I
2 mean, I'm not proposing that we refile a study plan with
3 all this in it. I mean, there's a lot going on. We have
4 35 studies going forward. We already have a process
5 going on. And if we start to have to revise study plans,
6 submit them to FERC, get approval, get comment, you know,
7 we just don't have the time for that.

8 MR. BOWLER: My understanding of what we're
9 talking about is what you file up to the date that the
10 study -- the determination is being prepared, the FERC
11 staff will take the elements from this discussion that
12 are important and recommend that the Director include
13 them in the determination.

14 MR. DEVINE: Okay. Understood.

15 MR. BOWLER: Is that accurate?

16 MR. HASTREITER: (Nodding head.)

17 MR. BOWLER: And we took care of 4.5, so I think
18 all we have left in 4 is 4.2.

19 MR. WOOSTER: I think Jim's letter for the most
20 part clarifies that, but there was a -- it was determined
21 that all four flow paths need to be analyzed.

22 The one component I'm still unclear about was, if
23 you could refer to the Panel's question number 8, would
24 be part (c) and whether they're requiring this flow data
25 to come as hourly data or mean daily. I think that's

1 what question subset 8(c) was asking, under what
2 conditions will the hourly data analysis be applied. I
3 think that was referring to the La Grange data set.

4 But Jim's response under (c) seems to be mostly
5 going back to the stage change analysis topic rather than
6 the La Grange flow path analysis. I think that's kind of
7 the one component to me for Element 2 that needs
8 clarification.

9 MR. DEVINE: Just to add, the data doesn't exist
10 for all four flow paths. That's why we proposed in
11 our -- what we could do in our revised study plan, which
12 was we can break down -- we think we can break down mean
13 daily basis, the division between the flows, between the
14 powerhouse and other flows past La Grange. We don't have
15 hourly or daily flows available for these other avenues
16 of flow at the project. You know, it's -- the records
17 are spotty, as best we can tell so far, at La Grange in
18 terms of which gate was open how much, you know, 15 years
19 ago and for how long. More recent records are a little
20 better. This is not -- like the powerhouse is one thing
21 and the total flow and the La Grange data, but where
22 these different gates were and what positions they were
23 at on a daily and hourly basis, the data doesn't exist.

24 MR. WOOSTER: In one of your comments, I believe
25 it was on either the proposed study plan or the revised

1 study plan, you had said that you would be able to use
2 hourly data to cite the details of operation at La Grange
3 Dam.

4 MR. DEVINE: And we clarified what we said there.
5 Let me find it for you. That's as far as breaking it
6 down between flows to the powerhouse and flows -- that
7 were going downstream between the powerhouse and the
8 others -- and the other ways flows could proceed
9 downstream.

10 MR. WOOSTER: So powerhouse versus the other three
11 conduits you can look at hourly?

12 MR. FARGO: John, could you -- to clarify things
13 for NMFS and for us, could you provide within some short
14 period just a breakdown of just what data is available to
15 do what with?

16 I mean, we found this to be data that we were
17 agreeing with NMFS would be interesting to definitely
18 look at for this proceeding. So if there are time
19 periods that you have the split that gives more detail
20 between the different paths there and other times you
21 don't, it would be good to know just sort of what that
22 looks like.

23 And again, this seems like it goes back to the
24 workshop type of communication as to what's available,
25 what would work, you know, with NMFS, and then, you know,

1 I mean, obviously you can't manufacture data if you don't
2 have it, but it would be good to know exactly what
3 periods are covered and what they're covering. It's
4 kind of confusing now to track what exactly it is you
5 have.

6 MR. DEVINE: Yeah. The four -- just to be clear
7 for everybody who may not as familiar with the project --
8 and I'll put a -- we have a schematic that we can share
9 with the -- you can put in the record -- that was at the
10 hydrology workshop that we shared with folks.

11 They are, you know, flows at La Grange can go to
12 the Modesto canal, to the Turlock canal, and can go
13 downstream. So that's pretty basic.

14 I think what John was asking for on the four
15 different conduits, or NMFS was asking for, the four
16 different flow paths was exclusive of the flows in the
17 canal, the canal flows to Modesto and the canal flows to
18 Turlock is, you could go to the powerhouse as a flow
19 path, the gates next to the powerhouse as a flow path,
20 the gates over at Modesto as a flow path, the spillway
21 would be a flow path, and there's actually another gate
22 in the dam on the Modesto, near the Modesto abutment.
23 And so those are the flow paths I think NMFS was seeking
24 that information for. Right?

25 MR. WOOSTER: Yeah. But I think you just

1 described a fifth. I'm not sure if you included the
2 crest of La Grange Dam, too.

3 MR. DEVINE: That's a spillway.

4 MR. WOOSTER: But how many were on the Modesto
5 canal side?

6 MR. DEVINE: Two.

7 MR. WOOSTER: Two on the Modesto canal side,
8 TID canal side you've got powerhouse and gates?

9 MR. DEVINE: Yes.

10 MR. WOOSTER: Plus crest of dam, which makes five.

11 MR. DEVINE: Which we don't have data on.

12 What we said we could do was by backing out the
13 flows at La Grange, our gauge, and flows that the canals
14 are going down the canals, what we know is the flows that
15 went downstream. We know that. We can get pretty good
16 information going back a ways for the flows back
17 through -- using output, generator output, the estimated
18 flows at the powerhouse. So that means the rest of the
19 flows came from someplace else. But that's what we said
20 we could do. We could only back it out that far.

21 And we've been continuing to dig on the flow
22 information we have or the records we have in terms of --
23 the Districts have in terms of gate openings, length of
24 openings, how much they are open, when they're open, when
25 they're closed, and that data is very spotty. Better

1 recently, but very spotty historically. We're not going
2 to develop any reliable -- be able to develop any
3 reliable data on those paths.

4 MR. FARGO: All right. I mean, to clarify what is
5 in the NMFS Request Number 2 and what FERC agreed with
6 NMFS would be the information that we thought would be a
7 useful split, here it just has La Grange powerhouse and
8 then the MID canal spillway, the TID canal spillway and
9 La Grange, so there's still just the four paths that have
10 been discussed in the FERC request and --

11 MR. DEVINE: Right.

12 MR. FARGO: -- in the NMFS, the FERC determination
13 letter and the NMFS request. Now we're talking five and
14 six. It's getting really confusing.

15 MR. DEVINE: Yeah. And that's why I wanted to
16 cover this.

17 MR. FARGO: All right.

18 MR. DEVINE: The four you're thinking of, Jim, and
19 the four that John was thinking of and NMFS was thinking
20 of in their request are four different paths, are
21 different paths.

22 MR. FARGO: Right.

23 MR. DEVINE: Okay? So NMFS was breaking down the
24 path that goes downstream --

25 MR. FARGO: Right.

1 MR. DEVINE: -- into four elements. Okay? Not
2 just two elements: powerhouse and spill. So they were
3 saying -- and there's -- they just missed it. There's
4 actually five elements the way the flow paths could go to
5 go past La Grange Dam.

6 MR. FARGO: And the fifth you're saying, I mean,
7 could go through the powerhouse, could go over the
8 spillway, go to either canal. Now what's the fifth?

9 MR. DEVINE: Forget the canals. That would make
10 seven. If you want to talk about all the flow paths
11 that -- I'm sorry to make this confusing -- all the flow
12 paths that go downstream, just not the canals.

13 MR. FARGO: Two canals.

14 MR. DEVINE: You have five.

15 MR. FARGO: All right.

16 MR. DEVINE: And the only one we have a decent
17 record on, and that -- even that is -- you know, we're
18 going to have to work on to see just exactly -- is the
19 powerhouse. So, you know, we're -- we just don't have
20 records on the other gates.

21 MR. FARGO: Okay.

22 MR. WOOSTER: I missed one in the MID spillway.
23 There's actually two. I mean, coming from the MID side
24 there's two. I missed one. I just called it the MID
25 spillway. But there's another one.

1 MR. FARGO: I guess it still goes back to the
2 other thing about providing the information you think you
3 have, the durations you think you have, and sharing it
4 with NMFS and others and then seeing what we can -- you
5 know, the best information we could put together on
6 things.

7 MR. BOWLER: Thank you.

8 MR. WOOSTER: I think, from what I'm hearing, that
9 there can be an hourly type analysis of powerhouse flow
10 versus everything else. And I think having that level of
11 analysis is useful because, as we discussed earlier,
12 there is some questions about flow in the powerhouse
13 channel versus not, although I believe the TID spillway
14 probably dumps water into the powerhouse channel side.

15 MR. DEVINE: Under certain -- at a certain flow
16 level it can get over the bar there that separates the
17 two.

18 MR. WOOSTER: I think having the hourly analysis
19 for what's available, and then the rest sounds almost
20 like qualitative type analysis where generally this thing
21 is used kind of these months or whatever they can dig up.

22 MR. DEVINE: Yeah.

23 MR. WOOSTER: You're going to have two levels, and
24 I think both of those would be useful.

25 MR. DEVINE: And just to make sure on the record,

1 I'm not sure how long the hourly record for generation
2 can go back. We have some. We're happy to provide what
3 we have.

4 But I think Jim's idea, we're glad to get a
5 listing of information that we have and the period of
6 record and the interval.

7 MR. BOWLER: Okay. Having knocked out 4, we'll
8 take our break. We'll do 15 minutes, so we'll come back
9 at five 'til three. We're ahead of schedule.

10 (Recess taken, 2:39 to 2:56 p.m.)

11 MR. BOWLER: We're ready to start again and I'm
12 going to use the mic, because some people can't hear me.

13 At this point we skip to NMFS Study Request 7,
14 Effects of the Project and Related Facilities and
15 Operations on Upper Tuolumne River Habitats for
16 Anadromous Fishes.

17 There are four elements to this dispute request,
18 involving migration barriers, water temperature,
19 implementing monitoring activities, and salmonid life
20 cycle model. I think the focus here is on the life cycle
21 model.

22 MR. HASTREITER: Stephen?

23 MR. BOWLER: I'm sorry.

24 MR. HASTREITER: Life cycle model is also in 8.

25 MR. BOWLER: Yeah. This is one of the ones that

1 essentially involves the issues above the Don Pedro Dam,
2 so this one is in the category of requests that we as a
3 Panel can't add much to because it involves policy issues
4 beyond our scope.

5 Is there anything downstream of Don Pedro lumped
6 in this?

7 MR. WOOSTER: On Request 7?

8 MR. BOWLER: Yeah.

9 MR. HOLLEY: There's nothing downstream.

10 This is Tom Holley from NMFS.

11 There's nothing downstream, but the issue is a
12 little bit different than the issues that we're dealing
13 with for NMFS Request Number 3 in terms of fish passage
14 in terms of nexus.

15 We believe there's a nexus to upstream habitat in
16 the Tuolumne River upstream of Don Pedro because of the
17 connection between the Don Pedro project and the
18 Hetch Hetchy operations. So it's a different nexus issue
19 than it was downstream of Don Pedro project.

20 There was arguments over whether there was a nexus
21 between fish passage blockage and the Don Pedro project.
22 We think that applies here as well, although we
23 understand that we're no longer going to talk about that.

24 But we also believe, secondarily, that there's
25 another nexus that the Don Pedro project either

1 indirectly or cumulatively if not directly affects
2 upstream habitat, that is, aquatic habitat upstream of
3 Don Pedro reservoir, because of the connection between
4 the Don Pedro project and City and County's projects,
5 which is upstream in the watershed.

6 So I don't know if the Panel can speak to that
7 issue of nexus or whether you're going to choose to lump
8 that in with the nexus issue downstream that you're
9 choosing not to address.

10 MR. DEVINE: Can I comment on that?

11 MR. BOWLER: Yes.

12 MR. DEVINE: The claim that NMFS makes in their --
13 in the study dispute is that the Hetch Hetchy facilities
14 are interdependent and interrelated to the Don Pedro
15 facilities.

16 And just to make sure it's on the record,
17 Hetch Hetchy facilities are operated in a way there's
18 not -- they are not interdependent and they are not
19 interrelated to Don Pedro facilities.

20 They make their operating decisions --
21 Hetch Hetchy makes its operating decisions daily, weekly,
22 monthly and annual without any regard in large extent to
23 what goes on at Don Pedro.

24 The fourth agreement certainly has an overarching
25 effect on what City and County of San Francisco can do as

1 to meet the requirements of the fourth agreement, but
2 they are not interdependent and they are not
3 interrelated.

4 The decisions that City and County of
5 San Francisco make about the operation of Hetch Hetchy,
6 they do not consult with Don Pedro or the Districts on
7 how to operate that system. They make decisions every
8 hour, day, month, year, and the Districts are not
9 consulted.

10 The latest example would be -- and the most --
11 probably the most apparent is that they've adopted -- the
12 City and County of San Francisco have adopted a
13 brand-new -- 2008 I think it went into implementation --
14 the water system improvement plan for the entire
15 Hetch Hetchy system.

16 There was no requirement, no -- even anything near
17 a requirement for the City and County of San Francisco to
18 get approval for -- of the Districts for such a
19 significant change in adaptation of the facilities.

20 MR. BOWLER: Let me ask --

21 MR. DEVINE: Let me just -- if I could just wrap
22 up? I mean, the City and County of San Francisco
23 representatives are here, and, you know, if you want to
24 get more information about that lack of interrelatedness
25 or interdependence, I'm sure they could talk about the

1 operation of their system.

2 MR. WHITE: What is the Commission's policy or
3 understanding of the interrelatedness or interconnection
4 between the two, Hetch Hetchy and Don Pedro?

5 MR. HASTREITER: Exactly as John just described.

6 MR. BOWLER: Would it be something you would treat
7 in the cumulative effects analysis?

8 MR. HASTREITER: Well, and it's going to be
9 treated in the model. The Districts have agreed to
10 disaggregate, in the model, flows out of Hetch Hetchy
11 into Don Pedro reservoir, so all that will be modeled and
12 then it will be addressed by the model both for flows and
13 temperature down below La Grange where there are
14 anadromous fish.

15 MR. WHITE: It seems to me that there must be a
16 level of interrelatedness or interconnectedness.

17 Could NMFS describe what you think the
18 interrelatedness and interconnectedness is?

19 I understand there are legal and contractual
20 connections between the two?

21 MR. WANTUCK: Yeah, we asked -- formally
22 petitioned the Commission to incorporate the 2009 ALJ
23 transcripts in its entirety to the record so that it
24 could be made accessible. There was much discussion
25 about the interrelatedness of these projects at that

1 time. And that would be a definitive source to go back
2 and review those expert testimonies.

3 Obviously, the Districts and the City and
4 County -- probably a review will reveal the same story
5 Mr. Devine told -- but there is also a counter-story, and
6 NMFS does not subscribe to the idea that these are not
7 related facilities.

8 Second of all, I bring back up the issue of the
9 Chinook salmon that exists in the Don Pedro reservoir,
10 and these fish go up and spawn in those reaches, in the
11 intervening reaches.

12 We believe that because they are an anadromous
13 species, they are being prevented from expressing an
14 anadromous lifestyle history.

15 Mr. Devine said there was no evidence of that. I
16 say there's no evidence that there's not. We're asking
17 FERC to study these issues. It would seem like that
18 would fulfill this lack of information.

19 So there are anadromous species in the reservoir.
20 They do go up and spawn in those areas. Thus, we're
21 asking for a study of that.

22 MR. BOWLER: Let me ask, in terms of the
23 downstream temperature issues, in terms of understanding
24 those and any information that's gained from the inputs
25 that come into Don Pedro relative to what goes downstream

1 and influences the temperature regime, does the
2 operations modeling, the hydrologic model that
3 disaggregates the instream flows, the flows into
4 Don Pedro, provide the information that's needed to
5 understand the downstream temperature issues?

6 MR. HOLLEY: I can answer that. I think the
7 simple answer is yes. The proposed reservoir temperature
8 modeling would be sufficient to characterize that, along
9 with the operations modeling, but this request was in
10 regards to the habitat upstream of Don Pedro reservoir.

11 MR. WOOSTER: Well, I had a separate question.
12 John, you said that there's no communication or
13 coordination between the two entities, the Districts and
14 San Francisco, be it monthly -- daily, monthly, yearly,
15 and I was just wondering, how then do the two work out
16 the water-banking agreement if there's no communication
17 or coordination? I mean, you've got various flood
18 protection levels that need to be kept and met, it seems
19 like -- and I don't know, maybe this is a question for
20 San Francisco, but --

21 MR. DEVINE: Well, I didn't say there weren't any
22 communications. And, of course, during flood management
23 seasons, as responsible water resource managers, they are
24 talking to one another to understand what the flows are.

25 In terms of their interrelatedness or

1 interdependence, all the decisions that San Francisco
2 make about their daily operations, weekly operations,
3 what they put through their hydro system, what they send
4 down over the pipeline, they don't seek nor do they ask
5 for the Districts' approval for any of that. They don't
6 get District consultation on any of that. All those
7 decisions are made by the City and County of
8 San Francisco absent any input from the Districts.

9 So, obviously, they're not so interrelated that
10 they need -- that they have to consult with Don Pedro or
11 Don Pedro has to consult with them.

12 Certainly, as water resource managers, they are --
13 during high flow periods, they are coordinating and
14 letting each other know what's going on at the projects,
15 how much flow City and County of San Francisco is seeing
16 in their system, you know, so that kind of planning is
17 going on. That's just responsible water resource
18 management. Flow goes downriver. It would be
19 irresponsible to not -- during flood management
20 situations, to not be communicating with one another.

21 MR. WOOSTER: How does the water-banking
22 agreement --

23 MR. DEVINE: The water-banking agreement is a
24 calculation of flow. It's well established. We covered
25 it in the hydrology meeting. And it's in the PAD.

1 There's a thorough description in the PAD of the fourth
2 agreement and how flows are separated or flow -- water
3 rights are allocated.

4 And they don't change that every day. It's just
5 the fourth agreement. It's been the fourth agreement
6 since the project was implemented. It's the fourth
7 agreement now. It doesn't change daily. It's just the
8 way that water rights are allocated.

9 MR. HOLLEY: Just because the Districts and CCSF
10 don't communicate on a daily or weekly time step doesn't
11 mean that there's not a nexus. And that's the basis for
12 which our request was denied is that there's lack of
13 nexus between Don Pedro and the habitat upstream of
14 Don Pedro reservoir.

15 I think we've demonstrated in our letters that
16 there is a clear nexus. And just because they don't
17 communicate on a daily basis and CCSF doesn't, you know,
18 consult with the District on every move they make doesn't
19 mean that there's not a connection between the two
20 projects.

21 MR. DEVINE: Well, the proof of there not being a
22 nexus or -- the proof of not being a nexus is there is no
23 condition you could put on the Don Pedro license that
24 would force City and County of San Francisco to operate
25 any differently than they do. So there's no nexus.

1 There's nothing that FERC can do within their
2 jurisdiction on Don Pedro that would order the City and
3 County of San Francisco to operate the project in any
4 particular way.

5 MR. HASTREITER: And again -- I'm sorry, John. Go
6 ahead.

7 The nexus that you're talking about relates to the
8 barrier at La Grange. There's no anadromous fish above
9 La Grange. And that's what this request is addressing,
10 anadromous fish habitat.

11 MR. HOLLEY: We're addressing anadromous fish
12 habitat and we -- all the areas above Don Pedro reservoir
13 were historic anadromous fish habitat.

14 We heard today from Ramon that some of the fish up
15 there have anadromous characteristics. So we feel as
16 though that it's anadromous fish habitat and it's
17 currently resident fish habitat as well.

18 MR. HASTREITER: And that habitat is affected by
19 the City, not Don Pedro.

20 MR. HOLLEY: Well, we believe that they're closely
21 related and that there's a nexus from one to the other.

22 And if I can read from the Districts' own PAD
23 document, an excerpt that kind of characterizes the
24 relationship between the two?

25 MR. BOWLER: And then maybe one more comment and

1 then we'll move on.

2 MR. HOLLEY: Sure.

3 It says:

4 "The City and County of San Francisco's
5 financial contribution enabled the project
6 to be built with sufficient storage
7 capacity to intercept water in wet years
8 which come directly from CCSF's
9 Hetch Hetchy system releases. Water in
10 this bank account is the District's water
11 to store and use in subsequent dry periods
12 allowing CCSF to use releases of water that
13 would otherwise be entitled to Districts."

14 So the presence of the project and the storage
15 that's afforded by the project affects the flows that
16 would otherwise be coming down in the Upper Tuolumne.
17 It's pretty clear that there's a relationship there.
18 Just because they're not coordinating day to day doesn't
19 mean the projects aren't related.

20 MR. BOWLER: I think the Panel is ready to move on
21 to NMFS Study Request 8, which I believe relates to 7.4
22 as well. The -- 8 deals with the request for information
23 or study of salmon and steelhead full life cycle
24 population models to assess the effects of the project
25 and related activities. And basically 8.1 deals with

1 fall-run Chinook salmon and 8.2 deals with Central Valley
2 steelhead.

3 NMFS requests a full life cycle salmonid
4 population model -- this applies to both, really -- that
5 will evaluate both in-river and out-of-river effects on
6 salmon.

7 The District proposes a conceptual model of
8 outside factors and a quantitative model for in-river
9 factors.

10 The FERC determination holds that the point of
11 modeling was not perfect population prediction but a good
12 estimate of the project effects; therefore, qualitative
13 estimates of out-of-river variables was adequate.

14 NMFS argues that the information is needed to have
15 a -- to have adequate modeling information, the
16 out-of-river variables.

17 And we didn't ask any questions in our
18 clarification letter on this item.

19 Is that an accurate representation of the dispute?

20 MR. THOMPSON: I think so. I think the main
21 argument we have at this point is that there is a FERC
22 study plan determination that determined that full life
23 cycle models were not needed, and we believe they are.

24 And to elaborate, we believe they are because our
25 history with this project -- and Rick alluded to the ALJ

1 proceeding and that record -- and believe me, it's thick
2 (indicating).

3 In that proceeding we heard a lot about
4 out-of-basin factors that were the controlling factors,
5 not in-river factors, that have the dominant control on
6 anadromous fish populations.

7 So what we're wondering here is what's going to
8 prevent those assertions from being made again when you
9 have a model that will end near the mouth of the Tuolumne
10 River, will not take into account those out-of-basin
11 factors that were always pointed to, have been pointed to
12 in the past as being the controlling factors.

13 So we're saying we need context. And the context
14 is to evaluate the delta factors, the ocean factors, have
15 a full life cycle model, evaluate in-river factors in
16 that context.

17 MR. BOWLER: Did either FERC or the District
18 explain the general meaning of the conceptual side of the
19 model? And is it a fixed -- sort of a fixed set of
20 variables that apply to -- just are fixed for the outside
21 factors and the in-river factors vary, or is there some
22 degree of modification for different situations in the
23 out-of-river variables?

24 MR. HASTREITER: I'll just start, Stephen.

25 We felt that doing an in-river production model

1 addresses the effects of the Don Pedro project within the
2 Tuolumne River.

3 In requiring a life cycle model, it goes way
4 beyond that. It would require following a cohort through
5 the system, out to the ocean, and then back up. And that
6 cohort would experience effects in San Joaquin River, in
7 the bay delta, in the ocean, all the way back.

8 And from our perspective, that sort of model is
9 really the fish management agency's responsibility that
10 would incorporate all the effects on the population.

11 We felt that the responsibility of the Districts
12 which would provide the information that we need to do
13 our public interest determination would be satisfied with
14 an in-river production model. Okay?

15 The W&AR-5, 6 and 10 are going to get to
16 addressing what the effects on those cohorts are in the
17 other areas outside of the Tuolumne River. And we're
18 going to use that information and describe that
19 information as part of our cumulative effects analysis.

20 And I guess -- I know there was a meeting this
21 week, and I'm going to pass it off to Noah to describe,
22 you know, 5, 6 and 10, W&AR-5, 6 and 10.

23 MR. HUME: Right. So the three studies that are
24 in the district study plan are salmonid synthesis,
25 information integration and synthesis type of study,

1 which is getting to this cumulative question, and then
2 that's supposed to feed into the development of two
3 production -- life cycle base, but basically salmon
4 production models.

5 In the past, the Districts have developed
6 different life cycle -- full life cycle models. These
7 are generally statistically based on pretty broad things
8 like basin outflow or something like that or delta
9 exports or ocean harvest or things.

10 And what we've found, we've tried to use them to
11 predict the effects -- to discern the effects of things
12 like habitat restoration or things like that. They're
13 very clumsy tools for that purpose. You have to just
14 sort of make these wholesale shifts in the stock
15 production relationship or something and say I think this
16 is about the sort of effect I'm looking for and would it
17 produce a long-term change in population size. And it
18 doesn't provide a very convincing argument at the end of
19 the day when you use the tool for that purpose.

20 So all we could say was population follows these
21 broad cycles, and, you know, it is explained by large
22 changes in basin hydrology and delta exports and ocean
23 conditions and things like that, and that the process
24 would be better served to develop a nonstatistically
25 based sort of production approach on factors that we

1 could actually know something about like habitat area,
2 predation, you know -- well, actually, predation was one
3 which we might be stuck using some sort of a
4 regression-based relationship. But temperature, those
5 sorts of things.

6 So that's the approach we took. It's going to
7 take it from spawner to outmigrant. And these type of
8 tools have been used in other relicensing contexts. The
9 eventual model was a spreadsheet-based tool people can
10 gain with and manipulate factors. We're going to have
11 additional workshops to decide what factors are to be
12 included. It can't model absolutely everything, but
13 we're going to work through those issues and try to
14 develop these models to be as inclusive as possible. And
15 that's the approach that we took.

16 MR. BOWLER: So is the input and output from the
17 out-of-river system, is it essentially like in a
18 hydraulic model, sort of a boundary condition? I mean,
19 you bring in what comes in and you --

20 MR. HUME: You start with a spawner population and
21 then how many come out the other side. Our ability to
22 calibrate such a model is going to be limited to only
23 about a half a dozen years of screw trap production data.
24 The data has become more robust only in recent years.

25 We're not going to do a spawning population,

1 trying to carry it all the way through a full life cycle
2 because we can't track all of these other factors that
3 are happening out of basin.

4 And so, you know, we can reproduce that
5 statistically, and we've done so in the past, but we just
6 don't think that's going to be useful in informing
7 license conditions on flows or temperature or habitat
8 restoration or whatever it's going to be.

9 MR. THOMPSON: I might ask a question of Noah.

10 How do other models do it? I'm aware of a
11 California Department of Fish & Game model that -- of
12 course, it's been in development for many years, but the
13 latest version that I saw a briefing about has now
14 extended it to be a full life cycle model, including
15 delta and ocean conditions.

16 My understanding is they did so on the basis of
17 recommendations from -- they're called the Delta
18 Stewardship Council, which had modeling workshops, a
19 number of people come together, experts in the field,
20 including our Southwest sciences lab, and they put a
21 report out, and Fish & Game heeded that report.

22 And I want to read one of the quotes from the
23 report, page 13. The report advises that, quote,
24 "Critical aspects," unquote, "of a model include density
25 dependence, time stepping, spatial grid, routing into and

1 through the delta, and ocean growth and survival."

2 And they're just saying, you know, "Fish & Game,
3 listen to that." And they have now developed this. And
4 again we'll wait and see.

5 I want to point out that our lab is also
6 developing a full life cycle model, at least one, and
7 there is a life cycle model I'm aware of for winter-run
8 Chinook that was developed by our two resources, which
9 takes fish from below Shasta Dam to the ocean and back.

10 And again, I'm left wondering what we'll do later
11 if an assertion is made that we produce salmon in the
12 Tuolumne, they all die out there. We produce enough of
13 them here. They all die out there.

14 If we don't have any idea of how ocean cycles,
15 decadal cycles affect populations or catch, or delta
16 conditions predation there, flows in the delta,
17 et cetera, that argument will be made again. And how
18 will FERC or NMFS or anyone else interpret that
19 information?

20 MR. HUME: I completely agree that these are
21 important considerations.

22 In the 2005 ten-year study report we used the
23 state's base modeling that we'd already done for the
24 Districts which uses these exact same approaches
25 developed in the 1990s, and people were unconvinced at

1 the results.

2 And so we have a model that can do that and we can
3 develop another model in the future to do that. We can
4 add life stages to the existing model. So these
5 approaches are all available, but it doesn't get to the
6 actual effects of the project.

7 You know, if you use these large statistically
8 based models, they will -- you'll have to fit to very
9 large variations in variables, so basin outflow, delta
10 exports, ocean conditions. Is that really what you want
11 the tool to use?

12 I think it's a very good tool to look at
13 management of the delta, of management of ocean
14 fisheries, you know, where you have lots of rivers coming
15 together.

16 MR. THOMPSON: Well, the OBAN model that I
17 mentioned, the R-2 resources model, found that spawning
18 and incubation temperatures up in the Upper Sacramento
19 River below Shasta and Keswick were a key factor in the
20 survival and the returns of winter-run. They figured out
21 what an in-river factor -- what in-river factor had an
22 effect using that model.

23 MR. HUME: Would they be able to discern a change
24 of two miles of cool water habitat with that model? I
25 doubt it.

1 MR. THOMPSON: But I would just -- I would close
2 by saying there's an opportunity -- I don't know if the
3 Districts have thought about the opportunity to
4 collaborate with these other modelers that are doing this
5 kind of thing.

6 You mentioned, Noah, that it's been done before,
7 maybe it didn't work, people didn't believe it,
8 et cetera, but I think you have an opportunity here to
9 collaborate with the California Department of Fish & Game
10 who's done a lot of work and has this Sal-Sim model now,
11 they call it. They have an interface for it. They're
12 going to put it on a -- my understanding is they're going
13 to have it publicly available. They're working on an
14 interface now. And that's one way of collaboration.
15 Another way would be with getting involved with the Delta
16 Stewardship Council, taking a look at what they're doing.

17 Thank you.

18 MR. WANTUCK: I'd like to -- thank you, Larry.

19 I'd like to add something that is on the record.
20 It's a short excerpt from a study performed in 1995 by
21 Oakridge National Laboratory for the Office of Hydropower
22 Relicensing, Federal Energy Regulatory Commission. Its
23 title is called "Potential Cumulative Effects of
24 Hydropower Projects in the Bay Delta California."

25 And the short paragraph I'll read here speaks to

1 the downstream impacts of this project and some others:

2 "There are nine licensed projects involving
3 22 storage reservoirs where cumulative
4 impacts are much more likely. These
5 projects are with direct impacts and are
6 located in three areas without large
7 federal-state water projects: The Yuba and
8 Bear Rivers in the Sacramento Basin, the
9 Mokelumne River and Calaveras Rivers in the
10 Central Sierra area, and the Tuolumne and
11 Merced Rivers in the San Joaquin Basin.
12 The Commission has active, unresolved
13 proceedings in the latter two of these
14 basins already, but cumulative impacts to
15 the delta are not yet within the scope of
16 those proceedings."

17 MR. WHITE: I understand there are, I believe --
18 correct me if I'm wrong -- there's a population model
19 that's being proposed to model response to potential
20 operational changes or scenarios in-river, but it doesn't
21 extend through the delta and into the ocean and complete
22 the full life cycle.

23 But there is another process that's being proposed
24 to evaluate or at least look at the out-of-river or
25 out-of-basin factors to try to put the freshwater

1 project-related factors into context, because, in my
2 mind, if you determine that there is a project effect, it
3 still makes sense to figure out how significant it is.

4 Can you describe to me what the process is to put
5 the freshwater in-river effects into context? And would
6 it be sufficient to guide the freshwater population study
7 results as to how much weight they carry? How much can
8 we know for sure about what the population model tells us
9 with respect to how significant the issues are or the
10 sensitivity of the population model results versus the
11 other external effects?

12 MR. HUME: So the -- I forgot to say in my prior
13 rambling that the W&AR-5 synthesis study is an attempt to
14 contextualize in-river/out-of-river cumulative effects.
15 It's going to do so based on existing study results.

16 So it wasn't going to run -- you know, develop a
17 big population model, you know, looking at ocean regime
18 changes or changes in exports or whatever. It's going to
19 summarize existing efforts, existing modeling efforts.
20 Any results that we can get our hands on we're going to
21 talk about.

22 The first steps of that was sort of defining the
23 literature. The literature set is not closed. We have
24 that -- I think we said we were going to include that
25 today. But it's sort of getting near full. And if

1 people have other information to provide us to look at,
2 we were going to do that.

3 And then the next step in that process was a
4 series of sort of conceptual models of how the river
5 system is functioning and, I suppose, including the full
6 life cycle through the delta and ocean as part of that.

7 That, in turn, was going to be narrowed in the
8 next two studies, the 6 and the 10, to just the in-river
9 factors.

10 I think numerically assessing the weight or
11 sensitivity of in-river versus out-of-river factors is a
12 very difficult question and I'm not sure how to inform
13 that with the process other than the literature summaries
14 that we have.

15 We will be looking at the sensitivity of the --
16 the relative sensitivity of in-river factors, of
17 project-controllable -- or what the Districts consider to
18 be project-controllable factors, but I don't know that
19 we'll be able to say changes in delta exports or, you
20 know, pelagic organism abundance or something is going to
21 outweigh some changes in project outflows or something
22 like that. We weren't going to try to study that here.

23 MR. WHITE: If you -- if it was attempted to do a
24 full life cycle population model, my understanding is one
25 would still have to make assumptions --

1 MR. HUME: Correct.

2 MR. WHITE: -- to build that model. Would it make
3 a significant difference in the -- I mean, you make
4 assumptions in a life cycle population model, also. If
5 you do a separate effort to contextualize the population
6 model in-river, the same assumptions are being made in
7 both paths; you're just doing different things with the
8 assumptions.

9 MR. HUME: Yeah. That's right. And it's more
10 just an issue of model scale and structure is the
11 problem, that we can't really -- once you start to
12 increase the geographic scale, you have to start
13 representing river production with simple curves and
14 things like that, and then you have to say, well, what is
15 influencing the shape of this curve.

16 And, you know, in the early versions of this
17 Fish & Game model they were just using simple flow
18 regressions to explain a production of a given life stage
19 and regardless of whatever factors.

20 And so that was one of the deficiencies that
21 they've been trying -- I guess they've been trying to
22 work through.

23 So it's -- whereas, if you just drop this -- the
24 modeling portion that we're doing, we're trying to say,
25 you know, this is the curve related to, you know,

1 production curve related to this particular habitat
2 attribute and build it up from there -- I'm not the
3 actual modeler, by the way -- but the idea was that there
4 could be a lot more specificity to particular mechanisms
5 at work in the river that are affected by project
6 operations.

7 MR. WHITE: So by increasing the geographic scope,
8 you could lose specificity in the --

9 MR. HUME: That's our position. Right.

10 MR. WHITE: Yeah. I just wanted to follow up on
11 that.

12 MR. THOMPSON: I would just follow up by saying I
13 was impressed by the Sal-Sim presentation. But I'm far
14 from an expert on this. I saw -- this is the Cal Fish &
15 Game model. I saw a lot of interesting new things in
16 that, and I think there's an opportunity for
17 collaboration there with what they've done.

18 They have predation factors in the model. They
19 have straying in the model. So they're not only looking
20 at fish that are produced in the Tuolumne and leave.
21 They're looking at fish that might be straying from the
22 Merced hatchery or from other hatcheries, or wild fish
23 produced in other tributaries. So it's pretty
24 sophisticated.

25 And I was really pleased because it was the first

1 version I had seen that had a full life cycle
2 perspective. And it wasn't like two models that are
3 linked together, sort of a quantitative model and then
4 sort of a conceptual model that you just kind of link
5 between, those kinds of things, you know. Again, if you
6 look at the report of this independent workshop, they
7 caution about that.

8 And so again, we'd like to see a full life cycle
9 model.

10 MR. WOOSTER: A question for Noah.

11 Is it not possible to stay with your detailed
12 model of the in-river conditions and then jump into
13 the -- out to the ocean and coming back as a scale such
14 as Fish & Game's model such that you're using that for
15 the downstream half of the model year for both?

16 MR. HUME: It can be done. Yeah. And then you'd
17 have to try to fit all that to what's -- it's been done
18 in other contexts.

19 We're proposing to cut the wheel off, but it could
20 be, you know, somewhere in the study process if, you
21 know, the information is found insufficient to answer
22 some broad questions, that could be revisited. But it
23 adds another level of complexity to start fitting
24 against. Then you're trying to get a whole time series
25 information and what are all the variations of all that.

1 MR. WOOSTER: If you took an approach like that,
2 could you not kind of preserve answering some of the
3 in-river questions you want to answer about project
4 effects and then also still have the bigger picture life
5 cycle runs?

6 MR. DEVINE: Doesn't it introduce unneeded
7 uncertainty, in a way? Because I think the scale issue
8 is what we're trying to get to in the development of this
9 study plan.

10 And just a comment on the development of the study
11 plan. This was not done in a vacuum. We had a lot of
12 meetings about this study plan in the development stage.
13 So this is not just the Districts' idea, you know, with
14 no consultation with anybody. So I just wanted to make
15 sure you're aware of that.

16 Through the consultation process we've tried to
17 work through the elements of the study plan, but, I mean,
18 what we were trying to deal with was uncertainty, and by
19 looking at the scale and with the data that we have and
20 we can get in our other work that we're doing, we can pay
21 attention to a fairly -- a very detailed scale on the
22 Tuolumne River.

23 And then if we go to this larger scale model --
24 and I'm not a modeler, either -- but it starts to
25 introduce all this uncertainty with respect to the

1 results of, you know, what our production model says.

2 And it seems like that's the things that the
3 project can deal with in, you know, in any effective way.
4 So I think it's uncertainty and lack of precision, it's
5 different at these different scales.

6 MR. BOWLER: Anything else from FERC staff before
7 we move on?

8 Okay. Panelists are ready to move on to NMFS
9 Study Request 9, which is Effects of the Project and
10 Related Activities on the Losses of Marine-Derived
11 Nutrients in the Tuolumne River.

12 There's four elements to this, dealing with
13 different aspects of sort of the delivery and mass
14 balance and effect of marine-derived nutrients.

15 Basically, the request and the Districts' proposal
16 and the FERC determination and the dispute all fall back
17 on the issue of nexus and whether the Don Pedro Dam is a
18 fish blockage, and again, this is an area where the Panel
19 is -- it would be outside of its purview to be making
20 determinations or recommendations and findings on.

21 MR. WHITE: Is there a connection here towards
22 return of marine-derived nutrients to the habitat below
23 the range?

24 MR. THOMPSON: Yes. Yes. There are aspects both
25 in the Upper Tuolumne and the Lower Tuolumne. We asked

1 for information in both places.

2 And so I think what I heard Stephen say, we're
3 going to rule out the transport of marine-derived
4 nutrients in the Upper Tuolumne on the basis of what
5 we've already talked about, but in -- I was surprised to
6 see in the FERC study plan determination pages -- I guess
7 it was on page 88, the note that -- the statement that:

8 "NMFS also requests information elements
9 pertaining to the Lower Tuolumne River. We
10 note that the Don Pedro project does not
11 block upstream fish passage between the
12 Pacific Ocean and La Grange Dam; therefore,
13 it does not inhibit the delivery of
14 marine-derived nutrients to the Lower
15 Tuolumne River."

16 I didn't follow that logic, for the reason that
17 you can inhibit the delivery of marine-derived nutrients
18 through other aspects besides the blockage of fish, I
19 mean, any effect on escapement. So we're going back, I
20 think, full life cycle model again.

21 If we could evaluate the -- in the context of all
22 factors the factors in the river that are affecting
23 escapement, you would be able to understand how
24 marine-derived nutrient delivery was affected by the
25 project.

1 So we disagree with the FERC study plan
2 determination logic here. Clearly, for example,
3 temperature effects -- let me use an example --
4 temperature effects on spawning and incubation success.

5 The project could, I believe, clearly affect
6 downstream temperatures in the spawning and incubation
7 areas. If you adversely affected the spawning success,
8 you'd adversely affect the number of smolts produced;
9 therefore, the number of outmigrants and potentially the
10 number of returning adults. So it isn't a fish passage
11 issue, per se.

12 So the only way I guess you could say that there's
13 no nexus or there's no connection here would be that you
14 are maintaining that the project has no influence on the
15 escapement of salmon to the Lower Tuolumne River, which I
16 don't agree with.

17 MR. BUHYOFF: Yeah. You know, I think we
18 addressed the other multitude of factors, you know,
19 in-river, out-of-river factors that affect production,
20 and so I think what we didn't see was anything in this
21 study that would correlate project effects on -- you
22 know, specific project effects on marine-derived
23 nutrients in Tuolumne.

24 And, you know, I think some of the other proposed
25 studies can, you know, in effect get at that, I mean, the

1 production models, which are intrinsically linked to how
2 much organic matter's coming back, and, you know, other
3 cumulative effects analysis temperature model, so on and
4 so forth, can get at project effects, you know.

5 MR. HASTREITER: The question I have, Larry, is
6 how is an estimate of the loss of marine-derived
7 nutrients going to inform the license conditions?

8 We all have an objective to address project
9 effects and try to come up with mitigation that is going
10 to be successful in bringing more anadromous fish back
11 and increase production in the Tuolumne River.

12 And I don't -- I'm not following the logic of how
13 an estimate of the loss of marine-derived nutrients is
14 going to influence a license requirement.

15 MR. THOMPSON: Well, I guess I could just refer
16 you to our study request where we address that and we
17 point out that there are both efforts that use salmon
18 carcasses, that are often disposed of, to fertilize an
19 area or they use some nitrogen sources and -- not just
20 nitrogen, but other carbon, nitrogen, phosphorous sources
21 to fertilize, and we cite those sources here. I'm
22 looking for them right offhand.

23 MR. HASTREITER: And you don't need to go to them.
24 So, I mean, could you use some sort of estimate based on
25 historical runs?

1 MR. THOMPSON: That's what we asked -- that's
2 really what we're asking for. We're asking for a --

3 MR. HASTREITER: Why do you need the Districts to
4 do that? Why can't you just come up with that estimate?

5 MR. THOMPSON: Well, I suppose we could do a lot
6 of the studies that we're talking about here today,
7 but --

8 MR. HASTREITER: I don't think it's a study, it's
9 an estimate.

10 MR. THOMPSON: It's not our responsibility to do
11 that. We're in an advisory role here. And what we'd
12 like to do is determine if the loss of marine-derived
13 nutrients to the Tuolumne River is substantial, and if it
14 is, we think there's at least a cumulative effect of the
15 project on escapement and therefore the return of the
16 fish, the return of marine-derived nutrients; therefore,
17 we might be able to use, as I cite here, a salmon carcass
18 analog to refertilize, improve the production of salmon
19 and steelhead and other aquatic species in the Lower
20 Tuolumne.

21 MR. WANTUCK: I'd like to, if I could, add on to
22 this. What we're talking about here is the return of
23 adult anadromous fish from the ocean at considerable
24 size, carrying organic material into the natal
25 watersheds, their death and subsequent decomposition, and

1 then the uptake of all of these nutrients into the
2 ecosystem, something that most salmon ecologists would
3 refer to as an ecosystem service.

4 And the connection with the FERC project would be,
5 obviously, the beneficial uses of the project that would
6 enhance that return of abundant ocean resources into the
7 watershed to not only stimulate the fishery, but also the
8 adjacent riparian corridor and all the wildlife in that
9 area and the food web that depends on these organisms.

10 MR. BOWLER: In the interest of time, I'll give
11 the Districts time for a quick response and then maybe
12 one or two more comments and we'll take a break.

13 MR. DEVINE: Okay. Thanks, Stephen.

14 Our view is, you know, there's no evidence that
15 there is a shortage of nitrogen in the Lower Tuolumne
16 River. There's been considerable benthic
17 macroinvertebrate studies, and they are -- diversity is
18 very good and the densities are normal, so, I mean,
19 there's a nitrogen and food source -- I think some of
20 this is food source issues.

21 And of all of it, there's been many studies done
22 of the BMI in the river. They've been reported on.
23 They're in the record of the existing license, and we
24 reference them in the PAD and, you know, that's -- we
25 think it's a -- there's no evidence of a food shortage.

1 Plus, we think it's very difficult to try to
2 estimate a return of X number of fish to the river to
3 say, you know, this is going to do Y to riparian
4 resources. We're not -- that's a very difficult
5 connection to make.

6 As far as food sources in the river, our studies
7 show that, you know, it's not -- they're not inadequate.

8 MR. THOMPSON: Can we just respond real quick?

9 You're right. There's no evidence. That's what
10 we want. We want a study to determine if there is a
11 shortage.

12 Nitrogen -- marine-derived nitrogen is a surrogate
13 for marine-derived nutrients. So to do a water quality
14 study or something on nitrogen really doesn't really do
15 it.

16 There's food sources, as Rick pointed out, from
17 the carcasses of these fish. They not only feed
18 benthic invertebrates, benthic macroinvertebrates, but
19 also young salmon. And so you missed that point.

20 So, I mean, you're kind of making our case for us,
21 John, that there -- we'd like to see at least a desktop
22 exercise to determine what the losses have been over the
23 years, and if it's comparable with other studies that
24 have been done in California, such as the one that Joe
25 Merz and Peter Moyle did that I cite here in the request,

1 it's probably -- it's probably a substantial loss, and
2 therefore, there may be some license condition that we
3 could develop.

4 MR. DEVINE: I'm always helpful. Glad I can help
5 you out, Larry.

6 MR. THOMPSON: Thank you.

7 MR. DEVINE: One of the things in the
8 collaborative rule-making of the ILP, this very question
9 came up by -- this is the development of the regulation
10 itself -- this very question came up about what about --
11 does the study that is needed to prove if there is a
12 study needed fall within the seven criteria?

13 And FERC clearly answered in that case that, you
14 know, if the applicants were required to go look for
15 problems and go study, there would be no limit to the
16 studies that would have to be done.

17 So what they're saying was, not having evidence of
18 something does not mean there's a requirement to go find
19 a study to see if there is evidence of something.

20 The relicensing process is only so long. There's
21 only so much you can do in it. And to go searching for
22 studies was not a -- was not one of the elements that
23 fits into the study criteria.

24 MR. BOWLER: Okay. That's just the kind of
25 thought that can go into your closing statement, which

1 we're going to talk about in a few minutes.

2 Does FERC staff have anything else?

3 MR. HASTREITER: I don't.

4 MR. BUHYOFF: No.

5 MR. BOWLER: At this point we would like to
6 allow -- we'll get to the closing statements in a bit.
7 We'd like to allow some of the other attendees who wish
8 to make comments some time to do that.

9 And also, before I forget, if you haven't signed
10 in, please sign in near the door.

11 If people could just raise their hand if you'd
12 like to make a comment? I'd like to figure out how much
13 time. Four? This is closing statements. So we've got
14 four.

15 We are going to take a ten-minute break and then
16 we'll be back and we'll do the attendees' closing remarks
17 and then the parties and the Districts.

18 (Recess taken, 3:52 to 4:09 p.m.)

19 MR. BOWLER: Okay. If people would take their
20 seats, let's get started.

21 We have four speakers from the attendees, and
22 we'll give them each four or five minutes -- I guess five
23 minutes, starting with Chandra, then Rick and then Spreck
24 and then Alison. I'm sorry. Chris and then . . .

25 MR. SHUTES: I'm Chris Shutes with the California

1 Sport Fishing Protection Alliance. That's S-h-u-t-e-s.

2 I have several recommendations.

3 First, I recommend that the Panel make several
4 findings of fact.

5 The first finding of fact I recommend they make is
6 whether La Grange Dam is used to regulate hydropower
7 releases from Don Pedro powerhouse. This will inform the
8 nexus issue. Although the Panel has determined that it
9 doesn't have the authority, if perhaps it has the wisdom,
10 to evaluate legal and policy issues, this is a technical
11 finding of fact that will help the Commission make a
12 determination about the jurisdiction of La Grange and
13 whether it's jurisdictional for the Commission.

14 Contrary to Mr. Devine's statement earlier this
15 morning, releases from Don Pedro are not fairly
16 consistent. We would point to our filing of
17 November 18th, 2011, the session number is 2011
18 1118-5171. It was excerpted in the NMFS filing on the
19 13th, which you have before you. I can provide the
20 session number if you wish.

21 And on page 12 of that filing it shows a very
22 regular flow downstream of La Grange Dam in the Tuolumne
23 River for a period of time but highly variable flows
24 coming out of Don Pedro reservoir. And we recommend that
25 you have a look at that and base in part your

1 determination about regulation of the Don Pedro project
2 by La Grange by considering that information.

3 Second, we recommend a finding of fact as to
4 whether the La Grange diversion pool occupies federal
5 land. This again is germane to the jurisdiction of the
6 Commission over La Grange Dam.

7 Third, we recommend a finding of fact as to
8 whether releases from the powerhouse located on the canal
9 just below the La Grange Dam on the Turlock irrigation
10 canal is used for project purposes.

11 We also recommend that the Panel make procedural
12 recommendations for the implementation of the study plan:
13 First, that you recommend that the Commission promptly
14 release a determination regarding FERC's jurisdiction
15 over La Grange Dam either as a project work for
16 Project 2299 or otherwise; and second, that you recommend
17 a procedural pathway for reopening the study plan should
18 the Commission determine that La Grange Dam is indeed
19 jurisdictional to FERC.

20 Part of the purpose of the study plan is to try to
21 encapsulate as quickly and as soon as possible, at one
22 time, all the study issues; and while this lingering
23 issue has not been determined as to the jurisdiction over
24 La Grange Dam, it allows a problem in terms of making a
25 clean and complete study plan should it be found

1 jurisdictional.

2 Finally, as a comment, I would like to note that
3 the Districts in 2009 in the fact-finding proceeding
4 regarding the Tuolumne -- regarding the Don Pedro project
5 made extensive claims about how the Tuolumne River flow
6 increases would not mitigate out-of-basin impacts.
7 Largely, this was attributed to delta conditions and
8 exports, but other factors outside the basin.

9 And, therefore, it strikes me that the proposal
10 made by NMFS this afternoon of a sort of
11 belt-and-suspenders approach to modeling may have some
12 merit. That would be that the in-basin model with a
13 finer resolution be performed as proposed by the
14 Districts and as supported by us, but also, that a
15 broader model be considered in order to address these
16 arguments that we've heard before about how there is
17 nothing that can be done with in-basin because
18 out-of-basin impacts are so great.

19 Thanks very much.

20 MR. BOWLER: Thank you.

21 MS. FERRARI: Hello. I'm Chandra Ferrari with
22 Trout Unlimited. I'm actually just going to echo some of
23 the concerns that were recently raised by Chris.

24 We really are hopeful that this Panel will
25 investigate and determine certain factual issues that

1 will ultimately inform the Commission's determination
2 related to whether the La Grange project is under FERC's
3 licensing jurisdiction.

4 The potential jurisdiction over the La Grange
5 complex is directly relevant to the Don Pedro project
6 because it affects the scope of effects the Districts
7 must study and consider as part of this relicensing.

8 So again, we are not requesting that this Panel
9 determine the jurisdictional issue; rather, we are
10 requesting that this Panel investigate and make relevant
11 findings regarding key factual disputes related to the
12 issue.

13 Such key factual issues include whether the
14 La Grange Dam occupies federal land, whether La Grange
15 has undergone post-1935 construction, specifically, the
16 La Grange powerhouse, and whether La Grange is used and
17 useful for making fish flow releases that are required
18 under the District's license for the Don Pedro project or
19 for regulating peaking flows resulting from power
20 operations at the Don Pedro project.

21 Resolving such factual disputes will move the
22 jurisdictional issue closer to resolution, which will
23 allow the study plan process to proceed with greater
24 degree of certainty and allow this relicensing process to
25 proceed more efficiently.

1 Thank you.

2 MR. BOWLER: Thank you.

3 MR. ROSEKRANS: Spreck Rosekrans, Restore
4 Hetch Hetchy.

5 I wanted to make a limited point about the
6 interdependency of the Don Pedro project and
7 San Francisco's projects upstream.

8 We heard statements earlier that San Francisco
9 operates its projects without consulting with the
10 Districts and vice versa. That certainly normally is the
11 case. However, San Francisco has a water bank in
12 Don Pedro reservoir that accounts for about a third of
13 its storage for -- to use that water bank San Francisco
14 paid for roughly half the cost of Don Pedro reservoir.
15 And under current agreements, San Francisco often has to
16 make releases from its reservoirs upstream to meet its
17 obligations to keep that water bank positive.

18 If and when relicensing does go forward, a
19 determination by FERC to change the operational criteria
20 at Don Pedro would change how that water bank works,
21 would change San Francisco's obligations and would change
22 how they would operate.

23 There clearly is an interdependency between the
24 Don Pedro project and San Francisco's projects and
25 Hetch Hetchy reservoir. Thanks.

1 MR. BOWLER: Thank you.

2 MS. WILLY: Alison Willy, Fish & Wildlife Service.

3 The U.S. Fish & Wildlife Service has authority
4 over resident fish passage under Section 18 of the
5 Federal Power Act. Section 18 is not limited to passage
6 of anadromous fish.

7 U.S. Fish & Wildlife Service has an ongoing
8 dispute regarding the NMFS-3 study and filed information
9 on entrainment and downstream passage that is not
10 connected to the anadromous-fish-versus-nexus discussion
11 covered in today's meeting.

12 We are still disputing that we need the NMFS-3
13 study to inform our Section 18 authority condition --
14 excuse me -- Section 18 mandatory conditioning authority
15 for resident fish passage.

16 On a separate note, the National Environmental
17 Policy Act and Federal Endangered Species Act have
18 different definitions for "cumulative effects" and for
19 "direct and indirect effects."

20 Endangered Species Act, ESA, the "cumulative
21 effects" definition discussed today is highly constrained
22 compared to the NEPA "cumulative effects" definition.

23 Under the Endangered Species Act, direct and
24 indirect effects of interrelated and interdependent
25 actions pick up the majority, if not all, of the range of

1 effects covered under a NEPA cumulative effects analysis.

2 If the ESA "cumulative effects" definitions are
3 going to be used in this process, we urge the Panel to
4 provide guidance that addresses analyzing the full range
5 of effects of the project and interrelated and
6 interdependent actions.

7 The Fish & Wildlife Service is going to be filing
8 with the FERC two papers that we've discussed today. One
9 is the "Genetics of Central Valley *O. mykiss* Populations:
10 Drainage and Watershed Scale Analyses" by Nielson,
11 et al., published in San Francisco Estuary and Watershed
12 Science, and the other is "Population Genetic Structure
13 of *Oncorhynchus mykiss* in the California Central Valley"
14 by Garza and Pearce, and it's a final report for
15 California Department of Fish & Game.

16 In this report, in Garza and Pearce, there's a
17 Table 4-B which shows the genetic fingerprint of various
18 populations in the Central Valley, and the Upper Tuolumne
19 River population passage showed up in their study in the
20 Stanislas and American Rivers.

21 And in the introduction to that paper they stated
22 that although structure was found, all naturally spawned
23 populations within the Central Valley Basin were closely
24 related. And this study, in fact, shows that the
25 Tuolumne River upper and lower populations are the most

1 connected to each other than any others.

2 So they said all naturally spawned populations
3 within Central Valley Basin were closely related
4 regardless of whether they were sampled above or below a
5 known barrier to anadromy. This is due to some
6 combination of historic shared ancestry, downstream
7 migration, and possibly limited anthropogenic upstream
8 migration.

9 So I just wanted to close saying thank you all for
10 listening to our comments today, and I hope you can
11 consider the U.S. Fish & Wildlife Service's position
12 regarding resident fish. Thank you.

13 MR. BOWLER: Thank you very much.

14 So we'll go with the Commission and then the
15 Districts and then NMFS's closing statements.

16 If you need it, you have up to ten minutes each.

17 MR. HASTREITER: Thank you, Stephen.

18 I want to thank the resource agency personnel that
19 have been involved trying to make the application for
20 relicensing of the Don Pedro project a better product.

21 And in the 20 meetings that were held prior to the
22 study plan determination, Fish & Wildlife Service
23 routinely was there, Cal Fish & Game were routinely
24 there, California Sports Fishing Alliance was routinely
25 there, and it really helped identify issues and helped

1 identify concerns.

2 And even though everyone may not agree at this
3 point, the study determination was a better product than
4 it would have been without that participation.

5 I understand NOAA has personnel constraints. I
6 would like to encourage them, if at all possible, to try
7 to engage a little bit more into the process, because
8 they are definitely a key player in this process.

9 And while you can still provide comments on the
10 record, and they can be useful and they have been useful,
11 I think getting in the discussions about issues has an
12 effect on everyone to see other people's perspectives
13 much more so than reading it in print.

14 So I want to thank everybody, and we've got a long
15 way to go on this one, and there's a lot of clarity that
16 we need to have moving forward, which we talked about a
17 lot today. But we're going to be there and we're hoping
18 you're going to be there as well to help us through this
19 process.

20 And I'd also like to thank the Districts. They
21 held a lot of meetings trying to sort these issues out,
22 and I thought they did a great job, almost too many
23 meetings, but there were so many controversial issues, we
24 really couldn't avoid doing that. So I appreciate the
25 Districts' efforts.

1 MR. BOWLER: Thank you, Jim.

2 John.

3 MR. DEVINE: Thank you Stephen.

4 This will be brief. I promise.

5 First, I just want to make sure we state for the
6 record that we do not agree with the comments made by
7 Cal SFA or Trout Unlimited with respect to the issues of
8 La Grange jurisdictional energy output and production and
9 operations at Don Pedro. And we have filed in a separate
10 docket our descriptions of La Grange operations.

11 With respect to the U.S. Fish & Wildlife Service
12 comments, we have responded to those comments in our
13 response to notice of study dispute dated February 21st,
14 and I would ask that the Panel, if you do consider
15 U.S. Fish & Wildlife Service's comments here, please look
16 at our responses.

17 Noteworthy of that is one of the points we made
18 that actually neither U.S. Fish & Wildlife Service nor
19 NMFS nor any other agency had made any specific study
20 request to investigate entrainment of resident fish in
21 Don Pedro reservoir.

22 Study plans were due on June 10th. The first we
23 heard of any kind of issue, even after all of our
24 meetings, with respect to resident fish and entrainment
25 was in a comment on the October 24th, 2011 comments on

1 the Districts' proposed study plan. None of those study
2 requests met -- tried to address the seven criteria.

3 So I would just ask that you look at our response
4 to U.S. Fish & Wildlife Service notice of study dispute
5 if you -- as you consider that -- oh, if you consider
6 that.

7 I guess, lastly, on behalf of the Districts I'd
8 like to say that we certainly extend our thanks to the
9 Panel for running a very efficient process. We're very
10 pleased to be able to participate. And we -- the
11 Districts appreciate that the Panel's focus is on the ILP
12 study plan criteria defined in Section 5.9(b).

13 Thank you.

14 MR. BOWLER: Thank you, John.

15 MR. WANTUCK: Thank you.

16 I'm taking a moment here because I want to make
17 sure I'm accurate.

18 Mr. Devine, I think you said there were no studies
19 put forward to assess entrainment on the project
20 facilities, and I'm holding here Table 1 of our filing
21 "Project Facilities and Related Facilities and Activities
22 Affecting Tuolumne River Passage for the Target
23 Anadromous Species." And the highlighted areas are areas
24 where we asked for these entrainment studies, so I'd like
25 to give that to the Panel.

1 I want to make three quick points and then that's
2 all.

3 The first point is, while we understand the
4 rationale for the Panel taking the position that they
5 can't opine on the jurisdictional decision, we would like
6 the Panel to recognize the intricate nature of that issue
7 as it's connected with these study plan disputes, and we
8 do recommend that the Panel make a recommendation to the
9 Commission that they solve this issue, that they make a
10 determination in the near future so that we can go
11 forward.

12 As it is right now, it's as if there's a cloud
13 hanging over the relicensing process because of the
14 uncertain status of the La Grange facilities, and it
15 would be a lot more clear if the Commission would rule on
16 this issue.

17 And in connection with that, we would urge the
18 Panel to take note and urge the Commission staff to take
19 a hard look at the new analysis that we've just filed on
20 the record in the last few days. It contains a lot of
21 detailed analysis that will clearly show that the
22 La Grange project occupies federal lands as one of the
23 conditions required for jurisdiction by FERC.

24 The second point I'll make is that a couple of
25 uncertainties still remain. I don't want to go back into

1 debates, but the uncertainties that we didn't fulfill
2 here today have to do with the "reasonably certain"
3 versus "reasonably foreseeable" standards that we
4 discussed earlier.

5 That's still unclear to us why FERC would choose
6 an ESA standard to apply to what in this case would be
7 clearly Federal Power Act authorities. And that
8 generally stems from the NEPA standard of "reasonably
9 foreseeable," not "reasonably certain." That's our
10 understanding of it.

11 The second point of clarity that we didn't get has
12 to do with Mr. Hastreiter's statement earlier -- I'll
13 paraphrase -- that passage plans must be developed,
14 approved and funded to become a reasonably certain
15 action. And we just don't know exactly where that comes
16 from, and we would appreciate some clarity on that.

17 My final point is that going forward the Panel may
18 find a number of areas where a resolution process or
19 further discussions, negotiations may be beneficial. Our
20 viewpoint of this is that FERC staff involvement is key
21 here. Oftentimes the devil ends up being in the details
22 of what is satisfactory and what is not, and we would
23 like to have Commission staff be the mediator and help us
24 chart a way forward that contains enough detail in these
25 study plans so that the intent of the study is met.

1 In connection with that, NMFS is acting in a
2 Federal Power Act proceeding in an advisory role in most
3 cases and FERC is the lead agency, not us, so that's
4 another reason why we believe FERC active involvement is
5 key.

6 And one of the things -- my final point is as
7 workshops and other involvements of multiple parties go
8 forward, NMFS does not desire to enter into a process
9 that amounts to a second study plan development process.
10 We've already been through that in the ILP. Now it's
11 time for some decisions to be made and to move forward.

12 We also feel that FERC staff should be central in
13 resolving these decisions as opposed to being in a final
14 approving role as an agency. We're essentially appealing
15 to FERC staff to be engaged and active in the resolution
16 of these issues.

17 So thank you very much to the Panel. We know how
18 hard it is to assimilate an administrative record of this
19 magnitude. And thank you very much for your patience.
20 And that's all for us.

21 MR. DEVINE: There was a sheet of paper that was
22 handed to you. We'd like to get a copy of that, because
23 we'll be commenting on that.

24 MR. THOMPSON: You mean that piece of paper?

25 MR. DEVINE: Yeah.

1 MR. THOMPSON: That's in the NMFS Study Plan
2 Number 3, Table 1.

3 MR. FOSTER: It's also in your notebook.

4 MR. WOOSTER: This is filed as Study Request
5 Number 3.

6 MR. DEVINE: We'd like a copy with the ones
7 checked.

8 MR. THOMPSON: I just highlighted the key for
9 entrainment and just showed the places where we
10 identified entrainment as an issue.

11 MR. DEVINE: Of course, our point was that there
12 was never a study request that met -- that tried to
13 address the seven criteria. And we'll comment on that.

14 MR. BOWLER: I'll address commenting on the final
15 comments in a moment. We have one more comment.

16 MR. EDMONDSON: Just final comments. For the
17 record I wanted to note that we've got four FERC staff
18 here at this meeting. And so specifically from NMFS, but
19 in general, for all of us here, I wanted to say thank
20 you. I realize four FERC staff in one place, that's a
21 really big deal. It's a big deal because it's a burden
22 to you and your families, it's also a cost to FERC, and
23 we really do appreciate your diligence in coming out
24 here. So again, thank you, folks.

25 MR. BOWLER: Thank you.

1 Okay. Closing matters. Again, if you didn't sign
2 in, please sign in.

3 We, the Panel, invite comments on matters related
4 to technical aspects of NMFS's recent filing -- today
5 filing and also if there's something in the closing
6 remarks that you didn't get to respond to, rather than go
7 round and round, you could include comments with those on
8 the documents. And that would be by close of business
9 Tuesday, April 24th, a week from today.

10 Also, the Panel will deliver its recommendations
11 to the -- findings and recommendations to the Director by
12 Friday, May 4th.

13 And that's actually a little bit of extra time we
14 were granted because we had to move the meeting back a
15 little farther than we wanted to because of conflicts
16 with spring breaks.

17 And finally, I'd like to thank Carole for doing a
18 great job last time and for being able to join us again
19 this time to report and for giving us good direction on
20 getting a good record.

21 I'd like to thank you, Richard and Dave, for again
22 yeoman's work preparing and for their wisdom and for
23 keeping me on my toes to try to stay ahead of you guys.

24 And finally, I'd like to thank the disputing
25 parties, the Districts, everybody who attended, everybody

1 who spoke, for a very sometimes quite detailed, sometimes
2 a little bit difficult, but very congenial and productive
3 conversation today.

4 And with that, I'll ask if there's any other
5 procedural questions about what's coming next.

6 (No response.)

7 MR. BOWLER: If not, thank you very much. And
8 we'll close the meeting.

9 (Time noted: 4:35 p.m.)

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