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BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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IN THE MATTER OF: :
Pacific Gas and Electric Company's :
Proposed Humboldt WaveConnect :
Project :
Draft License Application :
P-12779-005 :
-----X

Eureka Public Marina
Warfinger Building
1 Marina Way
Eureka, California
95501

Wednesday, June 9, 2010

The above-entitled matter came on for a
public meeting, pursuant to notice, at 12:00 p.m.

1 BEFORE:

2

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KEN HOGAN, FERC

4

LESLY KORDELLA, FERC

5

CAROLYN TEMPLETON, FERC

6

KEN YU, Esquire, FERC

7

8 PANELISTS:

9

CY OGGINS, California State

10

Lands Commission

11

JOHN DYE, Esquire,

12

California State Lands

13

Commission

14

STEVE MINDT, California

15

State Lands Commission

16

VICKI FREY, California

17

Department of Fish and Game

18

BILL MCIVER, U.S. Fish and

19

Wildlife Service

20

DIANE ASHTON

21

National Marine Fisheries Service

22

23

24

25

1 PANELISTS:

2

3

ANNA WEST, FACILITATOR,

4

PG&E

5

BRENDAN DOOHER, PG&E

6

ED CHESLAK, PG&E

7

ROBERT BLAIR, PG&E

8

ANNETTE FARAGLIA, Esquire

9

PG&E

10

11 PUBLIC SPEAKER:

12

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MARGARET HERBELIN

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PROCEEDINGS:

(12:09 p.m.)

MR. HOGAN: I'd like to thank everyone for coming today. We are getting a little bit of a late start. We wanted to make sure that everybody has had an opportunity to arrive and get settled.

Today's meeting is a public scoping meeting the also a technical meeting for the federal regulatory authorities to hear concerns and issues associated with the PG&E's proposed Humboldt project. I would like to go over a couple of housekeeping items. The rest rooms are in the lobby there, so if you need to use the restroom, please feel free to get up and use them.

There may be some varying opinions here today, but I just ask that everybody respect each individual's right to have that opinion, and understand that we need to recognize not everybody will agree with each other, but if we can agree to respect their right to have that opinion, that would be great.

So I, Ken Hogan, I am with the Federal Energy Regulatory Commission, I have with me Lesley Kordella, who is a wildlife biologist, Kenneth Yu, in the back, with our Office of General Counsel, and

1 Carolyn Templeton, who is our geologist person on
2 the project. And with that, Steve.

3 MR. MINDT: Yes, my name is Steven Mindt,
4 I am with the California State Lands Commission, and
5 we have a number of members of our commission in the
6 audience. We have our Division Chief, Cy Oggins,
7 over there, and our representative from our
8 engineering department out of our Long Beach office,
9 Padu, forgive me Padu, I forget your last name. And
10 Mary Hayes, with our Land Management Division, and
11 Annette over on the other side.

12 The State Lands Commission, the reason why we
13 work on participating in this joint meeting, is
14 under our statutory requirements, under CEQA, we are
15 required to get public input, and to identify the
16 range of actions, the alternatives, including the
17 location, the mitigation measures, and the
18 significant effects to analyze in the project's
19 environmental impact report. And we're here to take
20 comments on any of those areas from anyone that
21 would like to speak, and we thank you for your time.
22 Thank you.

23 MR. HOGAN: So everybody who signed in
24 should have got an agenda. Granted, we are a little
25 off schedule, but we'll try to hold to it as tightly

1 as possible, according to the time line.

2 Regarding the FERC process for this project, on
3 the back of the handout book there is a process
4 chart, and if we could identify where we are in the
5 process, and that's at Box 3B, right there. So we
6 are still fairly early in the process. Back in
7 March of, I think it was March, PG&E filed a Draft
8 License Application and that's included in the flow
9 chart, and comments on that application are due on
10 April 30th. So we are looking to hear, particularly
11 State Lands, issues or concerns, and approaches to
12 address those concerns, so we can include those
13 ideas or concerns into our Environmental Policy Act
14 document, for environmental assessment of the
15 project. Ultimately to give a recommendation to the
16 Commission either for or against the proposed new
17 license. Does anybody have any questions regarding
18 the FERC process or why we are here today? With
19 that, I like to ask PG&E to give a brief
20 presentation on the proposal.

21 MR. BLAIR: Good afternoon. My name is
22 Robert Blair and I am with PG&E. I am with the
23 Renewable Development Group, I am in charge of
24 WaveConnect, and I've got a few slides today that I
25 would like to go over, with the team to give a

1 review of the project. We've got our team working
2 on WaveConnect, many of them are here today. I'll
3 kind of go around the room to ask them to raise
4 their hand. I've got Annette Faraglia, legal, I've
5 got Ian Coleindo, who most of you know. Brendan
6 Dooher with engineering, Ed Shiflack, and I know
7 Mike Gundy is here also. And then we have some
8 consultants. Bob Booth, renewable development
9 support for PG&E, and Bill Conan, and of course Anna
10 West is here. So that's just the group, we have a
11 lot more working on the project.

12 A couple of slides on the overview of the
13 project. The objective for the project was to build
14 a demonstration site that would eventually lead to a
15 commercial kind of utilities project for PG&E. This
16 step is just a small pilot project.

17 We have funding for this project through a
18 grant from the DOE and CEC authorization about \$6
19 million in total. Funding for the construction
20 phase of the project is still uncertain, so we still
21 have a little bit of a hurdle in that part of the
22 project. We originally started with 2 sites, 1 in
23 Humboldt, 1 in Mendocino. The Mendocino site was
24 eliminated because of harbor characteristics. We
25 are looking at a potential replacement for that in

1 the central coast, but we are still under
2 investigation.

3 So Humboldt is leading the way in that project.
4 It's 3 miles off shore of Eureka, in about 45 meters
5 of water. We submitted the draft pilot license on
6 the 19th of March, and we are planning to do the
7 final pilot license by February of 2012.

8 The project will consist of about 5 megawatts
9 of capacity. The original application was for 5
10 years of operation. There would be a couple of
11 years of construction, and a year of decommissioning
12 around that 5 years. We are thinking about
13 discussing potentially extending that to 10 years,
14 and we're still investigating that option.

15 A little bit about the structure of the
16 project. We kind of look at it as a hybrid
17 ownership structure, where PG&E would own the
18 infrastructure, the cables and everything going from
19 the interconnection to the WEC devices in the ocean.
20 And the WEC manufacturer would own and operated the
21 devices themselves. We are still in negotiations on
22 the structure, so not that I'm positive, but that's
23 the anticipated structure.

24 There would be 4 bays at the site, 1 cable to
25 each bay, and 1 bay for each type of technology.

1 And just to let everyone know, we completed a
2 request for information from the WECs, I'll talk
3 about that a little bit later. We have 50 that we
4 sent applications to, and got back 14 responses.

5 In our draft pilot license, we have an
6 in-service operation day of about 2014. We think
7 that's a little aggressive, that assumes a lot in
8 terms of licensing and the most expedited path to
9 the end, negotiations with the WECs, and
10 construction. But we think that that is an
11 optimistic day to have that potentially be here by
12 then.

13 As I mentioned, the project description, we
14 think there will be 4 arrays of WEC devices, 1 for
15 each technology, a separate cable for each array.
16 PG&E would own all the infrastructure, we have the
17 interconnections to carry it to the substations. We
18 have the GenTide, conditioning device, devices off
19 shore. We have all the offshore cables.

20 We kind of originated it, so that it would be
21 about 9 miles of cables. We are looking at a
22 different site, a little further south, we'll talk
23 about that in a minute. That would shorten the
24 length of the cable around 3 or 4 miles.

25 As I mentioned, the WEC owners would own the

1 devices, operate the devices. They would own the
2 mooring, the anchoring, and potentially they could
3 own the conditioning devices, depending on what the
4 negotiations, how the negotiations turn out. But if
5 the WECs do own the conditioning devices, that's the
6 piece of the project that's offshore. There will be
7 several buoys, environmental buoys marked.

8 Here is a schematic of the project itself. As
9 I said, this shows 2 arrays, there will there will
10 be 4 arrays, 1 for each type of device. The
11 manufacturer will own those devices, and will own
12 the interconnection to the cables. Each array will
13 come down to 1 interconnection to the actual cable.
14 So we have 4 arrays, PG&E would own the cable, the
15 power conditioning devices on shore. It takes the
16 output from AC to DC to AC again, and then we go to
17 the gen pipe.

18 We just wanted to show you an example of the
19 mooring. This is 1 potential WEC device mooring
20 schematic. They will all be different. The idea is
21 that these are strung, kind of daisy-chained, and
22 they all go together to the PG&E's infrastructure
23 cable. This is kind of a picture of what an array
24 might look like, having an anchor and an
25 interconnection.

1 The location, as I said, was originally
2 intended to be about 2 and a half to 3 miles
3 offshore of Manila. We were thinking about where we
4 were going to put the shell up. The surface of the
5 footprint of the project itself is about a square
6 mile. It's 2 miles north/south of Windmont
7 east/west. Onshore facilities, the conditions
8 arising from the interconnection would be at a point
9 on the property of the Humboldt Bay Municipal Water
10 District, close to the New Navy Base Road. And
11 again, the interconnection is at the Fairhaven
12 substation.

13 There are some possible modifications to the
14 project from the draft pilot license. First the
15 term, and I want to bring this to your attention.
16 Most of you already know we are considering a
17 potentially longer term. It's a five-year
18 application, and we're thinking about potentially,
19 the reason we're thinking about a longer term, is
20 just the economics of amortizing all the cost of
21 this over a short term period, and it's an approval
22 risk around amortizing in such a short time frame.

23 The other potential change, and this is always
24 up in the air, are the number of devices. We have
25 30 identified, licensed applications, however these

1 things range from 750 kilowatts to 5 megawatts, and
2 we don't know which devices in particular are going
3 to be in. So we could have as few as maybe 10 to 12
4 devices. But there would be 4 arrays, just
5 depending on the number of megawatts per device.

6 Again, the location we're talking about would
7 be further south and if you could go to the next
8 slide, there is a schematic on this. It's very
9 difficult to see. We've always been kind of looking
10 in this band, you see a cable coming offshore and
11 making probably a right on a proposed line. That
12 was the site in the application itself, and after
13 discussions with the stakeholders and fishermen the
14 southern side was more preferred. For PG&E, we were
15 little bit indifferent, but with input from the
16 fishermen, again, we've decided to move the site to
17 the furthest southern point for the position, that
18 kind of box, and you can't see the whole box. Where
19 the northern side is, is in the application, the
20 southern side is where we are anticipating it would
21 go.

22 That's just another picture, a satellite
23 photo, how it would go directly west from shore,
24 instead of turning like the schematic.

25 The project time line. We got the preliminary

1 grant in March of 2008, the FERC permit. We have
2 done the pilot license, we've got the comments. We
3 are still negotiating with the WECs and going
4 through the license and comment periods. And then
5 we anticipate filing a final pilot license for
6 February 2010, and having arrangements with the WEC
7 manufacturers and kind of in the winter of
8 2010/2011, maybe early 2011, have agreements with
9 the WEC, so we know which devices will be in the
10 project. And anticipating the FERC license some
11 time in 2011, maybe later, and then begin
12 construction in the summer of 2012, if all goes
13 according to plan.

14 It's very difficult to see this slide, I
15 apologize for that. These are pictures of different
16 types of devices, there's 4 types of devices, and
17 numbers in the lower right-hand corner of the boxes
18 are the WECs the we're discussing today, finalizing
19 negotiations on which WEC to choose. So we have 1
20 in the attenuator, 4 in the point absorber, 2 WECs,
21 we are discussing to have possibly, wave surge
22 converters, and 2 oscillating wave columns.
23 The process at this point in the RFP, which is the
24 request for information from the WEC manufacturers,
25 we sent applications, we sent invitations to 53

1 manufacturers to get technical, commercial and
2 financial information. We had 14 respondents, and
3 we've narrowed it down to 9 in consideration today.
4 The next steps are negotiations with those
5 manufacturers. We are not sure if we are going to
6 go through an RFP process, which is requested
7 proposal, or if it's going to be bilateral
8 negotiations. Since it's such a new industry,
9 probably bilateral negotiations would be the
10 preferred method. Of course creating partnership
11 arrangements, financial arrangements, those kinds of
12 things.

13 Kind of a quick status. We're working to
14 address the questions and issues raised in the PPLA,
15 and the responses. Since there are number of
16 questions, and we are working through those
17 diligently, a lot of valuable lessons we are
18 learning in the process, and I think it's kind of a
19 struggle for everyone looking at a project like
20 this, in a new environment with new technology, and
21 so we really appreciate your cooperation with
22 everyone.

23 And a lot of adapted management monitoring
24 outcome from those questions, and working through
25 those questions. As I said, we are going to make

1 decisions on the WECs. We'll cover all that, and
2 we'll finalize preliminary engineering and costs,
3 with a target of having the final pilot license
4 application by February 11, by February, 2011.

5 I just want to kind of conclude with the
6 challenges we have with this project. It's a new
7 technology, never been done anywhere in the world.
8 There's a few kind of pilot licenses being proposed
9 in places like England and Ireland and some other
10 places, so it's new to everybody, and it's new to
11 PG&E, and to FERC and to State Lands, so there is a
12 lot of learning curve here.

13 And that's a challenge for us all; the
14 environmental impacts are uncertain. So it makes it
15 very complex, kind of analyzing that in the
16 permitting, as we've seen from the number and types
17 of questions we've gotten.

18 Project costs are much higher than we
19 originally anticipated. We thought a pilot license
20 would be in the 10 to 20 million range, but now we
21 are seeing numbers of 60 to 70 million, and this
22 doesn't include the devices themselves. The project
23 is over 100 million, so it is a very expensive
24 project. The pilot license process itself is kind
25 of new and untested, so we're kind of working

1 through all of those issues. One of the troubling
2 aspects of this, I've got to address it from the
3 company's risk standpoint, there is always a
4 possibility in this process, that if there is severe
5 and unforeseen environmental impact, the project
6 could be required to be withdrawn. And it's hard to
7 know how to manage that risk, so that is a big
8 hurdle.

9 There is no potential for a build out at this
10 site we are at today. So the original intent was to
11 have a commercial project, and have the pilot be the
12 first step. One of the challenges we are facing
13 with this project is we could go forward with this
14 project, and if everything goes well, we'll have to
15 move it and go somewhere else. And that's kind of
16 another economic challenge for PG&E.

17 There is short-term license, small-scale high
18 costs, make amortizing this over a five-year period
19 a little bit of a risk for CPUC approval. Finalize
20 all the numbers, so that's kind of a challenge.

21 Of course there are multiple agencies in the
22 permitting process, and that kind of ties into the
23 environmental project licensing process. So that
24 wraps up my comments. My name is Robert Blair,
25 again, we posted a copy of this on the website for

1 anybody that wants 1, and I'm happy to answer any
2 questions on things I covered.

3 MR. HOGAN: With no questions on the
4 presentation. I think right now we have 1 person
5 signed up to speak, Maggie?

6 MS. HERBELIN: I didn't have time to think
7 about what I was going to say.

8 MR. HOGAN: Maggie, when you get to the
9 podium, would you state your name and spell it for
10 the court reporter?

11 MS. HERBELIN: Okay, my name is Margaret
12 Herbelin, and that's M-A-R-G-A-R-E-T,
13 H-E-R-B-E-L-I-N, but I go by Maggie. I've been a
14 member of the working group for most of the year,
15 and been very proud and pleased that Humboldt County
16 was the place where PG&E wanted to come and do this
17 project. We certainly, here, could use the economic
18 development and the jobs that would be brought to
19 our county, with this new possibility.

20 And as I watched the costs soar and get more
21 complex and more difficult, I too have been
22 wondering about the practicality of the direction
23 we're going in, and whether or not that's going to
24 be something that's going to be a problem. And
25 that's kind of why I wanted a little more time to

1 think about this when I came in the door, to kind of
2 formulate some of the things that I think should be
3 weighed in that area, and also this is such a
4 special new direction for our economy and our use of
5 resources and the dividing of energy, that's going
6 in, that I know it's going to be expensive to
7 develop, but everything that's new, and this kind of
8 engineering quality is.

9 So I think looking at it from the point of view
10 of what it's going to give to us in the future
11 should be something that's really factored in, even
12 though it is going to be expensive. It's sort of
13 like whether or not to have that, I'll make a little
14 analogy here.

15 I've been a cheese maker for years and years
16 and years, and my fresh cheeses that I sell very
17 quickly are reasonably priced and keep the operation
18 going. But my 3 year aged parmesan cheeses, I call
19 my boutique cheeses, are the ones that I sell and
20 really make money on. And that's what this project
21 represents in my mind, is that concept of something
22 that is really going to be so special that it's
23 going to be really rewarded in the end. But I want
24 to think more on this for later tonight.

25 MR. HOGAN: Thank you. Would anybody else

1 who didn't sign up to talk, would they like to say
2 something? Okay, I don't see any hands. Should we
3 move on to the, at this point we had a break
4 scheduled, but I don't think we are going to take 1
5 just yet.

6 Do we want the next item on the agenda? With
7 that, we could have the federal and state resource
8 agencies join us in the front of the room.

9 MS. KORDELLA: This was supposed to happen
10 during the break, so.

11 MR. HOGAN: Well thank you for putting up
12 with the reorganization here. I want to point out
13 to the agencies that State Lands and FERC have asked
14 Anna West for her assistance with some facilitation
15 and or jotting down action items, potentially for
16 the agencies or FERC or State Lands, and just
17 recording those types of things that may be useful
18 throughout the process, or things that we need to
19 make sure that we take care of, without having to
20 dig through the transcript to see what we said we
21 would do. So just to be clear, Anna is offering to
22 provide the services to State Lands and FERC, and
23 it's not part of her role working with PG&E. So
24 with that, we got a lot of comments filed with the
25 Commission in response to PG&E's draft license

1 application on April 30th, and a little bit of time
2 before. Those comments that were filed, we've
3 assembled here in to the handout that we provided,
4 and FERC, State Lands also provided comments, and
5 those comments are the first that you'll find, and
6 the remainder of the comments in this package are in
7 the order of the time and date that they were
8 received.

9 One of the themes that we identified, and in
10 reviewing the comments was concerned with the amount
11 of baseline information. And we understand now that
12 PG&E is going through and has contracted with
13 Humboldt State University to do some baseline
14 studies. I'd like PG&E to give kind of an overview
15 of what those studies entail.

16 . MR. DOOHER: So we've actually got several
17 different studies that we're doing with Humboldt
18 State University. Oh, I'm sorry, My name is Brendan
19 Dooher, I'm a mechanical engineer at PG&E. We've
20 got several different studies that we're going
21 through with Humboldt State University. About a
22 year or so ago we approached them as, because they
23 were part of the original application at DUE, and we
24 actually wanted to include them, so that they could,
25 so that we could return something to the local

1 community and also to get their local expertise
2 involved in the project. And so we approached them
3 early, asked them for some suggestions as to what
4 they thought would be useful, and we ended up with
5 several different types of projects.

6 These include basically the baseline fish data
7 study, performed by Doctor Tim Mulligan. And this
8 would basically incorporate a series of assessments
9 along the actual area where the WEC devices were
10 supposed to be installed. A basically background
11 paper researched by Doctor Milton Boyd, where he
12 would basically take a look at the known data in the
13 air for benthic organisms. There would be a whale
14 watching data industry and tourist fleet statistics,
15 fishing industry economics and statistics, and both
16 population statistics study done by Doctor Steven
17 Hackett. There would be an assessment of the wave
18 resource, using SWAN, which is a modeling for doing
19 shallow water assessment, as well as integrating
20 that with radar, so that we could potentially take a
21 look just not at point sources using for instance a
22 NOAA wave rider buoy, but to specifically take a
23 look at maybe the entire resource, and we thought
24 there was a good potential using radars for that.

25 There is a sediment transport study by Doctor

1 Jeffrey Bogeld, to take a look at how sediment moves
2 around during the year. A diffuser scour study,
3 associated with the diffuser at the beach, that
4 belongs to the Water Agency, basically to see how
5 beach sediments move throughout the year.

6 And finally there is overall project management
7 by Doctor James Howard, who is head of their Natural
8 Resources Group.

9 MS. ASHTON: Who is doing the wave scour?

10 MR. DOOHER: The defuse scour study is
11 being formed by Doctor Charles Chamberlin's group,
12 the CERC group there.

13 MS. ASHTON: And the wave resource?

14 MR. DOOHER: Once again, that's Doctor
15 Chamberlin's group, that's the Schatz group.

16 MS. ASHTON: And the whales?

17 MR. DOOHER: Whales were actually a
18 special study. We had a particular interest in them
19 early on, and Dr. Dawn Goley have us a presentation
20 almost right off the bat, and we felt that we wanted
21 to approach her separately, and get that information
22 in early. So we actually incorporated her in much
23 earlier in the project, because we knew it would
24 take time to get contracts through. And so she did
25 work that was actually incorporated into the DPLA,

1 through CH2M Hill.

2 MR. HOGAN: This is Ken Hogan with FERC,
3 what is your time line for the completion of the
4 studies?

5 MR. DOOHER: About a year from now. They
6 started off a couple of months ago, and some of them
7 will end up in the February to March time frame.
8 Some of them might end up in June.

9 MR. HOGAN: We are on the record, so if
10 folks when they speak could give their names, prior,
11 for the court reporter to make sure they document
12 it, that would be great. I know I am 1 of the
13 biggest offenders of that, so.

14 MS. FREY: I have a question on the fish
15 study, on the vertebrate and invertebrate study,
16 both. This is Vicky Frey, with Fish and Game. How
17 many surveys or tows, and how often will Doctor
18 Mulligan be doing fish studies?

19 MR. CHESLAK: This is Ed Cheslak, with
20 PG&E. What I would prefer to do Vicky, is probably
21 get you the detailed study plans for that particular
22 study, Tim Mulligan. I can tell you that
23 Dr. Mulligan did expand the number, of the area of
24 his stations to include incorporate the southerly
25 site, as well as the northerly sites. So it's the

1 entire range of potential positions for the WEC
2 devices. He's got about 20 stations in there, that
3 includes control sites as well as sites within the
4 WEC devices themselves. I can't remember the
5 details, the number of tows and all that specifics.
6 So we'll have to get back to you with those kinds of
7 specifics, so that you can evaluate that.

8 MS. ASHTON: Diane Ashton, with the
9 National Marine Fisheries Service. Copies of the
10 study plans were sent out to the working group after
11 our last meeting in April. And I was looking at
12 this, this morning briefly, and I did have a
13 question. Because it said the completion of the
14 final report was expected April 30, of 2011, and the
15 sampling was supposed to be quarterly I believe, in
16 January, April, June and October, sort of quarterly.

17 My first question is when were the contracts
18 signed, and when has sampling been conducted? Has
19 it started? Did it start in January? And I'm
20 wondering how this will likely be very useful
21 information, but it's not going to be available
22 until, based on the time lines earlier, when
23 agencies may need to get this information to make a
24 decision.

25 MR. CHESLAK: We did start sampling this

1 spring, in the fisheries. The intent is to have 1
2 full year of sampling on a quarterly basis. The
3 contract was extended to allow this 1 full year of
4 sampling. The issue of whether the data will be
5 available with respect to the licensing process is 1
6 that I'll have to refer to another person. The
7 intent is to have that baseline data available for
8 everyone's evaluation. I believe in the DPLA we
9 identified that studies would continue during the
10 period before WEC deployment, so that site-specific
11 information was available in the adaptive management
12 program, so that you would be able to know what the
13 resources at risk were.

14 So that kind of folds into this kind of
15 adaptive management approach. We know we're not
16 going to have all of the information available for
17 the final license application, in terms of our
18 sampling, but that sampling is intended to continue
19 through several years.

20 MS. ASHTON: Because when we get into the
21 discussion of the adaptive management and monitoring
22 plan, there is some discussion of potential food
23 habit studies, and so I believe Dr. Mulligan's plan
24 was to release all the fish that were collected in
25 the trawls to identify, weigh and measure and

1 release the specimens. But I'm wondering if there
2 could be an opportunity for some of the predatory
3 species, to perhaps in fact not release those, and
4 take stomachs and preserve them, to look at, at
5 perhaps a later date to compare with, if food habit
6 studies go forward, after installation of devices.
7 That way it would be before project installation
8 information, and then ...I used to work for a
9 consulting firm, and we would gather samples and we
10 were under contract to work them up, and we were
11 paid. But you don't get before samples before, and
12 so if you have stomach samples you can work them up
13 at a later date. Is there an option to discuss that
14 with Doctor Mulligan?

15 MR. DOOHER: We did write into the
16 contract that based on what we learned from the
17 regulatory agencies along the way, that we may
18 re-approach them and say we would like to change
19 things. So yes, we're certainly open to that, and
20 it's never been our intention to not have this be
21 flexible. That was written in to the original RFP.

22

23 MR. HOGAN: Any other questions on the
24 baseline studies that PG&E is presenting?

25 MS. FREY: The invertebrate study, will

1 there be actually benthic grabs taken in evaluation
2 of benthic grabs, or is it strictly going to be
3 literature review?

4 MR. DOOHER: The original study was just a
5 paper 1, however based on the discussions, and
6 what's come out of the DPLA questions, we have
7 discussed actually approaching him and trying to
8 basically see if we can combine some of the efforts
9 done with Doctor Mulligan as well as maybe making
10 some grab samples with Doctor Boyd.

11 MS. FREY: Vicky Frey, I recommend that
12 the benthic grabs be combined with the trawls that
13 Dr. Mulligan is doing off shore.

14 MR. DOOHER: I was just basically reminded
15 also that there was a question earlier about the
16 Redwood Sciences Lab, Victoria, and if that's of
17 interest to discuss with you folks? I see that as a
18 nod, yes.

19 MS. FREY: Wasn't that study just looking
20 at birds?

21 MR. DOOHER: No, our original intent, I
22 believe, was to look at birds, but while they were
23 out over the last 21 years, they did extensive data
24 collection. And so they basically have a three part
25 effort. They had a very large database, but they

1 needed funding to actually put it together and put
2 it into a peer review format.

3 And so over the next few months there is
4 actually 3 phases. The first of those reports have
5 been released, and that is a report that summarizes
6 the 21 years of marine and bird mammal surveys along
7 the coast. The second phase of this, this summer,
8 will actually give the descriptive statistics and
9 the map distributions and densities of the species
10 that they have been observing along that time. And
11 then later in the year these species data will be
12 analyzed to determine the population density trends.

13 So when they were out there, if they saw
14 mammals or birds they actually did try to record all
15 of them, and so they felt it would make for a great
16 study. They just didn't ignore the fact that there
17 is a bird here and a mammal over here, and they
18 weren't part of that original study. They tried to
19 be as comprehensive as possible, and when we found
20 out about the study, we thought that would actually
21 be a very good addition.

22 MS. ASHTON: What was the timing you said,
23 of the phases?

24 MR. DOOHER: I believe by the end of the
25 summer most of this data will be out.

1 MR. HOGAN: Did you say the first phase
2 was available now?

3 MR. DOOHER: Yeah, what we have actually
4 received of the phase 1 reports. We haven't
5 distributed them yet, but we can make those
6 available as soon as we can.

7 MR. HOGAN: As they become available, if
8 you could also file them with the Commission, that
9 would be appreciated.

10 MS. ASHTON: Diane Ashton, National
11 Fishery Service. Is it appropriate to refer to our
12 actual comments?

13 MR. HOGAN: Absolutely, that's why I
14 provided them.

15 MS. ASHTON: Our comments are in Tab 4,
16 and I would look to page 18, and it's comment 25. I
17 was going to suggest, and we did in our filed
18 comments, that for some of our discussions of the
19 project itself and where it's located, in terms of
20 species under various jurisdictional regulations.
21 If the ecosystem were framed as a component of the
22 California current and large marine ecosystem, and
23 some of these relationships and the
24 interrelationships amongst the various components
25 that are being looked at, and will be monitored

1 might be very useful for sort of rolling out how
2 things might affect different trophic levels, as
3 well as for opportunities for making it very clear
4 for dovetailing studies, like Vicky referred to.

5 If Tim is out on the Coral Sea, he is already
6 out there. The major cost of mobilization has
7 already been paid, and so to take some grabs while
8 you are already out on site would be an efficiency.
9 So I suggest that perhaps by having some kind of a
10 visual flow chart, something, showing the
11 relationships amongst the trophic levels and the
12 proposed monitoring might be useful.

13 MR. CHESLAK: Let me just answer your
14 question, kind of in a general way Diane. Because
15 what we're doing is we're tasked by FERC to go
16 through every 1 of your comments, and to revise the
17 adaptive monitoring and adaptive management plan,
18 given these comments. And if we don't accept a
19 particular comment, or there's a difference of
20 opinion on the comment, that we need to identify
21 that difference and justify the reason that we did
22 not include your suggestion in the plans.

23 So we intended carry out that process, and we
24 intend to modify the adaptive management plans in
25 accordance with FERC's direction, and work with you,

1 work with the agencies to incorporate these comments
2 to the best of our ability. And where we can't come
3 to some agreement, then to identify the basis of
4 that for that disagreement.

5 So instead of going through each of the
6 specific comments, I would just say generally our
7 intention is to look at each of them carefully, and
8 discuss with you carefully how you want the plan
9 modified and to make such modifications where
10 practical and feasible, and everything, okay?

11 MS. ASHTON: Thank you. The reason I
12 suggested that was because we have been engaged in a
13 rather formal dance, and because these are new
14 projects, it's a pilot license format, numerous
15 different publications have come out identifying
16 things. And I thought it might be a way to kind of
17 start fresh with an approach that might get us in to
18 some new dialogue.

19 MR. CHESLAK: Well thank you for helping
20 us to understand the basis for your comment. We
21 certainly take it seriously, and will certainly
22 will look at ways in which we can modify the
23 adaptive management plans.

24 MR. HOGAN: I'm wondering, from having
25 heard what the baseline studies that are going to be

1 collected, is there something that you can identify
2 that is going to be missing, that you think your
3 agency will need potentially? Do you have a comment?

4 MR. MCIVER: No, I don't.

5 MR. HOGAN: I'm assuming that's not
6 acknowledgement that everything that is going to be
7 collected is fully, to the extent that you need it,
8 you need more time to consider what they are going
9 to be collecting, and review what they provide, to
10 make a decision on that first, no? Are you prepared
11 to discuss that today?

12 MR. MCIVER: This is Bill McIver, with
13 U.S. Fish and Wildlife Service. I am a biologist,
14 working on the Humboldt working group here.
15 Regarding baseline studies. I think we have
16 everything we need in terms of information regarding
17 abundance and distribution of our trust resources.
18 And by that, I mean I think we anticipate having
19 that information by the time, by the end of the
20 summer, as was pointed out earlier.

21 So terms of baseline information I think we're
22 really not requiring, anticipating requiring much
23 more, other than what we're anticipated receiving by
24 the end of the summer for our trust resources.

25 MR. HOGAN: Thank you Bill.

1 MS. ASHTON: I'm going to say that my
2 remarks are spontaneous, and I am here as an
3 alternate for Dave White, he is our primary contact
4 with the National Fisheries Service on this project.
5 I am 1 of the biologists working on an aspect of the
6 project.

7 I think it's a difficult question to ask, to
8 answer right now. We did file a lot of comments on
9 pieces that we felt were important to have, in terms
10 of describing the environment and its use, and
11 analyzing potential effects. What I'm not clear
12 about with the actual time line of the dates that
13 you put forth in your comments, or FERC put in their
14 comments, where I believe -and correct me if I'm
15 wrong- the final monitoring, the adaptive management
16 plan is supposed to be filed with you at the end of
17 August?

18 MR. HOGAN: That's correct.

19 MS. ASHTON: And so it seems like that
20 might be a challenge, based on that baseline
21 information, what it shows. I'm not clear it states
22 it's an epibenthic trawl, assuming it's going to be
23 operated that way. You would be sampling at a
24 different place in the water column. So what it is
25 actually going to reveal I don't know. So it's not

1 clear to me that we will have the baseline
2 information that we need.

3 MR. HOGAN: So you'll actually need to see
4 study results before you can make that
5 determination? Is that kind of what I'm hearing?
6 Or is it the methodology, that you haven't been
7 provided enough detail to evaluate it and make a
8 call?

9 MS. ASHTON: I just have what's written
10 down, so I don't know what questions were asked to
11 come up with that study. If it was framed in terms
12 of what is an adequate study to answer certain
13 questions, or what can you do for a certain amount
14 of money in a certain amount of time. More
15 information on what this actual study is would be
16 helpful.

17 MS. WEST: This is Anna, is that an
18 action item to in 1 way or another get additional
19 information about these studies?

20 MS. ASHTON: Well, is that how this
21 proceeding? I'm not sure, that's kind of our
22 Humboldt working group approach, and so in a FERC
23 situation is that how we do this, with an action
24 item?

25 MR. HOGAN: Well, what I've asked is if

1 Anna would identify particular action items that we
2 think need to be followed through on. So if PG&E
3 agrees we can call that an action item, we'll find
4 out more information about what the study is, and
5 circulate that to the group, so you can get some
6 comments on it, and figure out whether we're getting
7 the appropriate baseline data. Does that sound
8 fair?

9 MR. CHESLAK: Sounds fair.

10 MR. HOGAN: Any other comments or
11 additional baseline information needs that the
12 agencies see as missing holes at this time? Or
13 shall we move on?

14 MS. ASHTON: I believe we've identified
15 our needs in our comments.

16 MR. CHESLAK: Ken, I have a question here.
17 In the pilot, in your concept of the pilot project,
18 where you're putting out new technology, there is a
19 fundamental tension between having sufficient
20 baseline data to characterize impacts and putting
21 out a pilot project. There's a natural tension
22 there. So what do you recommend, how do we approach
23 this tension, so that you can deploy a test project,
24 a pilot demonstration project, yet not be in a
25 situation where you have to spend years and years

1 and years studying baseline information to
2 characterize potential impacts?

3 MR. HOGAN: Well let me acknowledge that
4 the Commission's baseline information is going to be
5 project specific, and will likely be different than
6 the resource agencies informational needs, because
7 our processes are different, in the things that
8 we're looking at. What I'm trying to accomplish is
9 having an open dialogue with the agencies, so that
10 we can attempt to pursue our processes independently
11 on a concurrent time line.

12 So we can try to get the of the pilot licensing
13 process together, but we recognize that the
14 information needs for your license application with
15 FERC may be different than what the agencies need
16 for their endangered species consultation or other
17 permitting processes. So Steve, would you like to
18 add anything to that?

19 MR. MINDT: This is Steve Mindt, with
20 State Lands Commission. That pretty much covers it.
21 That 1 of the requirements for a CEQA is that we
22 gather all the information that's required for all
23 of the responsible agencies, to issue their permits,
24 so we have to follow that line. So whatever Fish
25 and Game, or any agency would need, we would have to

1 gather that information and include it in our
2 document.

3 MR. CHESLAK: Under an ILP process, when
4 you create a PAD, you're obligation is to collect
5 currently available, currently readily available
6 information to develop that PAD, so that you can
7 identify studies that need to be carried out. So
8 this pilot project is intended to be an offshoot of
9 the IOP in a sense, right? So how, if we're going
10 to be using or characterizing a baseline with all of
11 our available information that we have, then how do
12 you determine when sufficient baseline information
13 has been collected? What is sufficient to
14 everybody?

15 MR. HOGAN: From the Commission's
16 perspective, let me rephrase that. From my
17 experience at FERC, and this is a pilot, and what
18 you have identified, here's the rub. What is the
19 necessary baseline information, and what will need
20 to be done, in terms of monitoring through the
21 pilot, post project construction.

22 For us, or from my perspective, what I see is
23 the issues where we have let's say ground disturbing
24 activities that are going to be non-reversible, we
25 really need our baseline information on that, so

1 that we can appropriately analyze the effects of
2 those ground disturbing activities. Where we don't
3 want the project effects are on a particular
4 resource, but it may not be a ground disturbing
5 activity. We would be looking more towards the
6 monitoring side of that, so that we can evaluate how
7 is a project affecting a resource. Whether it be
8 creating a fish aggregating device, acting as a fish
9 aggregating device or so on. And then so it's
10 really a balance of having your robust monitoring
11 studies so that we can truly evaluate the project
12 effects, and what are the other factors of the
13 project that are going to be kind of irreversible.

14 If you are laying your transmission line, and
15 you in the process bury it right through a
16 shipwreck. Well there is no going back from that,
17 and those are the kinds of things, we would need to
18 know that information ahead of time. So I hope I'm
19 being as clear as I can, but it's really a
20 case-by-case basis, and we'll know it when we see
21 it.

22 MS. ASHTON: This is Diane Ashton, with
23 NFS. I think the importance of the baseline in this
24 pilot license process is because this is a new
25 project. The effects of these devices are unknown,

1 and uncertain.

2 And so in order to detect an effect, or to
3 measure an effect, you have to know what has
4 changed in your resource. Be it a habitat feature
5 or a biological use of a particular part of the
6 habitat. If you don't know what it was like before
7 the devices were put in, then all you have is what
8 it was like after the devices are in. So on 1 sense
9 the baseline is very important, to measure the
10 changes against, and I think that's an important
11 point to make.

12 MR. HOGAN: And I agree with you Diane,
13 but 1 component that PG&E, for many of the
14 monitoring studies is proposing to have is control
15 sites that would be monitored both pre-project
16 installation and post-project installation. So you
17 would be able to monitor the changes at the site
18 based on the WECs and do a comparison with the
19 controls. And that to me seems to be a decent
20 approach. Is that not the case from your
21 perspective?

22 MS. ASHTON: I think having the control
23 sites is a good way to get a sense of what the
24 natural variability is in what you are measuring.
25 But again, they need to be very carefully designed,

1 so that you will ask the right questions and be able
2 to use the information you get to detect a
3 difference.

4 MR. HOGAN: Have we addressed your
5 question?

6 MR. CHESLAK: You have helped me
7 understand what the baseline needs are, thank you.

8 MR. HOGAN: Any other comments on the
9 baseline? General, there was a comment from both
10 the Fish and Wildlife Service and the National
11 Fisheries Service that we are not in informal
12 consultation at this time. And I'm wondering is
13 there a reason that we can't be considered an
14 informal consultation at this time? I have reviewed
15 the regulations and it seems like what we have been
16 doing is informal consultation, and it's unclear to
17 me.

18 MR. MCIVER: This is Bill McIver with
19 U.S. Fish and Wildlife Service. Where we are right
20 now is in the stage of technical assistance or
21 informal consultation, before formal consultation
22 has been initiated.

23 If an agency, a federal agency determines that
24 a project is, and pardon the regulatory speak here,
25 but if a federal agency determines that a project is

1 likely to, may affect a species, but won't adversely
2 affect it, then you can seek a letter from 1 of the
3 services, which would be considered informal
4 consultation or concluding informal consultation.

5 I think, and I won't speak for Diane at NMFS,
6 but for Fish and Wildlife Service, we just wanted to
7 clarify that it seemed like there were several
8 places in the document where you stated that you
9 were in consultation with the services, and we're
10 just, those words have regulatory meaning that
11 technically we're not in the formal consultation
12 stage. We just wanted to clarify that, and it's
13 not, it doesn't affect how we are working together
14 or anything, we just wanted to clarify for the
15 record that you have not initiated formal
16 consultation yet. Because under our regulations,
17 once you've requested formal consultation and then
18 the services have determine that there is sufficient
19 information to proceed, then the clock starts, in
20 terms of when we have to complete that consultation
21 process.

22 MS. WEST: So just to clarify, you are
23 saying you are currently in technical assistance,
24 and/or informal consultation, now?

25 MR. MCIVER: Yes.

1 MS. WEST: Is that right?

2 MR. MCIVER: Yes.

3 MS. WEST: But not formal consultation.

4 MR. MCIVER: Correct.

5 MS. WEST: Diane?

6 MS. ASHTON: Bill captured it very well.

7 MS. WEST: So yes?

8 MS. ASHTON: Yes.

9 MR. MCIVER: And let me add, this is Bill
10 with Fish and Wildlife again, that once the service,
11 say the Fish and Wildlife Service has determined
12 that we have enough information to proceed with a
13 consultation, then from 135 days from the receipt of
14 that request for consultation, we need to issue a
15 biological opinion. So that's what I mean by the
16 clock starting, so there is a regulatory time frame
17 there.

18 MR. HOGAN: We recognize that we have not
19 submitted a request for formal consultation,
20 initiating the clock, and that will be done with our
21 filing of a biological assessment. I guess I
22 covered the additional information needs already.

23 I'm wondering if we want to continue to move
24 on, or do we want to take a short break, before we
25 go into monitoring plans, any opinions? I've been

1 hearing whispers in my ear for a 10 minute break.
2 So okay, let's take a 10 minute break, and we'll
3 reconvene at quarter of.

4 (Whereupon, a break was taken.)

5 MS. TEMPLETON: This is Carolyn Templeton
6 from FERC. We're going to go ahead and get started
7 again. And I just would like to remind everybody
8 that if you didn't get a chance to sign in at the
9 table outside the doors before you came in, or if
10 your didn't see 1 of the sheets that was
11 circulating in the room, if you wouldn't mind going
12 ahead and signing up. Even if you are from PG&E, or
13 wherever, we would like to just have an accurate
14 account for everybody that was present for the
15 meeting this afternoon. Thank you.

16 MR. HOGAN: Before we move on to the next
17 agenda item, I just wanted to check to see if
18 anybody in the audience had any questions or
19 comments about the discussion before the break?

20 Okay, hearing none, our next agenda item is a
21 discussion of project monitoring plans and the
22 adaptive management strategies. This is a pretty
23 detailed topic, that's going to take much more time
24 than this meeting provides for. So what I'd
25 actually like to get is input from the agencies on

1 their expectations of what needs to be incorporated
2 into the adaptive monitoring, I'm sorry, the
3 adaptive management and the monitoring plans, and
4 kind of work towards a process that can, that we
5 can identify to help PG&E to develop the appropriate
6 plans by their August 30th deadline.

7 Some of the things that we were looking at the
8 Commission, from our review of some of the plans
9 were the duration of the monitoring, on ramps and
10 off ramps, biological triggers to either trigger
11 monitoring or discontinue monitoring and/or to
12 reinitiate monitoring.

13 So I'm wondering if the agencies have some
14 insight on whether or not you think triggers are
15 appropriate, are on ramps and off ramps of the
16 monitoring appropriate, and what kind of components
17 need to be incorporated into the monitoring plan.

18 A general comment that we did receive is that
19 there needs to be some type of reporting provision
20 built in to the monitoring plans, and we agree with
21 that. So any thoughts on at least the approach to
22 move forward to structure the monitoring plans in
23 such a way that they will be most useful and
24 beneficial to your agencies, and to provide a
25 comfort level that you feel is necessary?

1 MR. MCIVER: Okay, thanks Ken. This is
2 Bill McIver again, with the U.S. Fish and Wildlife
3 Service. And we did comment in our comment letter
4 regarding the monitoring plans and reporting
5 requirements under formal consultation for the
6 project. And I guess my answer regarding the
7 monitoring plans would be pretty much in step with
8 our comment letter, is that through the process of
9 participating in the Humboldt working group, with
10 PG&E and their consultants, the Fish and Wildlife
11 Service will, wants to work with PG&E and their
12 consultants to develop and to continue developing
13 the adaptive management plans and monitoring plans.

14 And so to say right now what those plans might
15 look like, I think it's too premature to say that.
16 Because we still need to work with everyone to get
17 them in shape. So I guess my answer is that, that's
18 the process that will get us there. And I think
19 based on what my experience has been with the
20 working group over the last year, is that I feel I
21 am pretty confident we can put our heads together
22 and develop monitoring plans that will reasonably
23 accomplish what they set out to accomplish.

24 And from the Fish and Wildlife Service's
25 perspective under formal consultation, 1 of our

1 comments was that under the regulations for, under
2 Section 7 of The Act, formally consulting with the
3 Service, and 1 of the regulation requirements of
4 consultation is to monitor the effects of the
5 project. And so whether the project is going to
6 last 8 years, you know you have to be able to
7 monitor the effects over that time period.

8 I'm not saying you have to go out every day
9 during those 8 years, but there has to be something
10 over that time period that monitors the effects on
11 listed species, because we make in our biological
12 opinion, and that pertains to listed species. In
13 this case it would be, in terms of the at sea
14 component, the Marbled Murrelet, which feeds in
15 those waters out there. We have to make a
16 determination of whether the project will jeopardize
17 the species or not.

18 That's our analysis that we go through in the
19 biological opinion, and through that process we make
20 a determination of what our anticipated level of
21 take, if any, might be. And take is a technical
22 term, basically it can mean to injure or to harm or
23 affect the behavior of a listed species. So in very
24 loose terms there, so through that process, to
25 evaluate that, we need reporting, and that's what

1 the monitoring plans, that's how they fit in to the
2 formal consultation process.

3 So that's what we want. We want to work with
4 PG&E and their consultants to devise monitoring
5 plans that will achieve these objectives. So
6 hopefully that helps to sort of frame our comments
7 and answer your question.

8 MR. HOGAN: It sounds like there's almost
9 kind of 2 steps to the monitoring that you are
10 suggesting, which is; 1, evaluate the project
11 effect, and 2, monitor to ensure that you are within
12 the take limits set by the biological opinion. Is
13 that correct?

14 MR. MCIVER: I think they're 1 in the
15 same. I think it's part of same process.

16 MR. HOGAN: I can appreciate that. If the
17 monitoring initially demonstrates that there is no
18 effect or that the effect that there is, would be
19 well within the take provisions of the biological
20 opinion. Would it be appropriate then to
21 discontinue the monitoring, based on what you can
22 assess from the monitoring that's been conducted?

23 MR. MCIVER: I think it's way too early
24 to speculate on what a monitoring plan might look
25 like. I mean I can hypothetically, we could drop

1 all sorts of hypothetical scenarios of what a
2 monitoring plan might look like. I mean you want to
3 be able to assess the project effects on the species
4 throughout the project period. I could conceive of
5 a situation where you might, after some time period,
6 I mean you may in your monitoring plan possibly
7 build in some kind of determination of confidence in
8 how the project may be affecting the species, it's
9 possible you could do that. But I would at the
10 outset, I would think that some sort of regular
11 monitoring would probably be the approach we would
12 recommend. But like I said, it's too early to say
13 what form the monitoring plan might take. And this
14 is what we need to get together with the consultants
15 and PG&E to work these things out.

16 For instance, say you go for 3 years and you're
17 not seeing any effect on any of our trust resources,
18 and then you stop monitoring, and then you put in a
19 different WEC device, and you're not monitoring, and
20 the WEC device is way different than anything out
21 there. You have no way of knowing whether it's
22 affecting the species or not. So for that reason
23 you would want to, under that scenario, you would
24 want to be monitoring, to see if there's any kind
25 of change.

1 MR. HOGAN: And under that scenario, I
2 think we agree with you. I think what we're looking
3 for is to develop the most robust monitoring plans
4 that we can, and the Commission can feel comfortable
5 with. We don't necessarily see the need for
6 monitoring in perpetuity, for what we term in slang
7 as monitoring for monitoring's sake.

8 But if we can build in on ramps and off ramps
9 to the monitoring plans, such as, okay, we've
10 monitored for hypothetically 3 years, we don't see
11 any effect, as you've said. Have an off ramp to the
12 monitoring, but then have an on ramp to monitoring
13 if the devices have changed, or the project is
14 modified in such a way, or if there is an effect
15 that has been determined, and there is a determining
16 mitigation measure to address that effect, it's
17 appropriate to monitor the effectiveness of that
18 mitigation measure.

19 So I think we're on a similar page, and I think
20 we would like to work with you, PG&E to try to get
21 it to where the Commission staff can be comfortable
22 and make a recommendation to the Commission
23 consistent with Commission policy, and that we can
24 all live with it. Vicky?

25 MS. FREY: Can I say something please?

1 Vicky Frey. Because this is a pilot project with a
2 definitive life span, and because it is a technology
3 that's new, we don't really know much about, it
4 seems to me that we should all be looking at this
5 from a precautionary perspective. And that is to
6 monitor through the entire project in order to
7 evaluate changes in the variability of populations,
8 atmospheric changes, oceanographic condition
9 changes, all of those things.

10 There are so many things that can change from
11 year to year that affect biological resources. And
12 because it's a finite period of time for this
13 project, I think that it should be monitored the
14 whole time. Now, I recognize that through the
15 adaptive plans, if they go out say and they monitor
16 for 2 years for a particular, some particular
17 effect, effect A. And it's a banner year for
18 whatever species that, that plan is monitoring for.
19 And they can see in the first 2 years that this
20 particular technology is having a significant effect
21 on species 1. Then they would be going into the
22 adaptive management mode, to make changes, mitigate,
23 change things, so that they would be reducing the
24 effects on those species. In which case, they are
25 going to have to continue to monitor to see if that

1 change has an effect.

2 Okay, so that's 1 scenario. The next scenario
3 is they monitor for 2 years and they don't see any
4 effects at all. That could be because the species
5 or the conditions are poor those 2 years for those
6 particular species. And you've stopped monitoring,
7 because you say there is no effect, and year 3,
8 it's a banner year, everything changes and you don't
9 know that there's an effect, because you've stopped
10 monitoring.

11 So I think it's imperative that we continue to
12 look through the whole project. Because it's pilot,
13 because we need to know everything that is going on
14 with this particular technology in order to evaluate
15 how we are going to deal with it on a commercial
16 scale, on a long-term basis.

17 MS: ASHTON: This is Diane Ashton with the
18 National Marine Fisheries Service. I've been trying
19 to think of an analogy that would really make sense.
20 And I think there is 1, I just can't quite capture
21 it in my mind.

22 But to support Vicky's point about the
23 monitoring in some fashion throughout the life of
24 the project. What we're responsible for, in some
25 ways is similar to your investment in this project.

1 You're putting your WECs out there, and you are
2 seeing how they're going to perform in this
3 environment, and that performance is based on power
4 generation, I think. So you're going to compare
5 this, how your sighting array is, I don't know all
6 the specifics. This is part of what will be brought
7 forth as this moves forward. But you want to see
8 what's the most effective, what's best able to
9 achieve your project goal.

10 Similarly, we're trying to answer those same
11 questions for our species. We want our species to
12 be successful, and to be able to coexist in this
13 environment, if that's possible. Or if they can
14 move around it, or they're not even encountering it.
15 But we don't have a lot of that same kind of
16 information. So it's sort of like these are old
17 species, but our level of information is sometimes
18 analogous to new technology.

19 We have new technology to gain information
20 about these species, but there is a lot of
21 variability. Just like there is going to be
22 variability in your physical conditions for wave
23 generation. So I think in the pilot license
24 process, there is adaptive management from the
25 industry standpoint, and there is adaptive

1 management from the resource standpoint.

2 And I think our task is to link those 2 in a
3 way that makes sense, so that the technology that's
4 needed can be advanced, and that the species are
5 protected. And it's a whole new way of doing
6 business, compared to projects that are just like
7 other projects, but it's a new 1.

8 So I think we are struggling, like Robert
9 mentioned. This is new for all of us, but we have
10 to kind of think of this in different ways. So it's
11 not want what can we live with, it's what do we need
12 to know, so that we can move forward in the most
13 prudent way. I don't know if that really helps
14 support what you said, but I think we're not
15 prepared to say 2 years is enough. I think this is
16 going to be an evolutionary process as we go
17 forward.

18 MR. HOGAN: I would agree with you, Diane.
19 I don't think it's appropriate just to set a time
20 frame for monitoring. And that's why we try to lean
21 towards triggers. If X, then Y, and to really
22 trigger it off of biological criteria, and those
23 triggers can be used for on ramps or off ramps. So
24 to address Vicky, you're comment about changing in
25 populations, or I think we can build or try to build

1 monitoring plans that can address that, and to also
2 allow for not monitoring in perpetuity, but maybe if
3 there is a, maybe we have just continued monitoring,
4 and then there is a banner year for a species, maybe
5 that's an appropriate on ramp to reinitiate that
6 monitoring.

7 I am not looking for any commitments here
8 today. I'm just wondering if these are concepts
9 that the agencies and PG&E would entertain, and to
10 try and give us a road map to August 30th, and how
11 to take our approach. So we have a goal in mind
12 that ideally is uniform.

13 MS. ASHTON: Can I ask why you selected
14 August 30th as the deadline, based on the time frame
15 on the pilot license chart? It doesn't seem to
16 indicate that, that might be fixed in stone?

17 MR. HOGAN: The reason we selected August
18 30th, is we looked at what we were asking PG&E to do
19 in our additional information request, and the
20 filing before we could comfortably give our go-ahead
21 to utilize the pilot licensing procedures, laid out
22 on the white paper.

23 We felt that 120 days to do that was the most
24 that we could, we would want to give, and kept in
25 mind when the permit expires in February. So PG&E

1 could complete the monitoring plans, we could review
2 them, either approve or deny the pilot licensing
3 process, and if we approve it, give PG&E time to
4 prepare their final license application and have it
5 filed by February.

6 It was strictly looking at it from the process
7 perspective. We had internal debates of having it a
8 shorter period, and decided that would not be
9 beneficial. I will say that we could be flexible,
10 but we would need to see schedules and things of
11 that nature. We want to keep the process moving
12 forward and we would need to hear input as to why
13 something should be changed and justifications.

14 MS. ASHTON: The reason I asked, is
15 because based on the information we received through
16 the Humboldt working group when I believe a draft is
17 expected the end of June, and then our next meeting
18 will be in July to discuss that. And then the end
19 of August is when this final is supposed to be
20 prepared. That's a very tight time line for that
21 few amount of interactions, it seems to me, and I
22 would like to say to, in terms of the triggers, I
23 would think another trigger that could be enfolded
24 in there is since there is a lot of projects in
25 different phases along both coasts, that as new

1 information becomes available that's learned from
2 another project that's further ahead than this,
3 either as an appropriate monitoring technique, or an
4 effect that comes up.

5 I mean we're planning by reasoning through
6 this, but there is usually things you didn't plan on
7 that surface. And so you have to be alert and aware
8 that your actually noticing those factors too. So
9 in terms of specifics of when you're checking for
10 gear, impingement of mooring devices, or whatever it
11 is, that should be part of the monitoring plan. So
12 that from the operations standpoint of maintaining
13 this infrastructure and the near shore, I believe
14 those plans are supposed to be provided sooner than
15 that, than August. I thought it was like 90 days
16 after the letter? Something like spill prevention
17 and the response plans and things like that. I
18 mean it seems like a lot of things are going to come
19 together fairly quickly, and then there is a fairly
20 quick turnaround time, in terms of response from us.
21 And it might be prudent to lay out some of those
22 time lines a little more specifically?

23 MS. FREY: From April, our last meeting
24 was in April, and on the time line that we were
25 given there and the dates that I wrote down from my

1 notes, it indicated that the preliminary permit
2 expires in February of 2011, and that the final
3 license application must be filed before that
4 expires.

5 So the intent at the time was that the final
6 license application would be filed around December,
7 in the December time frame. That's what we were
8 told in April, so August is a lot different from
9 December, and I'm curious why it got bumped up to
10 August. Can you repeat that again?

11 MR. HOGAN: Yeah, the study plans that
12 we've asked for, and I see you're looking at the
13 chart we developed, I don't know, a year ago. And
14 since we've developed that chart, we've modified the
15 white paper to ... we heard agency comments that the
16 process that's laid out by the pilot procedures,
17 didn't allow for missing information.

18 We wanted to know, agencies didn't want us to
19 make a determination on authorizing a pilot
20 licensing procedure, until we were comfortable that
21 we had all the information that we were going to be
22 need, rather than just identify what additional
23 information we were going to need.

24 So to do that, we removed the deadline that was
25 originally outlined in the white paper, which was 30

1 days from this meeting to authorize or deny the use
2 of the pilot procedures. By removing that deadline,
3 we said okay, and we will ask for and make sure that
4 PG&E or other applicants has provided us with the
5 information we've asked for, before we make that
6 determination.

7 Once we get that information from PG&E in
8 August, we will review it, see if it is sufficient
9 for our needs, and then make a determination on
10 the... well we could either issue another EIR, or
11 make a determination to approve or deny the use of
12 the pilot licensing procedures.

13 So that's why we had to include a deadline for
14 providing us with that information. So that we
15 could continue to move through in the process. And
16 that's why we came up with August 30th deadline.
17 Does that answer your question?

18 MS. ASHTON: I can see the intent of the
19 deadline, I think, or understand that, but my
20 concern is that it's like getting through an agenda
21 and not really covering every topic in the depth
22 that you need to. If you see by August 30th, maybe
23 there is not a final that everyone is totally
24 comfortable with, but we've made a lot of progress
25 in that direction, and we're still within our time

1 frame for coming up into next year for filing the
2 final license application, or excuse me, PG&E is.
3 Is there then the ability to extend that deadline a
4 little bit if needed?

5 Because this is new and you don't really know
6 what is going to look like till it's there, my
7 concern would be that that's not much time.
8 That's a lot of work to do in the short period of
9 time, and when you have to do it you do it. But I
10 think to do it right it's kind of like some of the
11 things that have come up, in terms of the process of
12 picking the devices, the actual ins and outs of
13 getting this project up and running. Similarly, the
14 monitoring plan kind of has a similar trajectory, so
15 my fear I guess, is this product at the end of
16 August 30th, if it's going to be what it needs to
17 be. It needs to demonstrate that it meets the
18 requirements of the pilot license project, but in
19 terms of what it really is going to be doing, I hope
20 that there is an opportunity to get the plan that is
21 needed in place.

22 MR. HOGAN: I think if we all work
23 together in an effort to meet the August 30th
24 deadline, and we're unable to do that, and we've
25 demonstrated significant strides toward these

1 adaptive management monitoring plans, and I'm
2 speaking from my own perspective. I don't authorize
3 extensions of time, so I can't say yes, we would do
4 that, but I would suspect we would be flexible to
5 allow for let's say finalization, and putting the
6 bow ties on the monitoring plans. Dressing them up,
7 you know, but we would have to demonstrate as a
8 group that we've made great progress, and it's just
9 a matter of we're just teasing out some key issues.

10 Does that answer your question?

11 MS. ASHTON: May I ask a question? So the
12 intent of this deadline is really for FERC to
13 determine if this project will meet the pilot
14 license criteria?

15 MR. HOGAN: In a nut shell, yes. I mean
16 we need to make sure that PG&E has developed the
17 plans and any other additional information that we
18 required, to a sufficient level that we can feel
19 comfortable to approve the pilot licensing
20 procedures. We made a commitment not to approve the
21 pilot licensing procedures without having that level
22 of information. That was based on comments that we
23 got from the agencies. Again, the August 30th
24 deadline was also set to facilitate PG&E's
25 preparation of their final license application, in

1 filing it prior to the expiration of the preliminary
2 permit in February.

3 MS. WEST: You're still looking cross
4 eyed. Did I hear you suggest Ken that if there is
5 significant progress being made, and you think that
6 the effort is going to be productive and ultimately
7 get all the information that you need, that, that's
8 a possibility for August?

9 So good progress is being made, information is
10 forthcoming and you can see the process continuing
11 to a productive conclusion, based on progress to
12 date by then?

13 MR. HOGAN: Yeah, I think if we can
14 demonstrate as a group that we're making good
15 progress, and we haven't been sitting around, not
16 working on the monitoring plans, my management may
17 be flexible in allowing for additional time to
18 complete those plans, if it seems appropriate, and
19 there was a schedule in place for getting them in.
20 I mean we will always consider requests for
21 extension of time, it just has to be justifiable and
22 showing the progress in having a schedule to move
23 forward is the justification that we are going to
24 look for. And like I said, I can't say that we
25 would approve or deny, but I think we want to be

1 flexible, we want to support the process, and I'm
2 just saying what we would need to show as a group to
3 influence my management.

4 MR. MCIVER: This is Bill McIver again
5 with Fish and Wildlife Service. Ken, I'm kind of
6 wondering, with your experience, in your experience
7 with FERC, have you on any previous projects before,
8 worked in or been in a situation where there is a
9 working group like this?

10 I mean it seems like this is kind of a,
11 certainly for me, in the 8 years I've been with the
12 Fish and Wildlife Service, I've never worked on a
13 project like this before, where you're right at the
14 ground level and working with other interested
15 groups and stakeholders. And I've certainly never
16 worked on a project with this complexity before, and
17 that may explain part of it. But certainly there's
18 been this early and often involvement of all
19 interested parties, or most interested parties
20 anyway, as far as I can see.

21 That process I think, should hopefully, if you
22 need to convince your management of any extension, I
23 would think that this process should, could do that.
24 I mean I guess I'm just offering that, because we
25 want to develop meaningful, let's just talk about

1 the monitoring plans for instance. We want those to
2 be meaningful. We don't want to just feel like
3 we're up against a hard deadline, and then we
4 complete something that none of us are really
5 satisfied with. But if we have a process going, and
6 we're still working towards it, I would hope that
7 that could be taken into consideration.

8 MR. HOGAN: Like I said, I think we would
9 take that into consideration, and to answer the
10 first part of your question, I have worked on a
11 number of occasions on working groups, particularly
12 in fisheries on conventional hydropower projects.
13 This is my first hydrokinetic project, as it is, I
14 think, all of yours. So we're advocates for the
15 process, and we want to make sure that we can move
16 projects through our process in an efficient and
17 timely manner.

18 Our experience, and this is why I say, when I
19 say what we need to provide to my management, as far
20 as showing progress, having a schedule, it's because
21 their experience and our experience at the
22 Commission has been if you give folks time, they
23 will take it, and they may not make any progress,
24 and 1 extension of time is followed by another
25 extension of time, followed by another.

1 So we're not inclined to just blanketly say,
2 okay, you're asking for more time, no problem. We
3 want justification for the time, and how is that
4 time going to be used, and that's the key.

5 And again, we're also conscious of the
6 expiration of the pilot permit deadline, and we're
7 trying to make sure that we are providing PG&E with
8 the time necessary to prepare a final license
9 application by the expiration of that project or
10 permit.

11 So we're trying to balance getting the plans
12 that we need, quality plans, robust plans, and the
13 final license application. We're committed to
14 putting in the time that it's going to take to work
15 in the work group. If it's weekly meetings, I'll be
16 there, or I'll be on the phone.

17 But like I said, we're trying to balance a
18 number of different things, and it is effort, and
19 it's going to take some work. If we can work
20 together, I think we can do it, and we can certainly
21 do it, and we can certainly do it for the final, to
22 have good documents in place for the final license
23 application.

24 MS. ASHTON: I would say that in order to
25 meet the August 30th deadline, and have plans that

1 all the agencies are on board with, it does require
2 frequent meetings, way more frequent than 1 or two.
3 And PG&E has to commit to really hearing what the
4 agencies are suggesting and saying, and
5 incorporating the changes that we want to see, in
6 order for those plans to be acceptable to the
7 agencies And I would like to emphasize that NMFS is
8 committed to doing this, but it is new for all of
9 us, and so you know it's going to take a lot of
10 work. And what if we can not come to an agreement
11 on what's acceptable? What is the process then?

12 MR. HOGAN: Ultimately, what needs to be
13 in the plans for the final license application is
14 what will the Commission need for those plans to
15 include to support our decision making progress and
16 our NEPA review. We look to the agencies to help,
17 again this is very new to us, so we are looking to
18 the agencies for their expertise to help inform us
19 of what it needs to be, and we will evaluate the
20 input of the agencies on those.

21 If we get plans that we believe are robust
22 enough for us to approve the pilot licensing
23 process, when the final license application is
24 filed, the agencies will have an opportunity to
25 comment on the plans and the entire application, and

1 to tell the Commission where they think the plans
2 are lacking. And we will make a decision on whether
3 the plans should be modified or not, and if so, we
4 will modify the plans accordingly.

5 MS. KORDELLA: So, in a sense, did I just
6 hear that there's flexibility for the evolution of
7 the process to continue in some capacity after the
8 August 30th deadline?

9 MR. HOGAN: Maybe.

10 MS. KORDELLA: I mean based on the
11 comments that can be filed with the application, if
12 there is something lacking at that point, it's still
13 an opportunity to add that component in?

14 MR. HOGAN: Yes.

15 MS. KORDELLA: So therefore conversations
16 don't necessarily have to stop, just because the
17 deadline occurs?

18 MR. HOGAN: Yeah, I think PG&E has done a
19 great job of implementing the pilot licensing
20 procedures to date, and we would anticipate that
21 even though the August 30th, let's say we all meet
22 the deadline and file good, robust plans on August
23 30, there is still a lot of work to be done
24 regarding the finalization of the final license
25 application, we would expect that it continues to be

1 a group effort. So I think PG&E, that's your intent
2 as well. I'm seeing nodding, so August 30th is not
3 the conclusion of the Humboldt working group or the
4 subcommittees.

5 So 1 thing that I did hear, is that it sounds
6 like we are going to need to increase the level of
7 effort, at least of the subcommittee, the permitting
8 subcommittee group. Is that something PG&E is
9 prepared to do, and do you think you could come up
10 with a proposed schedule for really trying to
11 finalize these plans by August 30th, or an approach
12 to doing that?

13 MS. FARAGLIA: This is Annette Faraglia
14 from PG&E. I think we'll need to discuss that. We
15 do very much appreciate the ability that FERC might
16 consider an extension of the August 30th. Because
17 it is a challenge to get everyone on board, and to
18 develop the plans in that time. And I hear what
19 California Department of Fish and Game and NMFS is
20 saying. We mentioned in our comments to FERC that
21 we couldn't do this alone, and that we would need
22 the cooperation of the agencies. Because it isn't
23 just as though we can file the plans on our own by
24 that date.

25 So I think what we would like to do is perhaps

1 off line, discuss how we could perhaps increase the
2 time we can spend on that, and try to develop
3 something. But I don't think we're ready right now
4 to come up with a schedule.

5 MR. HOGAN: And from our perspective, to
6 the extent that these meetings can be held by
7 teleconference or in the most efficient manner
8 possible, we would support that as well. I
9 appreciate your comments on that. Does anybody have
10 any other questions or comments regarding monitoring
11 plans from the agencies?

12 MS. ASHTON: This is Diane, with NMFS. I
13 again am going to suggest something, and I don't
14 mean to set us back at all, but it did appear in the
15 draft license application, there were some, in the
16 effects analysis, there were some conclusions made,
17 that then did not jive with what was chosen to
18 monitor in the monitoring plans.

19 And so I thought it might be useful in 1 of our
20 conversations in the future, is to step back a
21 little bit and maybe identify what we agree on, and
22 what we haven't come to agreement on yet. Because
23 it did seem within the document itself there were
24 some disconnects between the conclusions that were
25 derived and the effects analysis, and then things

1 that were identified in the working group that were
2 potential effects. And I think that might be worth
3 a little more discussions, because these things were
4 kind of marched out.

5 I think we could revisit that, and identify
6 some things a little more, in a little more detail.
7 I mean for example, lighting, that was discussed at
8 1 of our subcommittee meetings, and it was discussed
9 in the pilot license application also. But I think
10 for a lot of these issues, there can be further
11 levels of discussion and details, so that we can be
12 monitoring things correctly.

13 MR. HOGAN: Sounds like an action item to
14 me.

15 MS. WEST: Got it.

16 MR. HOGAN: Does anybody from the audience
17 have any questions or comments about our discussions
18 here? Okay, so with the action items that Anna has
19 recorded, I would say our next steps are addressed?
20 Would anybody like to add potential next steps?
21 Thank you everybody, and I will see you tonight.

22 MR. CHESLAK: You wanted some
23 clarification on potential next steps? Is that?

24 MR. HOGAN: Proposed next steps.

25 MR. CHESLAK: Proposed next steps? So the

1 proposed next steps would be to, for us to get
2 together and to come up with the process and the
3 schedule? That would lay out the way in which we
4 are going to address the comments on the adaptive
5 management plans? And then to include in that a
6 schedule for the timing of when we are going to be
7 at the meeting with the Humboldt permitting
8 authorities sub group, and discussions on those
9 methods?

10 This will be to meet that 120 days, that's
11 going to be an ambitious schedule, so everybody
12 tighten their belts. And so I guess that would be
13 the next steps that we would see at this point, is
14 to lay that out for you. And other than that, we
15 will have to think more about what to do after that.

16 MR. HOGAN: How long do you think you'll
17 be taking to lay that out? Just to give us an idea
18 of when we can expect a proposal, let's say?

19 MR. CHESLAK: I would say within a week or
20 2 weeks. We don't know right now, so we would try
21 to make that happen within a fairly short period of
22 time. We recognize that time is marching on, so
23 time is of the essence, and we'll take a look at it.

24 MR. HOGAN: Just looking for a ballpark
25 numbers, thank you.

1 MR. OGGINS: This is Cy Oggins, with the
2 State Lands Commission. If I could just request of
3 PG&E to keep us informed too, on your discussions on
4 the schedule. We also feel that this is a very
5 aggressive schedule for the State's environmental
6 review, so the sooner you get a sense of what your
7 schedule is, the more helpful it will be for us as
8 well.

9 MR. CHESLAK: Sure, absolutely, we'll keep
10 you informed.

11 MS. ASHTON: This is Diane. You had
12 already set that June 29th deadline for a draft?
13 Something coming back to the resource agencies, and
14 so if enfolding what you are proposing into that is
15 appropriate, it doesn't take you off that task?

16 MR. CHESLAK: That would be my intention
17 at this point is to, since we set that up, and we
18 put that schedule out there too, to at least fold it
19 into that schedule.

20 MS. FREY: So that would indicate to me
21 that we wouldn't have another meeting until after
22 June 29th, if that's when you are going to give us
23 revised plans. Is that correct?

24 Mr. CHESLAK: Again, we would like to sort
25 of talk about that internally. There is a fair

1 amount of work to be done to get those plans to you,
2 and then you have to review them. And so there's
3 that process that we have to think about. That's
4 what we want to discuss. How long it's going to
5 take us to revise them, how long it'll take you to
6 review them, and when a good meeting time will be.

7 MR. HOGAN: I would like to reiterate
8 Diane's comment though. There may be some issues
9 that have slipped through the cracks. That might be
10 a good starting point, just to make sure that those
11 are addressed, while you are working on the plans
12 that you already have in place. We can at least get
13 those inconsistencies addressed earlier or
14 identified, and it may facilitate the process.

15 MR. CHESLAK: I endorse that, I just ask
16 for the agencies to help us in that process. If
17 you've seen inconsistencies, please identify those.
18 We would be more than happy to take a look at them
19 and see as we develop these revised plans that we're
20 monitoring the right things at the right frequency
21 etc.

22 Ms. FREY: And I believe in our comments
23 we pointed out where there were some
24 inconsistencies.

25 MR. CHESLAK: So if they are in your

1 comments, then we'll be looking at everyone of those
2 comments and trying to address every one of those
3 comments, so we're covered.

4 MR. HOGAN: If nobody has anything else,
5 then I would like to adjourn the meeting. Unless
6 State Lands has something? Okay, meeting adjourned.
7 Thank you everybody.

8 (WHEREUPON the afternoon proceedings were concluded
9 at 2:54 p.m.)

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