

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

FEDERAL ENERGY REGULATORY COMMISSION

SCOPING MEETING

WICKIUP PROJECT

Boyle Education Center
Board Room
Central Oregon Community
College
Bend, Oregon

August 20, 2008

1 PROCEEDINGS

2 9:15 a.m.

3 MR. PUGLISI: Okay everybody. I think we'll
4 begin this morning's meeting. We wanted to give a little
5 bit of time for people who went to the Forest Service
6 Building to get over there. So we may have some late
7 stragglers. We'll just deal with them as they come in,
8 okay.

9 I'd like to welcome everybody to the scoping
10 meeting for the Wickiup Hydro Project, proposed project. My
11 name is Jim Puglisi. I'm with the Federal Energy Regulatory
12 Commission. Matt's on the controls here for the slides.

13 I first want to go over the agenda for today's
14 meetings, so everyone knows what to expect. First, we'll
15 start off with some introductions and then procedures for
16 the meeting, and then we'll talk about the purpose of
17 scoping and the licensing process, and we'll go over major
18 miles.

19 Then Wickiup Hydro, the applicant, will give a
20 project description and talk about the proposed studies.
21 Then we'll open up for comments and resource concerns from
22 the different agencies and entities involved. Then we'll go
23 over the study request criteria, which is the next step.

24 Okay. With introductions, like I said, my name
25 is Jim Puglisi. I'm a civil engineer with FERC. I'm from

1 Washington, D.C. With me today is Matt Cutlip, here behind
2 the controls. He's the fishery biologist; Katy Zengion,
3 who's an attorney; and Steve Hocking, who's an environmental
4 specialist.

5 A few things to go over first. There were some
6 handouts in the back table I think most of you picked up.
7 There's the registration form, which is the green sheet.
8 I'd ask everybody to please fill that out so we have that
9 for our record.

10 Also, there is a copy of the scoping document,
11 which is this white thing here, which was issued by FERC
12 last month. There's a copy of the preliminary study plan
13 that Wickiup Hydro has put together. In addition, there is
14 a map of the proposed project, to give you an idea of what
15 we're talking about.

16 As you can see, I'm speaking into a microphone
17 here closely for the court reporter. All information in
18 this meeting is being recorded for the Commission's record.
19 Therefore, we ask everyone if they have any questions or
20 comments, that they need to speak into one of these
21 microphones. It's not an amplifier microphone. It's just
22 for recording the meeting.

23 So it's going to be -- the logistics may be a
24 little tough here today. We ask everybody to be patient and
25 work with us in trying to get the microphone, make sure you

1 have the microphone in your hand first before you ask a
2 question, so everything gets on the record.

3 Okay. Also you'll see on the registration sheet
4 there was a box that you can check for written comments. If
5 anyone has any written comments, they can submit them today.
6 If they want to file them later, they can do so. They
7 either can mail them or e-file them, and that's on page 20,
8 I think it is, of the scoping document. I'm sorry. Let's
9 see.

10 Yes. On page 20 of the scoping document, it
11 tells you how to file that. Also, you can contact me. My
12 name and number is in the scoping document, and you can give
13 me a call or send me an email if you have any questions on
14 how to file anything.

15 Also in the back of the scoping document, towards
16 the back you'll see a mailing list of everyone who's
17 currently on our mailing list. If you'd like to be -- first
18 of all, you should check the mailing list to make sure your
19 address is correct, and if not, please let me know today and
20 we can handwrite the correction and give me that
21 information. We'll get that into the system.

22 Also, if you want to be added to the mailing
23 list, there's a box check on the green sheet which, if you
24 want to grab it back, you can and we'll add you to the
25 mailing list for all future issuances from the FERC.

1 (Off the mike question.)

2 MR. PUGLISI: Yes. So hold on a second.

3 (Off the mike statement.)

4 MR. PUGLISI: That's okay. Is the microphone
5 turned on? Can you --

6 VOICE: I'm sure you can hear me.

7 MR. PUGLISI: No. There's a switch there. I'm
8 sorry, but you need to --

9 VOICE: How's that? After all this hoopla, this
10 is such a trivial question.

11 MR. PUGLISI: State your name first please, for
12 the record.

13 MR. LICKWAR: Peter Lickwar, U.S. Fish and
14 Wildlife Service. If we're already signed up for FERC's
15 electronic mailings, do we need to sign up for hard copy or
16 is it redundant?

17 MR. PUGLISI: No. If you want a hard copy,
18 that's just -- either option.

19 MR. LICKWAR: Okay. But there's nothing -- both
20 boxes are duplicative?

21 MR. PUGLISI: Yes.

22 MR. LICKWAR: That's all I want to know. Thanks.

23 MR. PUGLISI: Sure, no problem. Okay. I want to
24 talk about the FERC's website. Basically, most of you aware
25 of www.ferc.gov. There's a lot of hydropower guidance

1 information on the website. The key thing I want to bring
2 up today is FERC's E-Library.

3 On the main page of the website, there's a link
4 to E-Library. All records and filings for the project, for
5 this project and all projects are on the E-Library website.

6 Basically, what you do is you go into E-Library
7 and you put in the project number or the docket number for
8 this project, which is P-12965, and that will give you a
9 record of everything that has been filed for this project,
10 and everything that's been issued from FERC and submitted to
11 FERC is on the record.

12 Also within E-Library is a very important
13 feature. It's called e-subscription, and I highly recommend
14 everybody e-subscribe. E-subscription will give you an
15 email notification for any documents that come up for this
16 project.

17 When you e-subscribe, you subscribe to this
18 project, P-12965. Anytime anything is filed or submitted,
19 you will get an email notification about the document.

20 Okay. I'm just going to talk a little bit about
21 the purpose of scoping. Under the Federal Power Act, FERC
22 has responsibility to issue licenses for non-federal hydro
23 projects. Also, the National Environmental Policy Act
24 requires FERC to identify and analyze environmental effects
25 of proposed projects, which we do by preparing an

1 environmental assessment or an environmental impact
2 statement.

3 That's why we're here today. We're here to
4 discuss any existing and proposed conditions at the project
5 site.

6 We're also here to seek comments as to what
7 issues you think the Commission staff should be looking at
8 in our EA or EIS, and what the Commission staff should be
9 looking at in terms of studies that would be required by the
10 Applicant. We will also review and discuss the preliminary
11 process plan.

12 Okay. The licensing process we're using for this
13 project is the integrated licensing process, otherwise known
14 as the ILP. The ILP has many deadlines, but it's also a
15 very interactive process from the very beginning.

16 This is the default process that all licensing is
17 done through FERC. This here is an abbreviated schedule of
18 the ILP process. You'll note the first block there, in
19 January of this year, the Notice of Intent and the pre-
20 application document for this project was submitted by
21 Wickiup Hydro.

22 Matt? So now here we are here. We're in the
23 second block. We're into the scoping process here, and
24 we're putting together the study plans. The next step will
25 be -- the next step in line is the study plan development,

1 which we go from here.

2 This fall, we will start working on the study
3 plans. Wickiup Hydro will file a proposed plan, and we will
4 review. Everyone will have a chance to review and comment,
5 and then we'll issue a final study plan.

6 The next step, which will take over the next
7 summer or the next one to two years, will be the studies
8 themselves that Wickiup Hydro will be doing. While they're
9 doing their studies, also they'll be developing their
10 license application.

11 Then as far as the schedule goes, March 2011 is
12 when the license application from Wickiup Hydro will be
13 filed to the Commission. We'll review this application. If
14 we deem it adequate, we will submit a ready for an
15 environmental analysis notice.

16 When we submit this notice, that is when everyone
17 has a chance. We will ask for terms and conditions, any
18 comments, and any interventions at that time for this
19 process. Then we will develop an environmental assessment.

20 Right now we believe we will not need to do an
21 environmental impact statement. We will do an environmental
22 assessment, but that will be determined if we need to do an
23 environmental impact statement.

24 Once that's issued, there will be a chance for
25 the public to comment, and then the final step, there will

1 be a license order issued as determined by the Commission.

2 Okay. Those blocks I just showed you, these are
3 some major dates. In the scoping document that you picked
4 up today, on the very last page you will see a schedule of
5 pre-filing activities, which are basically the top row of
6 the previous slide, with all the pre-filing activity.

7 These are some major deadlines I just wanted to
8 highlight this morning. First is the next big step is that
9 any comments on the pre-application document, the scoping
10 document and any study plans will be due by all participants
11 on September 23rd of this year. So that's in one month from
12 now. So it's a quick time frame. I wanted everybody to be
13 aware of that date.

14 The next step, based on all the comments and
15 plans submitted, Wickiup Hydro will prepare a proposed study
16 plan, and they'll issue that on November 7th, 2008. It will
17 have a follow-up study plan meeting.

18 The final step for the study plans will be the
19 Commission will issue a study plan determination on April
20 8th, 2009. Once that's been done, they will start the study
21 season. So the summer and fall of next year will be the
22 first and possibly only study season, depending on what the
23 study plans say.

24 Once studies are done, a preliminary license
25 proposal will be submitted by Wickiup Hydro in September of

1 2010. Then they will file the license application on March
2 7th, 2011. Keep in mind these are the dates that you will
3 see now in the back of the scoping document, and there are
4 strict dates we try to keep on the same, this time line
5 here.

6 However, things could get shifted back if there's
7 more information needed or an issue comes up. So please be
8 aware that this is an evolving time line. We try to stick
9 to these dates, but they may be shifted back for one reason
10 or another.

11 Okay. Now I think I'll let Wickiup Hydro -- I'm
12 sorry. Also with us is the Applicant, Wickiup Hydro, LLC,
13 and Erik Steimle here will talk briefly about the project.
14 Oh, I'm sorry. Are there any questions on the -- any other
15 questions on the FERC process?

16 (No response.)

17 MR. PUGLISI: I know we're going kind of quickly
18 here, but I know we have a lot of things to discuss. So I'm
19 trying to get to the discussion period. Erik, would you
20 like to --

21 MR. STEIMLE: Sure. My name is Erik Steimle, and
22 I work for Symbiotics out of their Portland, Oregon offices.
23 I have a short presentation about the project this morning.

24 MR. PUGLISI: You want to use a microphone?

25 MR. STEIMLE: Can you hear me? Can everyone in

1 here hear me all right, or -- okay. First, introductions.
2 Here with us today, also with us is our Director of
3 Engineering and Operations, Dave Boyter. Brian Cole is with
4 us, and aids us with government relations, and our aquatic
5 ecologist, Kai Steimle, is also with us.

6 So to start things off, I'd like to talk about
7 the Wickiup Hydro Group, LLC and their relationship with
8 Symbiotics, and then talk about a little bit about
9 Symbiotics and the types of hydro projects we pursue.

10 Then I'll move into a discussion about the
11 project. I'll give a little bit of background, but I'll
12 move pretty quickly and talk about the features we've
13 proposed and the operations. Then I'll go over a little bit
14 of the information that was discussed in the preliminary
15 application document, resource issues that we brought up in
16 proposed studies that were outlined.

17 Finally, I'll go over at the end some -- with you
18 about some contact information for our offices here in
19 Oregon, and also provide you the link to our website, where
20 you can obtain additional information about our projects.

21 But you can also download copies of the documents
22 that we're putting out as we proceed through this licensing
23 process. Go ahead. Sure. You have a question?

24 MR. PUGLISI: Please state your name.

25 MR. SUPPAH: My name is Erland Suppah. I was

1 just wondering on your Project Features, are the your final
2 ones or are you going to make changes on them?

3 MR. STEIMLE: No. Our project features, as they
4 are, FERC has a fairly specific criteria for a project to --
5 it has to have certain, there has to be certain things
6 completed to have a preliminary application document
7 accepted.

8 You have to delineate, you know, features that
9 you propose, and they have to be, you know, they have to be
10 engineering -- they have to be feasible.

11 You have to review the resources in the area and
12 see what potential impacts would be. But none of that is
13 set in stone. As I'll go over here in a little bit, we're
14 going to conduct some studies beyond the baseline resource
15 information that was put together in the PAD.

16 The purpose of that is to, you know, identify
17 issues or potential impacts the project could have. But it
18 also helps us design a better project, because the final
19 project won't be determined until we file that final license
20 application.

21 So this scoping today, the studies that will take
22 place over the next year or two, everything through that
23 three-year process aids us in defining a better study or
24 excuse me, a better project at the end of that three-year
25 period. Does that answer your question?

1 MR. SUPPAH: Yes.

2 MR. STEIMLE: Okay. Wickiup Hydro Group, LLC, is
3 a wholly-owned subsidiary of Symbiotics. Symbiotics is a
4 hydroelectric development company, and it was started in
5 2001 to license, construct and operate new hydroelectric
6 projects in North America.

7 We pursue what we call or what we feel are both
8 environmentally and economically sound hydro projects for a
9 given local area, and the primary way we do this is to
10 propose what we call run of river or run of reservoir
11 retrofit projects. Wickiup Dam is just one of those
12 projects.

13 What we do is we propose a retrofit project on an
14 existing diversion, and propose to generate power in a way
15 that doesn't alter the current flow regime. So in this
16 particular case, Reclamation and North Unit would actually
17 dictate how much power we could generate.

18 We do have a variety of projects throughout the
19 United States. In Oregon specifically, we have three active
20 projects right now, the Dorena Dam and Fall Creek Dam
21 Project in Lane County, and the Applegate Dam Project in
22 Jackson County.

23 I know last night there was a couple of questions
24 on where we are with those projects, so I'll go over that
25 just a little bit. Dorena and Applegate, we started those

1 projects in 2002. All three of these are Corps of Engineers
2 dams.

3 The Dorena Dam project is the furthest along. We
4 expect to finish the federal licensing process in the next
5 couple of months, and construction will begin in the summer
6 of 2009.

7 Applegate Dam is a little bit further behind.
8 Construction is scheduled to begin in 2010. Fall Creek Dam
9 is a cooperative project between Symbiotics and the Emerald
10 People's Utility District in Lane County, and we're just in
11 the first year of the ILP study process.

12 Most of you are probably aware that Wickiup Dam
13 was built about 60 years ago. It is a Reclamation dam, and
14 it's operated in a cooperative effort between Reclamation
15 and the North Unit Irrigation District. It's 100 feet tall,
16 13,000 feet long, with a crest width of about 400 feet.

17 Some of the specific modifications that we've
18 proposed at this time would be the bifurcation of the twin
19 outlet conduits. After that bifurcation, there would be two
20 new 96-inch diameter penstocks that would feed into a single
21 120-inch diameter penstock that feeds into the new
22 powerhouse.

23 There would be the addition of the turbine unit
24 itself. We've proposed a 7.15 megawatt Kaplan unit. The
25 powerhouse itself is proposed to be about 50 by 50 feet in

1 size, and finally the installation of a 110 feet of new
2 transmission lines, which would tie in with the existing
3 distribution line just north of the project.

4 This is the diagram that you picked up when you
5 came in the door. It's a diagram, an engineering schematic
6 of the dam itself. Everything you see in black is currently
7 on site, and everything delineated in red is an added
8 feature.

9 Just for a little orientation, the dotted line
10 that you see kind of running top to bottom through the
11 center of the screen, that's the current access road along
12 the crest of the dam, if you were driving out there. That's
13 everything left of that on the screen is the reservoir and
14 then to the right, downstream of the current facility, is
15 the Deschutes River.

16 So you can see on that slide, where the two new
17 96-diameter penstocks would tie in, feeding into a single
18 penstock leading into the powerhouse. Then below the
19 powerhouse, there would be a new outlet facility into the
20 Deschutes River.

21 (Off mike discussion.)

22 No, I can go over that on the next slide when I
23 talk about operations, if that's all right.

24 MR. LICKWAR: Peter LICKWAR, U.S. Fish and
25 Wildlife Service. The project footprint is on lands under

1 whose ownership? Is it BLR? Is it Forest Service? Is it
2 BLM?

3 MR. STEIMLE: We believe that it's BLR's lands.

4 MS. STEIMLE: Yes.

5 MR. LICKWAR: Thank you.

6 (Off the mike comments.)

7 VOICE: It's the Forest Service land, but it's
8 withdrawal area (off mike). I don't know all the details on
9 that.

10 MR. STEIMLE: Okay.

11 MR. HOCKING: Yes. This is Steve Hocking with
12 FERC. We've got some questions about the land ownership
13 too, so we're hoping to talk about that today and get that
14 cleared up, in terms of who owns what and what the
15 responsibilities are. So we'll talk about that gain a
16 little bit later.

17 MR. LICKWAR: Peter Lickwar, U.S. Fish and
18 Wildlife Service. Specifically, we need to know for
19 purposes of (off mike), you know, who has the ball.

20 MR. HOCKING: That's right, and we want to know
21 the same thing.

22 MR. LICKWAR: Thank you.

23 MR. STEIMLE: Okay. If there's no other
24 questions, I'll go ahead and move onto the next slide. Just
25 to follow up on that, this is an artist's rendition of what

1 the completed project would look like if you were on that
2 access road, looking down into the Deschutes River.

3 The large concrete block structure you see in the
4 foreground there is currently on site, just upstream of the
5 current outlet facilities. But right away, you'll see the
6 most biggest visual change is the addition of the powerhouse
7 itself there, which would be -- it's just left of that
8 current concrete structure.

9 So I'm moving to talk about operations now. As I
10 said before, we primarily pursue these run of river retrofit
11 projects, and Wickiup is one of these projects. So
12 Reclamation, in cooperation with North Unit, would actually
13 dictate the amount of power we could generate.

14 So when we put together the preliminary
15 application document, to get a sense of power generation, we
16 used historical flow information. The graph you see up here
17 on the screen has months of the calendar year along the X
18 axis, and discharge in cubic feet per second along the Y
19 axis.

20 We have a wet year illustrated in a solid yellow
21 line from 1997, and a dry year in 1995 as the dotted line.
22 The red solid line is median discharge from Wickiup Dam.
23 That's based on 58 years of flow data.

24 So because current operations will dictate how
25 much power we can generate, average highest capacity would

1 occur in July, and the lowest would occur in the winter
2 months, which in the next slide I'll go into a little bit
3 more, and the project would actually be offline.

4 So this is getting to your question about the
5 flows. The project right now would operate, it would be
6 online and would be able to use flows between 420 and 1,400
7 cubic feet per second. So yesterday, when we were out at
8 the site visit, there was about just under 1,700 cfs coming
9 out of the diversion.

10 So if the project was built and we were out
11 there, you would see flows coming out of the powerhouse.
12 You would also see flows coming out of the normal outlet
13 facility from the dam. Now when flows were between 420 and
14 1,400 cubic feet per second, all flows would be going
15 through our project and then into the Deschutes River.

16 Then below 420 cfs, the project will be offline
17 and all flows would go through the normal outlet facilities,
18 which as you saw illustrated in the previous graph, that
19 would primarily be during the winter months.

20 The graph you see here, the flow exceedance curve
21 for the project, it's got exceedance probability expressed
22 in percentile along the X axis, and discharge in cubic feet
23 per second along the Y axis. So the yellow lines illustrate
24 where we can actually generate power.

25 So the lower line there is supposed to illustrate

1 420 cfs. So if you follow that line across, you end up
2 right around 60 percent. So about 60 percent of the time,
3 flows would be great enough that we could generate power,
4 and conversely, about 40 percent of the time flows would be
5 below 40 cfs and the project would be offline.

6 On average though, we predict annual generation
7 will be about 21.15 gigawatt hours, or enough to supply
8 energy to approximately 2,700 homes. Go ahead.

9 So I've given a little bit of information here
10 now about operations and some of the features. I'd like to
11 transition and talk a little bit about how this project will
12 fit into the landscape.

13 This is the list of resources that we reviewed in
14 the preliminary application document. The PAD, as some of
15 you are well aware, serves as a baseline environmental
16 assessment for impacts the project could have, based on the
17 best existing information available to us at the time that
18 it was drafted.

19 In the interest of time, during the presentation
20 I'm not going to go through each one of these and discuss
21 what's in the PAD, but I'm sure we'll come back and talk
22 about a number of them.

23 Specifically, information that was either in the
24 PAD or information that was missing from the PAD that needs
25 to be included as part of the review on resource impacts.

1 But again, the list includes socio-economic, environmental
2 and cultural resources.

3 MR. PUGLISI: Thank you, Erik. Excuse me. Oh
4 yes. Kai?

5 MR. STEIMLE: Oh, do you want me to finish the
6 presentation or -- no, I'm sorry. I was trying to
7 communicate with Matt on the slide.

8 (Laughter.)

9 MR. STEIMLE: I apologize. No, I don't have much
10 left here. Also in the PAD there is a list of studies that
11 we have proposed in the back there. If you look at the PAD,
12 it isn't much more than a list, and as, excuse me, Jim
13 pointed out earlier, that sort of is the next phase in this,
14 the dynamic scoping process for the study that will be
15 completed.

16 The comment period or study request window of
17 time is coming up pretty quickly. It's only 30 days away,
18 or just over 30 days.

19 So in order to aid all the stakeholders with
20 those study requests and comments on the project, we have
21 put together a preliminary study plan, which we do have
22 extra copies of it here today, in order to aid all the
23 stakeholders with written comments on what we propose at
24 this time or additional studies that they recommend.

25 This by no means speeds up the FERC study plan

1 process for us. We still have to file an additional study
2 plan in November, as Jim dictated on that original time line
3 there. But we feel this is sort of a better way to do it.

4 We feel that we can write a better study plan in
5 November by putting this first draft out and letting you
6 take a look at it. So and again, I'm sure we'll come back
7 and discuss these after the presentation.

8 I've given the information there for our offices
9 here in Portland, and also the website where you can find
10 out more information about our company, about our other
11 projects in the U.S. or download documents for the Wickiup
12 project as we proceed through the ILP process. That's it.

13 MR. PUGLISI: All right. Thank you very much,
14 Erik, for the presentation. I guess I'll first ask if
15 there's any questions pertaining to Erik's presentation or
16 the information I provided earlier, any general comments,
17 questions?

18 MS. GRAINEY: This is Mary Graineey with Oregon
19 Water Resources Department. Erik, I'm wondering if on this
20 project, if you guys considered an alternative design with a
21 larger turbine and a smaller turbine, if that option would
22 give you more flexibility through the year, in terms of
23 switching to a smaller machine during the winter time?

24 Since the large flows, since all the flows are
25 controlled and we're not dealing with flood flows, you could

1 have a larger system during the summer time and a smaller
2 system during the winter. Did you folks consider that
3 alternative?

4 MR. STEIMLE: Sure. I'll follow up on that, but
5 I'll let Dave talk about that actually.

6 MR. BOYTER: This is Dave Boyter, Symbiotics.
7 Okay. We do go through a lot of different options, looking
8 at different turbine configurations, whether one turbine or
9 two turbines.

10 We'll revisit that again as we continue to go
11 through this information, especially from the information we
12 found out about the water that's coming out from the
13 foundation of the dam or from the dam itself, that flow that
14 we were originally planning on.

15 We'll gather that data from the information and
16 include that in our study. At this point, we felt the
17 Kaplan would capture a large enough flow and would be best-
18 suited. But we'll definitely keep looking at that option as
19 we go forward.

20 VOICE: How much of a temperature change from the
21 inflow to the outflow of the water (off mike)?

22 MR. STEIMLE: Actually, let me see if I answered
23 your question right. You're talking about the water being
24 heated by the turbine itself?

25 VOICE: Yes.

1 MR. STEIMLE: There have been studies that have
2 looked at that. Turbines, the spinning of the turbines,
3 there is a potential to heat water. But it's been fairly
4 well-documented as hardly measurable in projects of this
5 size. Now hydro projects can affect temperature in the
6 rivers below by pulling water from different areas in the
7 reservoir.

8 But this particular project, the intake for the
9 water will be at the same elevation as the current intake.
10 So there will be no change in temperature from the status
11 quo.

12 MR. PUGLISI: Are there any other questions?
13 Okay, yes.

14 PAUL DEVITO: I've written a paper about the
15 project over there--putting in a system for fish bypassing--
16 I was wondering if you guys had seen that.

17 MR. STEIMLE: I think that I have seen the
18 project in particular. I read about it in the paper. I'm
19 not familiar with it specifically. But we are familiar with
20 screening and bypass, and we have provided that on some of
21 our other projects.

22 MR. PUGLISI: Okay. What I think we'll do now is
23 we'll go through each of the resource areas. We'll go down
24 the list that way, to kind of keep the conversation going in
25 some kind of order. But if you have a topic you want to

1 bring up outside, that's fine too. So I think we'll just go
2 down the list here, and talk about the different areas.

3 Are there any questions about the geology and
4 soils, any concerns or comments or questions that anyone has
5 concerning geology and soils for the project?

6 (No response.)

7 MR. PUGLISI: No? The next would be water
8 resources. Does anyone have any questions concerning water?
9 Okay, one second.

10 MR. DEVITO: My name is Paul DeVito. I'm with
11 the Oregon Department of Environmental Quality. I'm
12 wondering, you know, at the site visit yesterday I saw the
13 waters discharging with an amazing amount of turbulence,
14 which would help reaerate the water if it is lowered
15 dissolved oxygen.

16 If it's determined through a water quality study
17 that the water on the upside of the dam in the reservoir is
18 low dissolved oxygen right now, and once retrofitted with a
19 turbine, we no longer have that reaerated discharge that
20 would help oxygenate that low dissolved oxygen water, if the
21 company would plan for some mechanism to reaerate that
22 water, if it is determined that we do have low DO water on
23 the upside of the dam.

24 MR. STEIMLE: Yes, I can respond. We have
25 proposed one-year comprehensive quality water monitoring the

1 primary purpose of that is there isn't very much information
2 in the reservoir right now. There is some information below
3 in the Deschutes River, but we feel we need to collect a lot
4 more data in the reservoir so we can have enough information
5 for file for 401 water quality certification.

6 As far as additional facilities to address that
7 issue, our project at Island Park has done just that. We
8 have an aeration basin directly below the project. So if we
9 determine that our project is going to be a problem or cause
10 this issue, we're going to have to incorporate some type of
11 feature to address that.

12 Because again, we can't operate the project
13 obviously if we're outside of those 401 conditions, and if
14 we don't adhere to Oregon's anti-degradation standards. So
15 it's in our best interest to propose a project that's going
16 to be within that.

17 MR. DEVITO: So Erik, you all are proposing one
18 year of water quality monitoring both in the reservoir and
19 downstream, is that correct?

20 MR. STEIMLE: That's correct, yes.

21 MR. DEVITO: Then in the PAD, you say that -- you
22 talk about augmenting DO. But you don't get into any
23 specifics. I mean can you talk about, do you have any
24 specific proposals or ideas of how you're going to do that?
25 I mean you're talking about spilling basin --

1 MR. STEIMLE: I don't think that anything's -- I
2 mean I don't think we're ready to talk about a specific
3 feature of this plan, because I think we want to know what
4 we're dealing with in the reservoir, what the water quality
5 issues are in the reservoir before we work on engineering
6 some large feature like that.

7 MR. HOCKING: So after a year's worth of
8 monitoring, once you find out what the baseline conditions
9 are, and you're a little bit further along in your design,
10 at what point are you going to make the call or the
11 proposal, you know, that aeration is likely going to be
12 needed?

13 MR. STEIMLE: Sure, no. I think the first year,
14 I think we could come up with an idea or present that to the
15 group at the first year study meeting. That takes place
16 after the first year of studies.

17 We could synthesize the data we've collected over
18 that year and make at least a preliminary determination to
19 address that.

20 MR. HOCKING: I just want to point out that
21 Symbiotics right now is proposing just one year of
22 collecting data, one year's worth of studies. The ILP
23 permits up to typically two years.

24 So if everything can be collected in one year, I
25 mean that would be great. That would accelerate the process

1 and get us moving along even faster. But we do have to --
2 we are interested in hearing everybody's comments about what
3 do they think all the data that is needed to be collected in
4 one study season.

5 MR. STEIMLE: I'd like to follow up on that, if I
6 can. I think we're proposing one year baseline water
7 quality monitoring as part of the ILP process. It doesn't
8 preclude us from collecting additional water quality data as
9 part of the 401 certification process.

10 MR. HOCKING: Which would be after any licenses
11 issued?

12 MR. STEIMLE: Collection could easily go on after
13 the license is issued for baseline information, both pre-
14 construction and during construction and afterwards. But we
15 intend to use that first year data to put together a 401
16 application.

17 We feel that will be sufficient to put together
18 an application and get quality data in one year instead of
19 two.

20 MR. RIEBER: Rick Rieber with Reclamation. I
21 noticed at last night's scoping meeting you had mentioned
22 something about the lack of water quality data for Wickiup,
23 and then I just remembered that our Reclamation water lab
24 does collect water quality data out of Wickiup Reservoir as
25 well as all of other projects.

1 I believe it's done once every four or five
2 years. I believe that we spend one to two days doing that.
3 We'll make sure we get that information to you.

4 MR. STEIMLE: Okay. That will be great.

5 (Off the mike comment.)

6 MR. HOCKING: That's a good point. I mean part
7 of scoping here, we're trying to find out if there are any
8 other sources of information that are available out there.
9 I believe it's Fish and Wildlife and some of the other
10 agencies.

11 If you're aware of any other information that you
12 think the Commission needs to have that already exists, you
13 know, that would be helpful in us taking a look at this
14 proposed project. Let us know and let Symbiotics know,
15 because it's just that much better if the data already
16 exists. Then we don't have to tell Symbiotics to go out and
17 collect it.

18 So if there is data out there that you're aware
19 of, either on water quality or wildlife monitoring or
20 anything like that, that would affect the project in that
21 area, go ahead and let us know, and we'll try and get our
22 hands on it.

23 MR. DEVITO: (off mike) Paul DeVito again, Oregon
24 Department of Environmental Quality. I believe that Forest
25 Service does have some water quality data that you may or

1 may not be aware of, although talking to Tom here, I guess
2 it's no -- it's all documented data for the reservoir.

3 And relative to the dissolved oxygen potential
4 issue--a turbine with aeration capacity. If one year's
5 worth of data does not identify that there is a dissolved
6 oxygen problem in the reservoir, and if there is one, my
7 expectation would be in the late summer or early fall, that
8 if the data does not identify a low DO issue with one year's
9 worth of data, that won't likely be sufficient to provide
10 reasonable assurance that there is not one there under a
11 worse case condition.

12 If we have -- in fact, I don't know what would be
13 -- what would constitute a worse case condition in the
14 reservoir that would cause a low DO, but I would suspect it
15 would be an issue of the reservoir's lower than normal for
16 the summer.

17 So if for instance in 2009 we have high reservoir
18 levels, and we have high dissolved oxygen levels, my
19 suspicion would be that they'd be under a lower reservoir
20 condition and we would have poor DO.

21 That if the company I wanting to move forward
22 after just one year's worth of data collection, that 401
23 certification that my department would have to write would
24 likely need to require additional monitoring before the
25 project was brought online, to identify whether or not

1 facilities need to be designed and constructed to address
2 the DO problem, potential DO problem.

3 I wanted to offer that up. So it might be wise
4 to build in the possibility that additional seasons of data
5 collection that we don't have either poor DO identified, or
6 if we don't have worse case conditions that might pertinent
7 issues.

8 MR. HOCKING: Just a quick note. Under the ILP
9 process, what Erik was referring to at the end of the first
10 year's worth of studies, they have to file what's called an
11 initial study report, that has the results of all the
12 studies that are completed.

13 There has to be a meeting. Folks have to get
14 together and take a look at that, and then decide whether
15 the study plan needs to be amended or not. So that would be
16 the time in which at the end of --

17 It's kind of already built into the ILP process,
18 where if the data were to indicate that a second year was
19 needed, you know, we could look at it at that time, at the
20 initial study report meeting, and then hopefully everybody
21 reaches consensus and then the second year's worth of data
22 would be kind of built in.

23 The existing plan would be revised to capture
24 that. So I just wanted to point that out.

25 MR. WALKER: Tom Walker, Forest Service. I'm

1 back to what Paul was talking about. We do actually have a
2 little bit of limited water quality data including dissolved
3 oxygen on Wickiup Reservoir.

4 Something I wanted to point out, we do have algae
5 blooms in that reservoir, including blue green algae blooms,
6 and those vary from year to year. As those blooms die out,
7 you could potentially have different oxygen levels. Those
8 too could vary from year to year on how severe those blooms
9 area.

10 MS. STEIMLE: I'm not sure what's the best way to
11 coordinate the sharing of the data that you have.

12 MR. WALKER: Well, our hydro coordinator is on a
13 fire, but that's Rod Bonnaker. It's probably best to route
14 everything through him and then he could go to the
15 individuals that may have that data available. But probably
16 he'd eventually come through me for that.

17 MR. ROSS: (off mike) The same thing for
18 Reclamation. For the record, the same thing for
19 Reclamation. I'm Robert Ross.

20 MS. GRAINEY: I'm Mary Graineey with Oregon Water
21 Resources, and yesterday at the site visit we talked a lot
22 about the current operations of the project. So I just
23 wanted to offer to FERC the documentation for the water
24 rights for this project that right now govern how it's
25 operated.

1 So there's a couple of things in this document.
2 One of them is the right to store 200,000 acre feet of
3 water. The other thing, it gives the background for the 20
4 cfs minimum flow for year-round and for the ramping rate of
5 one foot per hour, plus or minus.

6 The other thing is that this reservoir acts as a
7 passthrough for the reservoir up above it, for Crain
8 Prairie, and there are three irrigation districts that store
9 water in the upper reservoir. So there is an agreement, a
10 1938 agreement between the irrigation districts about how
11 the reservoirs are filled, and they have working
12 relationships on how the water is released.

13 So that is coordinated through our water master's
14 office, and Jeremy here works on a daily basis with the
15 irrigation districts to analyze how much water is needed on
16 a particular day, how that balances with the in stream flow
17 requirements for the state, and he tells the North Unit
18 Irrigation District person how much the gate needs to be
19 opened in order to meet all of those needs.

20 So these documents that I'm giving to FERC relate
21 to water rights certificate 51229. It's available on the
22 Water Resources website, if anybody wants it, or you can
23 contact us and we can get you the documents also.

24 MR. PUGLISI: I just want to say thank you, Mary.
25 We'll be filing that online. Everyone will have access to

1 that through E-Library, so the documents will be filed.

2 MR. LICKWAR: Peter Lickwar, U.S. Fish and
3 Wildlife Service. Along those lines, there was an April
4 22nd, 2008 document filed by Stohl Reeves, noting that there
5 was an agreement negotiated between Wickiup Hydro Group and
6 our North Unit Irrigation District.

7 I was just curious if that was available on the
8 record. I didn't know what that document was. I haven't
9 seen it. I'm just personally curious about what if any
10 relationship it has with the information Mary just
11 discussed.

12 MS. OREM: This is Charisse Orem from Stohl
13 Reeves. I represent North Unit. We haven't submitted to
14 FERC. It's not -- it hasn't been made public, but we can
15 discuss what it is. The primary purpose of the document is
16 to ensure really, I think related to what Mary's raising
17 here, that downstream flows, that the project won't affect
18 downstream flows.

19 This is the agreement between North Unit and
20 Wickiup Hydro Group, Symbiotics, is that they won't disrupt
21 downstream flows, they won't affect reservoir elevations,
22 won't interfere with the district's O&M practices, and won't
23 compromise the district's infrastructure.

24 MR. LICKWAR: And not to intrude on the legal
25 relationship between yourselves and North Unit, but is it

1 possible to see a copy of that document?

2 MS. OREM: I think so, yeah.

3 MR. LICKWAR: Thank you. And again, not to make
4 an inappropriate suggestion, but should it be entered into
5 the FERC record for the project?

6 MS. OREM: Well, what we plan to do is draft
7 detailed comments, which would highlight the actual
8 components of the agreement that substantively relates to
9 what we're talking about here.

10 So I mean if people are interested, if FERC feels
11 they need to see it, you know, I don't see any reason why
12 not to file it.

13 But I think the components of it that are
14 substantively relevant to this are the parts that Wickiup
15 and North Unit have agreed to, which are that they'll be
16 sure not to compromise the infrastructure and not to affect
17 the downstream flows or the reservoir elevations.

18 We'll make sure that that all gets into our
19 comment letters and is clear. But having said that, I don't
20 know any -- I can't think of any reason not to show the
21 agreement itself either. I think there's a lot of in there
22 that's not relevant to the rest of this.

23 MR. CRISS: My name is Ed Criss, representing the
24 Citizens Action Group and the Upper Deschutes River
25 Coalition. I believe that the Department of Environmental

1 Quality, if I'm not mistaken, aren't you doing some river
2 studies on the surface water quality throughout the state
3 called the total maximum daily load, the TMDL work?

4 I think it can be found on the DEQ website. So
5 there's another source of information about water quality.
6 I believe, if I remember correctly, it goes back to 1968,
7 and they're monitoring along the whole river. So there's
8 some information there that is pertinent to probably what
9 you folks are going to be looking for.

10 MR. DEVITO: Paul DeVito again, Oregon DEQ.
11 Yeah, we do have ambient water quality monitoring that is
12 conducted around the state, to identify waters that are not
13 meeting water quality standards.

14 Those water bodies or reaches of water bodies
15 that are identified as not meeting standards are prioritized
16 for development of total maximum daily loads or basically
17 water quality plans, to get those water bodies into
18 compliance.

19 River reach below the project, as identified in
20 the preliminary application document, is 303(d)-listed,
21 303(d) being the section of the Clean Water Act that talks
22 about TMDLs. It's identified as being water quality limited
23 for several parameters, including temperature, dissolved
24 oxygen, turbidity and sedimentation.

25 The water quality data that my department

1 collects, as well as receiving water quality data from other
2 resources, is put into a data storage system called LASER,
3 and I forget what the acronym stands for. But basically
4 it's a database.

5 Yeah, Symbiotics is aware of that database and
6 that information. Yes, it definitely should be used in
7 evaluating the project. Thank you.

8 MR. PUGLISI: Any other questions or comments
9 about water resources, quantity or quality?

10 (No response.)

11 MR. PUGLISI: Okay. I think next, we'll go to
12 the next issue, which is fisheries and aquatic resources.
13 Anybody have any questions?

14 MR. BENJAMIN: Brian Benjamin with the Oregon
15 Department of Fish and Wildlife. I guess mine is going to
16 be more comments, that may pose some questions for the
17 Applicants.

18 As most people in this room know, and probably
19 also our federal counterparts, the people of the state of
20 Oregon spoke pretty loudly over the last 20 years, that the
21 degradation to our streams and water bodies in the state of
22 Oregon is unacceptable.

23 This can be most highly seen from some of the
24 recent legislative actions that have been taken, and also
25 work by many of the non-profits and NGOs around the state.

1 ODFW maintains the state of Oregon's fish and
2 aquatic resources in public trust for the state of Oregon.
3 In reviewing these documents, we've had some concerns with
4 the PAD and some of the downplaying of the effects of the
5 project on fisheries and aquatic organisms.

6 It obviously is being passed off for the status
7 quo, that it's only affecting, you know, the hydro
8 generation. However, as we heard last night at the public
9 meeting, the proposed implement there is fish-friendly. I
10 guess we have some argument on that, that there is no fish-
11 friendly turbine and there's no fish-friendly dam.

12 That's also been seen by the legislative assembly
13 in the state. So with that, I'd like to kind of reiterate
14 for the record, and this will also be in writing, probably
15 in our comments to FERC, that two statutes and an
16 administrative rule in the state of Oregon apply to all
17 projects of this nature.

18 The first one I'd like to discuss is the fish
19 screen statute, which is ORS 509.615, which requires the
20 installation of screen or bypass devices on certain water
21 divisions.

22 "Any person," and this is quoted from the
23 statute, "Any person who diverts water at a rate of 30 cubic
24 feet per second or more from any body of water in the state
25 in which fish exist, shall operate and maintain, at the

1 expense of the person, such fish screening or bypassage
2 device that the state Department of Fish and Wildlife
3 determines are necessary to prevent fish from leaving the
4 body of water and entering the diversion."

5 This is something that -- and again, I realize
6 that this project seem fairly benign at the surface, but
7 we're only taking the water that's being diverted presently
8 and turning it to hydro. However, what we found in the past
9 that several projects throughout the state is once you
10 develop a federal nexus through a FERC license, it pretty
11 well eliminates the state's ability to regulate or mandate
12 such fish screening or bypassage devices at a later date.

13 So in other words, once FERC issues a license on
14 this, the state's ability to step in and enforce the statute
15 becomes pretty well nullified.

16 So even though this might seem fairly benign at
17 the surface and might not be a high priority for the state
18 at this point, what we've done over recent years has been to
19 put these expectations on any license, with the event that
20 some of the sub-basin plans are working towards
21 reintroduction of bull trout, which is now a federally-
22 listed species in the sub-basin.

23 Also downstream, we're working on other listed
24 anadromous fish as well. So we don't want to do anything in
25 a situation like this, that precludes the later

1 incorporation of any fish protection devices.

2 So whether or not there can be an exemption to
3 that or something that would have to be seen at a later
4 date, but we'd like to see at a minimum some studies in that
5 regard to determine what the effects that the project might
6 have.

7 The other one relates to fish passage, and this
8 will be Oregon administrative rule 635-412-005, Section 18.
9 "Fish passage means the ability by the weakest native
10 migratory fish, in whatever fishery stage is determined by
11 the department, to require passage at the site, the move
12 voluntarily with minimal stress and without physiological
13 injury upstream and downstream over the artificial
14 obstruction.

15 "Native migratory fish means native fish that
16 migrates through their life cycle needs, including both
17 anadromous and resident fish species." That's a different
18 OER, 635-007-050. So also obviously this project, although
19 it's an existing dam, invokes what we call a trigger in the
20 statute, that requires fish passage.

21 If a fish passage is deemed unnecessary, what's
22 required is that the Commission issue either a waiver, a
23 fish passage waiver or a fish passage exemption. So just
24 basically just putting applicants on point that these are a
25 couple of issues that the department will be looking at and

1 we'll be looking for some documentation from the applicants
2 in the future, to consider both of those.

3 Realizing that it's a retrofit, there may be some
4 options there. However, I just had to bring these up at
5 this point. Also, like I said, they'll be filed in writing.
6 So I guess some of the expectations in moving through your
7 study plans may be to increase what you look at in terms of
8 potentially an entrainment study, and some streaming
9 feasibility.

10 If nothing, at this point just the feasibility of
11 those, to license to the project. So that's all I have.

12 MR. LICKWAR: Thanks Brian. Peter Lickwar, U.S.
13 Fish and Wildlife Service. Similarly, it just seems like an
14 opportune time to sort of weigh in from the U.S. Fish and
15 Wildlife Service.

16 We had sent a letter dated January 7th, 2008 to
17 Symbiotics and copied it to the FERC. Essentially we did
18 kind of the same thing that Brian just did, is tell you a
19 bunch of stuff that you're probably already pretty familiar
20 with in terms of our authority under the Federal Power Act,
21 Fish and Wildlife Coordination Act, Migratory Bird Treaty
22 Act, Eagle Protection Act, and a variety of applicable laws
23 to the hydropower licensing and proceedings.

24 So just to reiterate those and echo some of the
25 things Brian mentioned, in my cursory examination of the

1 study plan, I was glad to see that you were interested in
2 looking at a tailrace barrier. I appreciate that.

3 But did note, as I think Brian was noting, I
4 didn't see any proposed studies regarding downstream passage
5 or entrainment, and would be curious to bring those up as a
6 topic. We'll probably get to this under terrestrial
7 wildlife, but you probably noticed there's an eagle nest in
8 close proximity to the facility.

9 The eagle's been delisted. However, we still
10 have responsibilities under the Eagle Protection Act and the
11 Migratory Bird Treaty Act. So we do look forward to sending
12 in written comments before September 23rd, and try and
13 discuss in greater length our concerns and our interest in
14 proposed studies, but just to put a placeholder in now about
15 those.

16 Probably again, better under terrestrial
17 wildlife, but as we noted in our letter, there is a spotted
18 frog adjacent and in the vicinity of the project, and an new
19 candidate species not listed. But all the same, that's
20 probably good to be thinking about that critter.

21 I don't know if this is a good time to talk about
22 bull trout. Sorry I missed the meeting yesterday. Stuff
23 came up. But if you'd like to know about bull trout, feel
24 free to ask me anything you'd like to know.

25 MR. STEIMLE: Well, there's been a couple of

1 mentions about possibly reintroduction. Can you talk about
2 the status of that and what's going on or what --

3 MR. LICKWAR: Sure. We did address that in our
4 January 7th, 2008 letter as well, and noted that bull trout
5 are extirpated in the area of the project, and are
6 considered to be extirpated all the way downstream to about
7 river mile 132, which is the location of Big Falls, a
8 natural anadromous barrier.

9 So that's why you won't have steelhead up there
10 as well or Spring Chinook. It's about a 25-foot high
11 waterfall, three or four hundred thousand years old. Bull
12 trout are present down below there. There are spawning
13 populations.

14 When we issued our draft recovery plan in 2002,
15 the recovery team, and again this is all in the letter, did
16 not find that reintroduction of bull trout into the upper
17 Deschutes was essential for the recovery of the species.

18 However, they did also note that it was a
19 historically important range, and that it would be desirable
20 and a wise conservation measure to assess the feasibility of
21 reintroducing bull trout into the upper Deschutes, including
22 Wickiup.

23 There are several spawning spring streams that
24 enter the reservoir, that probably have appropriate water
25 temperatures and substrate to support spawning bull trout.

1 That is a critical element in any feasibility.

2 I kind of stalled at about halfway through a
3 feasibility assessment. Things keep happening. But we are
4 trying to move forward with that, not just as a U.S. Fish
5 and Wildlife Service, but as our Deschutes Basin Bull Trout
6 Working Group has a variety of representatives, both state,
7 federal and private.

8 So at the moment, there are no imminent plans to
9 reintroduce bull trout into the upper Deschutes, including
10 Wickiup. However, there is a long-term conservation action
11 in the recovery plan to perform a feasibility assessment,
12 and if that feasibility assessment proves positive, to move
13 forward from there.

14 If you want to see what this process looks like,
15 we actually did complete a feasibility assessment on the
16 Clackamas River over in that drainage just outside of
17 Portland. That feasibility assessment was positive, and
18 they are moving forward with additional plans for actual
19 physical reintroduction of bull trout into that extrapolated
20 area.

21 I suspect that any process that we might
22 eventually use, should we reach that juncture, would look
23 very similar to Clackamas.

24 MR. RIEBER: Just one additional point. Both our
25 process and the one that is being used at the Clackamas,

1 strongly considered -- well, the Clackamas absolutely
2 considers bull trout reintroduction when it moves forward to
3 occur as a non-essential experimental population.

4 What that means under the Endangered Species Act
5 is that the species would be up there, but it would not have
6 the status of an ESA protected fish. In other words, there
7 would not be a take prohibition. They would have the status
8 of a proposed species, which means federal entities such as
9 the FERC or BLR or others could conference, and we could do
10 conference opinions. Those would be available and for some
11 reason the species status never changed.

12 But there would be no prohibition on take for
13 those fish up in Wickiup. So it's a way to sort of balance
14 the recovery needs and people's concerns about the effects
15 of the presence of a listed species, by putting it up there
16 as a 10(j) non-essential experimental species. So if
17 there's any questions about that, please let me know.

18 MR. RIEBER: Rick Rieber, Reclamation, and Peter
19 can perhaps address this. I noticed that on page 46 in the
20 application, it's quoted as saying "The watershed above
21 Wickiup Dam is a proposed critical habitat for bull trout."
22 Maybe I'll let Peter address that.

23 MR. LICKWAR: I will get even with you for
24 bringing up critical habitat, because it's so complex. But
25 it's okay Rick. I forgive you.

1 The Fish and Wildlife Service, and I apologize.
2 All my comments that I'm about to make are probably going to
3 be wrong in numerous respects, due to the complexity of this
4 issue and the legal ins and outs. So I will try and touch
5 on it. But if you want a more factually accurate answer, we
6 can get you one later.

7 We have proposed habitat in the Deschutes. It
8 does not include critical habitat upstream of river mile
9 132. I have no recollection of us including any areas
10 upstream of that in any of our proposals, because they are
11 in an extrapated range that has been found to be not
12 essential for the recovery of the species.

13 So I don't think we have any ever proposed and
14 certainly do not have critical habitat upstream for the mile
15 132 on the Deschutes. That's my best recollection. Does
16 that sound accurate? Okay, and our critical habitat
17 proposal is currently under adjudication, and that's been
18 that way for a number of years.

19 MR. CUTLIP: This is Matt Cutlip with FERC, and I
20 have a question, Peter. When you talk about possible
21 introduction of bull trout in Wickiup Reservoir, are you
22 also looking at reintroduction upstream of Crain Prairie,
23 and are there any existing fish facilities, fish passage
24 facilities at Crain Prairie Reservoir?

25 Also, would you be looking at introduction below

1 Wickiup Dam? I'm just trying to get an idea of the
2 geographic scope of the reintroduction effort.

3 MR. LICKWAR: Okay. So there's at least three
4 questions there. Fish passage facilities at Crain, no.
5 Introduction downstream of Wickiup, I'm struggling with the
6 geography of how it all works.

7 If we reintroduce bull trout into suitable
8 habitats in the little Deschutes, it is physically possible
9 that those fish during seasons when there's suitable water
10 and temperatures, could move down the little Deschutes and
11 then up, advance into Deschutes and then up there, although
12 we wouldn't have put them there intentionally.

13 However, they might decide that that's FMO
14 feeding migratory overwintering, and they might just go use
15 it. So I think I got two of your three, and I can't
16 remember what the third was.

17 MR. CUTLIP: Upstream of Crain Prairie.

18 MR. LICKWAR: Upstream of Crain Prairie. Our
19 first cut did find suitable spawning and rearing areas
20 upstream of Crain. So it is one of the six habitat patches
21 that we have identified as being potentially suitable
22 habitat, and that's all part and parcel of the ongoing
23 feasibility assessment.

24 MR. CUTLIP: Thank you.

25 MR. HOCKING: Erik, can you just clarify again

1 what the proposed action again is regarding fish streams? I
2 mean what are you guys -- what is the current proposed
3 action?

4 MR. STEIMLE: At this point in time, we have not
5 proposed any screens on the intake facility, and we propose
6 doing a study, looking at potential for fish to become
7 injured if they swim up into the facility, basically looking
8 at whether or not we could put tailrace screens on the
9 project.

10 MS. STEIMLE: Maybe if I could clarify that. Our
11 position is that because of the operation of our project or
12 the proposed project will not change the intake or the flow,
13 that our project will not change the number of fish
14 entrained from Wickiup Reservoir, and then certainly
15 discussion as to whether or not our project would change the
16 fate of those fish that would pass.

17 So I guess that's a question we would have about
18 the management of the Deschutes River downstream of the
19 project, and the roles for introduction reservoir fishes
20 into the Deschutes River downstream.

21 Because so our position is while our project
22 could potentially change the fate of upstream moving fish,
23 because right now they cannot be injured by the existing
24 outlet. So we're proposing to study whether or not our
25 project would change that injury rate, and it's our position

1 that downstream moving fish, the numbers would not change,
2 but their fate could.

3 So that's the first thing that we would study.

4 MR. BENJAMIN: Brian Benjamin, ODFW. Again, the
5 management of the fisheries below the reservoir. I wasn't
6 here when the project was constructed. Had it been
7 constructed today, it would certainly be screened. Actually
8 well no. It wouldn't be constructed today.

9 MS. STEIMLE: You're proposing to --

10 MR. BENJAMIN: No. I'm not certainly trying to
11 get you on that. It's just the status quo isn't really
12 what we're looking at here. The status quo is the reason
13 we're in the fisheries dilemmas we have today, in some of
14 the past decisions that were made.

15 So as far as the management perspective, we would
16 prefer no reservoir fish to make it through the project, now
17 or once you have it installed. Or I guess what I should say
18 is in the future, it would be nice to have safe passage both
19 up and down, to reconnect those, as well as at Crain
20 Prairie.

21 Although that's not on our radar screen right now
22 just due to priorities throughout the rest of the basin and
23 the water quality issues above, I guess our stance is that
24 if an issue --

25 A license is issued for 50 years, that negates

1 that and doesn't require that to be a condition of the
2 license, no matter what efforts are put forth by our entity,
3 Water Resources or any of the NGOs, Oregon Water Trust to
4 secure potentially additional water, who knows what's going
5 to happen with the irrigation districts, with the expansion
6 of Bend and some of the conditions there that may dictate
7 more in stream water.

8 We don't want to negate the potential to have
9 fish screening and passage at the facility. So that's our
10 primary concern at this point. The reason why I say that is
11 it might seem kind of crazy, but we've seen it at so many
12 projects around the state, where conditions have changed,
13 and then we have no ability to move in that direction for 50
14 years.

15 It doesn't help recovery efforts throughout the
16 state. So that's why our position is so staunch on it. Not
17 that it's not flexible; it's just that that's our starting
18 point, for sure.

19 MR. PUGLISI: Thank you, Brian. Any other
20 questions or comments?

21 MR. SUPPAH: My name's Erland Suppah, and the
22 intake pipe, is that coming off where the spillway, the top
23 -- that's in that diagram or --

24 MR. STEIMLE: Could you put the map up? So
25 everything on the map that's black. So in the black,

1 there's the intake extending on the left side of the page,
2 the current intake.

3 (Off mike comments.)

4 MR. SUPPAH: I'm sorry. They're going to be
5 using the existing intakes. (off mike comment) This
6 intake; is that the top flow?

7 MR. STEIMLE: Oh, it's right at the bottom there.
8 Yes, I'm sorry. I just missed it.

9 MR. SUPPAH: (off mike) So there's seven feet of
10 fall between the intake and what we talked about yesterday?
11 There's seven feet between the intake and the --?

12 MR. STEIMLE: Yes.

13 MR. SUPPAH: Vertical height, not length.

14 (off mike comments)

15 MR. PUGLISI: Are there any other questions
16 concerning fisheries?

17 MR. RIEBER: Rick with the Bureau of Reclamation.
18 I'll just reiterate what I stated at last night's scoping
19 meeting as well, that Reclamation does support the
20 monitoring of turbine-induced, the potential for turbine-
21 induced injury and mortality of entrained fish.

22 A mortality monitoring program should definitely
23 be developed in consultation with the groups that are
24 currently present here, and designed to determine the
25 magnitude of injuries and mortality on entrained fish.

1 You know, those results will determine the need
2 for additional studies, project operation modifications, and
3 the potential for monetary compensation for turbine-induced
4 fish injury and mortality. There should definitely be
5 annual consultation between the Applicant and those involved
6 in those monitoring studies.

7 Oh, and there's definitely going to be some
8 interest during the period -- during the certain years when
9 the reservoir is drafted to 40,000 acre feet or less,
10 especially when there appears to be a substantial increase
11 in entrainment of adult fish.

12 So these types of studies will definitely have to
13 consider that type of operation.

14 MR. WALKER: Tom Walker, Forest Service. I just
15 wanted to point out in the reservoir there are several
16 exotic invasive species, and one that are continually
17 passing the reservoir into the river as well. So just keep
18 that in mind when we talk about fish screening.

19 MR. CRISS: Jerry Criss, Central Oregon Fly
20 Fishers and liaison to the Northern Council of the Fly
21 Fishing Federation. What is the problem with putting a fish
22 screen up?

23 MR. STEIMLE: There's not a problem with putting
24 a fish screen on, but it has been proposed as a study that
25 could be conducted, the feasibility of doing that. It's

1 generally just a matter of designing it to be fish friendly
2 at the flow rates that would pass through the penstocks, to
3 make sure that it wouldn't cause additional --

4 But it would be design criteria and it would take
5 more engineering to design appropriate screening for a
6 project of this size. Otherwise, it's not a problem to
7 discuss it. The other issue is understanding what -- how
8 our proposed project would differ from the current
9 operation.

10 MR. STEIMLE: One thing I might add from last
11 night is that we discussed last night, we were there at the
12 site yesterday, and although we don't know what the current
13 mortality of the fish, mortality rates for the fish are that
14 are currently coming through the facility, ODF&W has done a
15 number of studies on other dams in the state, on mortality
16 rates of fish passing through. Some of the ones we've
17 looked at have been as high as 70 percent.

18 So the type of turbine that we're proposing we
19 feel, based on just the preliminary literature we put in the
20 PAD, would potentially reduce the mortality rates of fish
21 coming through there right now. That's one particular
22 thing.

23 Now I know that's subject to debate and an
24 additional study is going to be done to address that. But
25 the other side of it the question is too, so if we provide

1 screens for downstream bypass, do we really want or can we
2 efficiently do that without basically aiding exotic fish we
3 don't want in the Deschutes River, from getting into the
4 river through our project.

5 MR. CRISS: Well, I guess I have a question for
6 Brian then. Do we have any kind of fish counts of fish
7 coming through that, the diversions now?

8 MR. BENJAMIN: Not to my knowledge.

9 MR. CRISS: Okay, so this is going to be a big
10 guessing game then?

11 MR. BENJAMIN: That's why we would need some
12 study to look at that.

13 MS. STEIMLE: So if I could ask a question for
14 comment?

15 It seems like screens are used to discuss
16 different things between exclusion screens potentially, that
17 would prevent all fish from moving downstream, versus
18 screens that would prevent any fish from entering our
19 project, but would allow fish to go through the existing --
20 allow fish to pass through the project as they would
21 currently, versus screening fish so that no reservoir fish
22 could move downstream. So if you would like to comment?

23 MR. CRISS: I think what we're getting at in the
24 screening process is if we have a screen on the turbine, at
25 least we won't injure any more fish through the turbine that

1 are naturally injured through the diversions that we have
2 right now. That to me is a reasonable thing to assess.
3 That's all I'm asking.

4 MR. STEIMLE: I think we can follow up by saying
5 that on our other projects, we have included exclusion
6 screens. We have included screens with bypass. So I mean -
7 -

8 MR. RIEBER: It's Rick with Reclamation. I think
9 I heard that the proposed trash racks will have a one-inch
10 mesh?

11 MR. STEIMLE: I'm not positive of that. I put
12 that out last night. That's something we put on other
13 projects. I'm not sure about that.

14 MR. RIEBER: I was just curious, you know, with
15 the existing --

16 MR. BOYTER: We're not proposing, as of the
17 current proposal, to do anything -- oh, this is Dave Boyter
18 by the way. Symbiotics isn't proposing to install anything
19 upstream of our bifurcation. So whatever is the existing
20 status quot of the intake trash racks, and we're assuming
21 there are some, of the intake of the Reclamation site is
22 status quo.

23 Whether screening options have been studied, you
24 know, is a possibility.

25 MR. HOCKING: Rick, what information do you have

1 right now on the, you know, the design of the current
2 intakes? I mean I guess you guys have some design drawings,
3 but has anybody seen them recently? You were talking
4 yesterday that the water level hasn't been down below them.
5 What information do you have?

6 MR. ROSS: This is Bob Ross, Bureau of
7 Reclamation. We have a complete set of drawings on it.
8 They're included in our standard operating procedures. We
9 can pull that out and share that information with
10 Symbiotics. Again, just request that from us and we'll send
11 that to you.

12 We haven't really analyzed it for the effect of -
13 - on entrainment. But the one comment that I do have is we
14 have to again preserve the interests of North Unit through
15 this, for delivery of water. There's always a trade-off in
16 the design of fish screens.

17 If the decision is to put in fish screens, they
18 have to be cleanable. They have to be of sufficient size,
19 and that does get to sometimes, for screening. Once you put
20 the fish screens on, then you have to screen the entire flow
21 through the intake pipes, which will be in excess of the
22 flow going through the turbine.

23 So now that's a trade-off in the design and I
24 don't want to make any comment on -- it's just a design
25 criteria, and that those screening have to be cleanable. So

1 if it blocked up, that the stronger you make the openings in
2 the screen, the more likely they are they could get debris
3 or trash in them that would reduce their efficiency.

4 So these are design details. But I don't want to
5 make any comment one way or the other on that. It's just
6 that if they have to put the screens in, they have to design
7 them so they're cleanable and that they can pass the
8 required water, not just for the project but for all water
9 that would go through the pipes.

10 MR. RIEBER: This is Rick with Reclamation. Yes,
11 I would also probably for certain say that the outlet works
12 have been inspected fairly recently, especially since either
13 during the safety of dams work or shortly after that. So we
14 should have an idea of what kind of condition they're in.

15 I think during some of the monitoring studies
16 that we mentioned, that would include the potential for
17 screening or not. We definitely would consider other
18 alternatives to screening, such as scope lights,
19 hydroacoustic noise, whatever some of the newer technology
20 is, in an effort to still allow the current supply of water
21 to pass through to irrigation.

22 MR. PUGLISI: Yes, I have a follow-up question.
23 You said the works has been recently inspected. What would
24 that entail? Does that entail from the, what's it called,
25 the jughouse down? I mean how -- what about the intake

1 area? When was the last time the existing intake was seen?

2 MS. KIHARA: This is Kathy Kihara, Bureau of
3 Reclamation in the Bend field office. We usually do annual
4 inspections of our facilities, and Wickiup as a major
5 facility goes through what we call a periodic facility
6 review. That's every six years.

7 Alternating down every six years is what we call
8 comprehensive facility review. So we do have that
9 information in the database in Denver. We can get that
10 information to you.

11 Most likely, what has happened on those
12 inspections is that we've had a dive team actually come out
13 and dive to those intakes and look at them. We have also
14 looking at using some side scan sonar technology, to be able
15 to view those intakes from the reservoir side.

16 I do believe they have shut guard gates down and
17 actually come through the two valves and end up into those
18 penstocks. That's not done very often, but that should have
19 been within the last 20 years, and we should have some
20 information on that.

21 MR. PUGLISI: Yes. We would appreciate if we can
22 get any information about the existing conditions of the
23 facility and inspection reports.

24 (Off the mike comment.)

25 MR. PUGLISI: We'll finish off this category,

1 yes.

2 MR. LICKWAR: I apologize. I had had a thought
3 that I meant to bring up under Water Resources. So am I
4 allowed to do --

5 MR. PUGLISI: Yes.

6 MR. LICKWAR: Under federal law, I noticed in
7 your studies you had looked at some of the questions of
8 ramping rates, and I think that that has been a long-
9 standing environmental concern in the area of Wickiup is
10 ramping rates, the effects on soil erosion, frosties,
11 frosties subsequent mobilization sediment.

12 It's been an issue, and I think there is an
13 existing ramping rate and I believe, Tom, the Forest
14 Service's Wild and Scenic Rivers Act plan has a proposed
15 ramping rate that was somewhat more protective.

16 So there's a variety of ramping rates out there,
17 and one of the things that struck me and BLR, correct me if
18 I'm disremembering, was that one of the restrictions on the
19 ability to control ramping at that facility was the actual
20 physical limitation of the project hardware, in terms of
21 ramping flows.

22 So am I just completely thinking of something
23 else, or is that the state of that facility? There are
24 actually physical restrictions on its ability to ramp?

25 MR. GIFFEN: Jeremy Giffen with Water Resources.

1 The document we had earlier had a ramping rate of a foot an
2 hour. However, we adhere to the upper Deschutes management
3 plan. So a ramping rate of .2 feet for every 12 hours.

4 We've been adhering to that for at least ten
5 years now. I don't think the facility has been a problem
6 there, in terms of exceeding that. We just -- it's I
7 believe the ramping rate is for flows below 800 cfs, and we
8 do adhere to that today, and that has not been a problem.

9 VOICE: What's the name of the plan? Upper
10 Deschutes?

11 MR. GIFFEN: I believe it's the Upper Deschutes
12 management plan.

13 MR. WALKER: Tom Walker, Forest Service. Upper
14 Deschutes Wild and Scenic River Comprehensive Management
15 Plan, and also the Upper Deschutes Wild and also the Scenic
16 River environmental impact statement addresses that as well.

17 MR. LICKWAR: To follow up Bob, and I'll hand out
18 to you. I just -- the reason I brought it up is that I knew
19 that ramping rates had been an issue, and it just struck me
20 is that the hydro facility may have significantly greater
21 abilities to control flows and while we, as Jeremy pointed
22 out, that the existing facility is trying to meet or is
23 meeting the Forest Service's projected ramping rates, is
24 that always looking for the positive elements of the hydro
25 facility.

1 If there's a more beneficial ramping rate than
2 even the one that the Forest Service has currently proposed
3 under Wild and Scenic, or that ODF&W perhaps could suggest
4 or identify, that could get at some of our both fisheries
5 and water quality issues.

6 The hydro facility presented an opportunity,
7 through its physical control of the flow, to be able to give
8 us physical ability to provide even better ramping rates,
9 simply consider that as another -- a positive opportunity
10 that comes with the project. So I just wanted to put that
11 forward as a suggestion. Thank you, Bob.

12 MR. ROSS: This is Bob Ross, Bureau of
13 Reclamation. It is my understanding that there also may be
14 some physical limitations on the outlet two valves, and
15 those valves are 70 years old. They have been known to be
16 finicky and stick at certain locations that have -- if they
17 are not operated in the right flow regime, to have some
18 vibrations.

19 So I think that some of the physical limitations
20 may just be with the old hardware that's in place. I think
21 they operate those valves very gingerly and take very good
22 care of them. But there are some problems with the valves,
23 private ramp.

24 MR. FAULK: This is Jim Faulk on that. We do
25 have some questions about the proposed operations. Look

1 into that.

2 MR. ROSS: I will address that a little bit more.
3 I have some comments about the operation.

4 MR. FAULK: Okay.

5 MR. PUGLISI: If you want to take a break right
6 now, we're going to take a little break. Why don't we
7 break? It's whatever, ten, almost 10:50. So we'll meet
8 back at 11:00, and I have some phone calls to make and we'll
9 continue on, okay.

10 MR. HOCKING: Are we proposing a lunch break or
11 what does -- I mean we can do whatever the group wants to
12 do? I mean we can take an hour, half hour or we can just
13 press on if we feel like we're close to getting to the end.
14 Do you want to take another look at that, say in 45 minutes
15 after we come back?

16 MR. PUGLISI: Is there some time frame that
17 someone here needs to leave?

18 MR. HOCKING: We have until two o'clock, so we
19 have still plenty of time left. So we can -- why don't we
20 look at that again, say at about quarter of, quarter to
21 12:00.

22 If anybody has, if anybody needs to leave, you
23 know, and has something to say in the resource area, then
24 after we're done with the resource areas, again we're going
25 to go back and feel free to talk about whatever you want to

1 talk about, after we're done with all the resource areas.

2 But if you have to leave early, let us know, so
3 we can make sure that you get time to say whatever you need
4 to say on the record.

5 MR. PUGLISI: Come back by 11:00. Thanks.

6 (Whereupon, a short recess was taken.)

7 MR. PUGLISI: Okay. I think we're ready. It's
8 ten after 11:00. We're ready to start back on the record.
9 I'm sorry, can you hear me? It's switched on. There's a
10 light. Can you hear? Okay.

11 It's now ten after 11:00. We'll start back up
12 the meeting. I'm sorry about the microphone situation. We
13 know it's kind of difficult to keep the conversation
14 flowing. So we appreciate the efforts you have in waiting
15 your turn to talk in the microphone.

16 It just helps make a clear public record, and
17 this way, when you read the transcripts, we can credit who
18 said what for each comment, okay. So we'll start the
19 meeting back up again.

20 We left off with fishery and aquatic resources.
21 Are there any other follow-up questions or comments anyone
22 has in that resource? Oh yes.

23 MR. SUPPAH: Do you have an upstream passage for
24 the fish? Is there an upstream passage for the fish on the
25 dam right now?

1 MR. PUGLISI: He indicated no, all right. Okay.
2 Next we'll talk about terrestrial resources. Does anyone
3 have any comments or questions about any terrestrial
4 resource issues, plant, wildlife?

5 MR. WALKER: Tom Walker, Forest Service. I just
6 want to bring up the point, any time there's any ground
7 disturbance and sensitive plant and noxious weed surveys are
8 conducted by the Forest Service.

9 I think there are some noxious weed sites along
10 the dam right now that we'd be concerned with spreading,
11 either by during construction activities or equipment coming
12 in and you know, either bringing weeds in or leaving with
13 weed seeds to other areas.

14 Typically, we have contract provisions that
15 require pressure washing equipment before it can enter the
16 site and before it goes to another site to be cleaned again.

17 MR. STEIMLE: That's why we have proposed a
18 comprehensive survey in that area, the potential effect, to
19 look at the species that are there. Also to ensure there's
20 no species with special status, but also as a starting point
21 to work on a noxious weed control plan and revegetation plan
22 for the area post-construction.

23 MR. PENHOLLOW: Clay Penhollow, representing Warm
24 Springs Natural Resources. Yesterday, this was mentioned,
25 that there are deer and elk in the area of course, and

1 during the major work on the dam, it was noted that many of
2 them left but came back.

3 So I don't see it as a main or a big concern, but
4 there will be some disturbance, I would think, with the
5 extra traffic from the construction period. Then, you know,
6 that would be a follow-up probably with the Forest Service,
7 Fish and Wildlife and ODFW.

8 The other thing I noted was in the scoping
9 document, one, the list of the number of species there and
10 osprey wasn't on the list. But I think we have that noted
11 as well.

12 MR. STEIMLE: Yes. We'll add that to the list.

13 MR. LICKWAR: I don't know if this fits under
14 terrestrial resources or T&E, so take your pick. Maybe I'll
15 just start with just a general question. Is the footprint
16 of the project going to be outside of any of the existing
17 riparian area?

18 I'm just not sure exactly what the footprint's
19 going to look like, in terms of its terrestrial impacts.
20 Presumably, it will be relatively small.

21 MR. STEIMLE: Yes. Do you see that diagram?
22 There's a map on the back side that shows the footprint.
23 The access roads. We're proposing to use existing access
24 roads. Just on the backside there's a map that has an
25 overlay and an aerial photograph.

1 MR. LICKWAR: Okay. So there might be some
2 limited riparian area impacts. You're going to have to take
3 out a few trees?

4 MR. STEIMLE: Yes.

5 MR. LICKWAR: But it looks like it's going to be
6 relatively small terrestrial impacts.

7 MR. STEIMLE: I know you mentioned earlier the
8 bald eagle nests in the area.

9 MR. LICKWAR: Right.

10 MR. STEIMLE: We've worked pretty closely in the
11 past with Rob Burns out of the Roseburg office, in designing
12 construction time lines to limit our window of activity
13 during their nesting and breeding periods.

14 MR. LICKWAR: And of course, we did mention the
15 similar work windows that the state has, that we'll inform
16 you of in due time, for fisheries issues. Yes, I think
17 that's it. Thanks.

18 MR. STEIMLE: Okay.

19 MR. PUGLISI: I have a follow-up on that
20 statement first, about the project boundary, okay. There
21 was a question asked last night about the capacity of the
22 existing transmission line. The proposed transmission line
23 and any upgrades will become part of the project boundary.

24 If the existing transmission line needs to be
25 upgraded, there will be additional impacts for X amount of

1 length, and also the boundary will increase for the project
2 to wherever it ties into an acceptable existing line. I
3 just wanted to make sure that everyone is aware of that.

4 I think I asked this yesterday, but the question
5 can an existing line handle the power, and did you say that
6 you're going to do a study?

7 MR. STEIMLE: I'm not going to answer that now.

8 MR. BOYTER: Yes. We already started a contact
9 with Mid-State Electrical Coop and we'll continue that, to
10 do a study of what it will take to get their lines to accept
11 our power.

12 The current idea of the proposal is to keep it at
13 that distribution voltage, instead of building a
14 transmission line on top of that distribution voltage line.
15 But that will be a study that we'll talk to Midstate about,
16 helping us complete.

17 MR. HOCKING: I mean do you have any idea of how
18 long -- I mean if you were to have to retrofit the line,
19 like where's the next point of interconnection? How far out
20 would you have to go out on that line to the next point of
21 interconnection?

22 MR. BOYTER: It could as much as nine miles, but
23 that would need to be part of the study. It's hard to tell
24 without study.

25 MR. HOCKING: If it's nine miles longer, you're

1 going to be crossing private lands. What land ownership are
2 you talking about in that corridor?

3 MR. BOYTER: We'll have to look at that in the
4 study. But it would be the same power line corridor, same
5 power line. Just retrofitted, upgraded.

6 MR. ROSS: This is Bob Ross, Reclamation. When
7 were out there yesterday, I noted that the power line
8 appeared to be a single phase line, and it certainly will be
9 upgrade. A major part of the upgrade will be adding another
10 phase conductor to it and ensuring that the resulting design
11 has aquatic protection standards.

12 So these things can go back to generic
13 description, whether it be drifting the capacity of the
14 turbines is sufficient that the issue. But we will have to
15 have other studies.

16 MR. PUGLISI: All right. Back to the terrestrial
17 resources area. Any other questions?

18 (Off mike comment.)

19 MR. PUGLISI: Okay. We're going to talk about
20 land ownership at this point, so does the Bureau want to
21 first address that?

22 MR. ROSS: Again, this is Robert Ross, Bureau of
23 Reclamation. Again, we appreciate FERC setting up these
24 meetings and considering the ownership rights and Wickiup
25 Dam was authorized by Congress as the property of the United

1 States.

2 The project was authorized by a finding of
3 feasibility by the Secretary of the Interior, dated
4 September 24th, 1937, and approved by the President November
5 1st, 1937, pursuant to Section 4 of the Act of June 25th,
6 1910.

7 Section (b), Section 4 of the Act of December
8 5th, 1944, irrigation is the only federal authorized purpose
9 of the project, okay. On the management status of the dam,
10 the Reclamation and the Forest Service entered into a
11 memorandum of understanding on September 8th, 1971, for the
12 administration of forest resources, recreation facility,
13 lands, water and reclamation works in the Wickiup Reservoir
14 area, Central Deschutes project.

15 And Deschutes National Forest, which was
16 established by the general responsibility for the management
17 of the area. As part of the memorandum of agreement, zones
18 of primary administration by reclamation were established
19 and are collectively known as the reclamation zone.

20 These are areas that are primarily administered
21 by Reclamation, which include the dam and associated dike
22 along the northeastern part of the reservoir, and dike and
23 spillway along the eastern part of the reservoir.

24 Identification of these locations in no way
25 limits Reclamation's interest through the reservoir area.

1 The two agencies, Forest Service and Reclamation, have
2 overlapping jurisdiction at the Wickiup location.

3 Reclamation has jurisdiction of the waters and
4 operations of the Wickiup Reservoir as part of the Deschutes
5 project. These are areas for which Reclamation will take
6 the lead, in specifying project prescription under Section
7 10(a) and 4(a) of the Federal Power Act.

8 The Forest Service has responsibility for
9 recreation and management of natural resources and lands,
10 and we would expect that they would take the lead in
11 specifying project prescriptions as allowed for their areas
12 of responsibility.

13 But I will say the staff for both agencies work
14 together cooperatively on a very regular basis, and meld the
15 missions and goals of both agencies.

16 Yes, there are concerns and issues, and I have to
17 say many are covered, at least addressed in one shape or
18 form. We may modify those slightly, but they're covered in
19 the PAD. Wickiup Hydro, LLC does recognize the role of
20 Reclamation and Forest Service.

21 But anyway, the concerns that we have as an
22 agency are the unimpaired operation of the dam and delivery
23 of water to the North Unit Irrigation District, and that the
24 scheduled waters remain unchanged. I understand that there
25 are agreements in place, bilateral agreements between North

1 Unit and Symbiotics, and we applaud those agreements.

2 The coordination, the second thing that is of
3 issue to us is that the coordination of operation of the dam
4 and the powerhouse are seamless between North Unit and the
5 operator of the hydro plant.

6 The third thing that is very high on our list of
7 responsibilities is Reclamation, as a public trust
8 responsibility, to ensure dam safety. As such, Reclamation
9 must have approval authority on all facilities that might
10 affect the integrity of the federal facilities.

11 This includes the design review approval and
12 construction inspection of the power plant as it relates to
13 its interface to federal facilities. There will be the
14 bifurcation of the penstocks and other design features. We
15 have a full staff in our Denver Technical Service Center,
16 and have a lot of expertise in hydroelectric power design
17 and maintenance in that regard.

18 However, I will say that such approval shall not
19 relieve the licensee of the basic responsibility to develop a
20 project that does not affect the operation or the integrity
21 of the dam. Even though we may give approvals, again the
22 responsibility will always lie with the licensee.

23 In this regard, we will ask the Commission, in a
24 part of our requirements, we will ask the Commission to
25 require the licensee to enter into contracts for

1 coordination, construction and completion of the Wickiup
2 hydroelectric project, and prior to first water operations,
3 enter into a contract for operation of the hydroelectric
4 facility.

5 Such contract will also provide a funding basis
6 to reimburse Reclamation for staff time and expenses on the
7 project. Particular areas that Reclamation feels will be
8 appropriate and applaud the efforts there and backup
9 efforts, the requirements of other agencies would be
10 dissolved oxygen studies, turbidity and water quality,
11 temperature studies and then as appropriate, depending upon
12 what is decided for screening or non-screening, if there's a
13 potential of the fish to go through the turbines, would be
14 to at this point initiate the baseline studies required to
15 support later studies of turbine induced injury and
16 mortality.

17 Last above is whatever effects they do have on
18 the natural resources and the fishery resources, that there
19 is mitigation and maximum effort in the design and operation
20 of the power plant, to mitigate for those impacts.

21 I do want to take my comments a little bit more
22 in the operation of it. We are concerned and have touched
23 on this area of the design of the fish screens, that those
24 fish screens do not impact delivery of water to North Unit,
25 and that we have an excess margin of safety that way.

1 I've expressed -- the second item is I've
2 expressed concerned about the two valves that are currently
3 installed in the valve house. Those two valves are old.
4 They're 70 years old, and they only are typically operated
5 full open to full close once a year. They'll open up
6 incrementally to supply water and close.

7 But under a scenario and under the current design
8 proposed by Symbiotics, those valves may need to exercise
9 full open to full close, or at least a good percentage of
10 open to close, any time the plant starts up and shuts down.

11 We do recognize that that transmission line is on
12 a remote distribution feeder, and those do not have the
13 reliability and the continuity of power delivery. So we can
14 see a great potential for that plant to start up and shut
15 down many times throughout the year.

16 The new valves have some rough stones in them,
17 and the operator do split them, and I'm trying to get some
18 further feedback from the operations. But they are --
19 they're old valves, and they have to be maintained. We're
20 going to go in and inspect them once a year. It may be that
21 the licensee may choose to retrofit with new valves. It
22 would be that they could work with their operation better.

23 But in any case, they're going to have to find
24 some way to have reliability of the valves, and if there is
25 a shutdown of the plant that requires instantaneous opening

1 of the valves, if there's problems with them, that's what
2 they have to work with.

3 It's not going to be Reclamation's liability that
4 those valves operate in an unattended, remotely-automated
5 mode.

6 Right now, they suit our needs and the needs of
7 the North Unit manually operated. If they stick, if they
8 jam, the operator can handle that. They can back them off
9 and they can operate them. But we see that there's a
10 potential for a great deal of higher wear and tear on older
11 equipment.

12 That's certainly an issue that we're concerned
13 about and we'll have to work out. The power plant will
14 require a wider tailrace. We are concerned about the
15 changed flow patterns of the water exiting the turbine, and
16 that we'll be concerned that the tailrace be periodically
17 monitored for scour. A lot of times the Kaplan turbines
18 create more of a rolling action of the water, rather than
19 the way the water currently comes out of the two valves.

20 Let's see now. We talked about the power line.
21 I do want to talk a little bit about some of the engineering
22 aspects of the project. If we could go back to the slide
23 that shows the overall penstock and where they're going to
24 tie into the -- that one, Bill.

25 This is some things that related to them in

1 direct conversations. But the particular configuration of
2 how they tie into the penstocks* is not going to be
3 acceptable to Reclamation.

4 Right now, they're proposing a single turbine
5 shutoff valve here. Those need to be moved to individual
6 valves in this location. The reason is, under this
7 configuration, that this removes our capability to maintain
8 these penstocks and conduits.

9 Given that there's currently guard gates at this
10 location, we can close guard gates on each individual valve,
11 and then that allows access and still continued operation of
12 the -- and delivery of water to North Unit. If they were to
13 put valves at this location, that would still maintain our
14 capability to maintain the plant.

15 One last thing is I think we're going to have a
16 change in the PAD. They had an address for the Klamath
17 area office, and that needs to be changed over to our Bend
18 field office, for the people who receive notifications.
19 Rick, do you have any other comments?

20 We appreciate the opportunity to comment. Thank
21 you.

22 MR. HOCKING: I have a follow-up question. What
23 I hear you saying is that the current design, with just the
24 one valve that is downstream of the bifurcation, is not
25 acceptable, will not work for the Bureau?

1 MR. ROSS: That's correct. At a minimum, two
2 separate valves go into the bifurcation. There's some
3 engineering concerns that we have on the angle that the
4 pipes come out of the -- are shown to be coming out of the
5 penstocks. Water doesn't bend that quickly, so there will
6 need to be considerable analysis in that area.

7 MR. HOCKING: Erik, do you want to respond?

8 MR. STEIMLE: You know, at this central level we
9 definitely need to move those valves up and put two of them
10 in. We can make that change. That's not a problem at all.

11 As far as the modeling of how the flow transfers,
12 we understand that needs to be done and approved by the
13 Bureau prior to construction. That, of course, will be
14 done. But yes, we'll go ahead and move those valves up, to
15 make sure that the Bureau's operation of the project is not
16 hampered or maintenance of it is not hampered at all.

17 MR. ROSS: And there are many things that can be
18 covered under contracts. We mentioned construction
19 coordination. We want to make sure that we get good
20 coordination (off mike).

21 MR. HOCKING: What about the existing two valves,
22 and the fact that they're pretty tricky to work with and
23 that they stick sometimes, and that you're going to be, I
24 guess, trying to maintain either the one foot per second,
25 whatever the ramping rate that's required. Then there's a

1 more restrictive ramping rate in the Upper Deschutes plan.

2 I mean what are -- do you all have a specific
3 proposal as to how you're going to do that flow transition
4 from the powerhouse to the old outlet works?

5 MR. STEIMLE: I think there's two issues I hear.
6 When our power plant goes offline, there's a power outage or
7 whatever, flows need to be automatically and easily
8 transferred to those existing gates, to the existing valves.

9 So we do need those valves operational. Of
10 course, we assume that any upgrades that Wickiup Hydro needs
11 to add to the construction will be covered by Wickiup Hydro.
12 So we don't expect the Bureau to upgrade their features for
13 us.

14 But yes, we do need those working, and in great
15 working order, so that they can be automatically
16 transferred, so there's no variations in the river
17 downstream.

18 As far as flow changes during ramping or rate
19 changes, we would, of course, mimic what is currently done,
20 and our project will have the feature of doing more than
21 that if so desired.

22 But being the run of the river or run of the
23 reservoir, we don't want to change anything. We'll leave it
24 to the Bureau and to North Unit. If they want to have us
25 involved to change that, we'll just mimic it in our power

1 plant.

2 So any flow changes, ramping rates in our
3 powerhouse will continue to follow the line, to what the
4 current resources are.

5 MS. STEIMLE: And if I can follow up with that,
6 we did in the Preliminary study plan, we've outlined a
7 ramping prevention study that's intended to outline the
8 specific features that will allow transfer of water between
9 our project and the existing operations, to prevent any
10 unintended changes in flow due to operation of our
11 project. So that's a proposed study for the first study
12 season.

13 MR. HOCKING: So I guess you would be addressing
14 the valve issue, the fact that the valves were older and
15 what your proposed action will be, in terms of either
16 replacement or retrofitting, because they'd have to work
17 together as a unit?

18 MS. STEIMLE: We'd be outlining the mechanical
19 process of transfer between them and how we would coordinate
20 their operations.

21 MR. HOCKING: You're going to handle that in that
22 study, in that ramping study?

23 MS. STEIMLE: Yes. It's a -- yes, a ramping
24 prevention. So that's intended to address that issue.

25 MR. PUGLISI: Just an additional question and

1 clarification on this situation here. I'm a little unclear
2 on the operations. It's my understanding it's currently
3 manually operated, dictated by first the state of Oregon to
4 the North Unit Irrigation District.

5 Do you propose to have automated valves? The
6 existing valves that are there are not automated. So are
7 you going to convert those to automated valves, make those
8 upgrades?

9 MR. STEIMLE: Yes. It will have to be upgraded,
10 to have that feature. A good example would be the Island
11 Park project, and also a Reclamation project in Idaho. When
12 the project was -- when the hydro project was put on, they
13 had to automate the existing gates.

14 They also had to automate the timing of the gates
15 so that as the power plant shut down, the dam gates opened.
16 So the water result, the amount of water in the river would
17 remain the same.

18 So that's the same sort of thing we would do in
19 this plan, is look at what features we have to put on. Like
20 the Island Park project had to have battery backup for the
21 gates if there was no power to have that transfer. Those
22 provisions we would look at.

23 MR. PUGLISI: Okay. Could you also discuss the
24 processes, you know, who's going to operating this facility,
25 the valve. Is that North Unit? Is that the Bureau? Is

1 that Wickiup Hydro? The chain of command, however, whoever
2 wants to answer that question. I'm just unclear on exactly
3 when flows are needed?

4 MR. BOYTER: Once the license is issued, you
5 know, of course there will be that agreement entered into
6 with Reclamation. There's already an agreement with North
7 Unit, and I don't think that's been quite decided yet.

8 But on other projects, it's usually the licensee
9 has their operators on staff, and it's just easier for them
10 to make the transfer or make the adjustments in flows. But
11 that hasn't been decided. But the licensee typically
12 changes those flows for the dam owner.

13 MR. PUGLISI: So currently, it's a Bureau
14 employee who operates, or is there a North Unit? North
15 Unit. And so they'll hand over the authority for that, the
16 control to Wickiup Hydro. Is that my understanding?

17 MR. BOYTER: That really hasn't been decided yet.

18 MR. STEIMLE: On other projects, they did it just
19 for the convenience of the existing dam owner and dam
20 operations. But that hasn't been decided here. It's
21 whatever works best for the North Unit and Reclamation.
22 We're flexible there.

23 MR. PUGLISI: All right, thank you.

24 MR. CRISS: George, is this a totally automated
25 plant then, or will there be a man on site for so many hours

1 or full time? How is that done? What kind of impact is
2 that going to have? Are you going to have a full time
3 operator?

4 MR. BOYTER: This is Dave Boyter.

5 MR. CRISS: Sorry, Jerry Criss.

6 MR. BOYTER: Our projects are built to be
7 automated, but we always have staff on site at least daily,
8 to oversee and make sure things are working right. But the
9 projects nowadays are designed to be automatic.

10 That's just in case, you know, the power goes out
11 in the middle of the night. We want to make sure that
12 flow's transferred right then and there. It's totally
13 automated that way.

14 MR. CUTLIP: This is Matt Cutlip with FERC.
15 Based on what you just said regarding the modification of
16 your proposal, it's like you would now have two gate or
17 valve structures instead of one. It appears as though that
18 may accommodate a modification to how you may provide flows
19 during construction.

20 As I understand, you would now be able to provide
21 water through one of the existing conduits through the dam,
22 while isolating the other one and making changes to
23 installing your project.

24 So that being said, there's a suite of issues in
25 the scoping document that are related to addressing what the

1 impacts would be if you were pumping flows over the dam.
2 That may no longer be necessary.

3 So if in fact you are going to propose or change
4 your proposal, you would need, as I understand it, to file
5 an amendment to your PAD, so we can analyze what's, you
6 know, the current proposal is, so when we move forward in
7 the study plan, we're not collecting data on something
8 that's no longer relevant.

9 MR. STEIMLE: We can go ahead and make that
10 adjustment to the PAD.

11 VOICE: Do you want to follow up on whether you
12 concur with that or --

13 MR. ROSS: This is Bob Ross. Yes, I believe
14 we'll concur with that.

15 MR. PUGLISI: Oh. Back to the -- oh, wait a
16 minute. A question on that.

17 MR. DEVITO: With the two existing penstocks,
18 let's see; I forget what the current flow is or was
19 yesterday, that my understanding was that the amount of flow
20 that needed to be sent downstream for irrigation purposes
21 required that both pipes be at full flow, together with the
22 flow that leaks through and is collected below the dam, to
23 satisfy the irrigation needs.

24 So if the in stream work window to construct this
25 project is, I think it was in the PAD, but I recall that

1 it's during the summer, and if that's the time when
2 irrigation districts are making the call for water, that
3 would require both penstocks be at full flow.

4 I don't know that there would be the option of
5 cutting off one of those pipes and lining the one pipe and
6 then switching and lining the other. It seems like the flow
7 needs would require that water be passed over the dam with a
8 pumping system or a suction line.

9 MR. CUTLIP: I have a quick question. Are those
10 in stream work windows, is that just a finite? That's the
11 only time you can do any work in the state of Oregon?

12 MR. BOYTER: There's some flexibility with that.

13 MR. CUTLIP: Because it would seem like if you
14 can move that to later in the season, it would be a lot
15 easier to pump even 100 cfs over in the winter, than it
16 would be to pump 16 or 17 hundred or who knows what upper.
17 I mean that's a lot of water to be pumping over a dam.

18 That's a significant effort, and you'd probably
19 have the greater chance of failure if you're trying to move
20 that much water. So that might be something that would need
21 to be considered as well.

22 MR. PUGLISI: Brian.

23 MR. BENJAMIN: Brian Benjamin, ODFW. There is
24 some flexibility in the work period. However, I don't
25 understand why the bifurcation can't happen outside of the

1 in-water work window, because construction only needs to
2 happen in the in-water work window for the tailrace, I would
3 think.

4 The bifurcation, why couldn't that happen outside
5 of the in-water work window when the water needs from the
6 irrigation district are at a minimum?

7 MR. BOYTER: I would hope that -- I think that's
8 the case too, and that's what we were hoping, is that at
9 least we can do the bifurcation when the flows are much
10 smaller, during the winter time or the late fall.

11 MS. STEIMLE: What is the capacity for each
12 penstock? It's my understanding it was 2,000 cfs? Is that
13 correct, for the existing structure?

14 MR. GIFFEN: In the past, we worked on the
15 valves. We would do it in the non-irrigation season. We'd
16 wait to work on the valve until after the irrigation season,
17 and do it when the flows are low.

18 MR. PUGLISI: A follow-up on that capacity
19 question. I just want to make sure that it's been
20 determined that the capacity of the proposed pen, single
21 penstock to the power house has the same capacity as the
22 dual pipes, currently the dual outlet penstocks that are
23 currently there?

24 The existing capacity, you know I just wanted to
25 clarify. Has it been determined that the capacity of the

1 single penstock for downstream flows is equivalent to the
2 dual pipes?

3 MR. BOYTER: I don't know. If the penstock going
4 to the powerhouse, we're doing final design. It will be
5 designed for the flows of the powerhouse, and the water
6 would go through --

7 (Simultaneous discussion.)

8 MR. ROSS: This is Bob Ross again. I think that
9 the capacity of the turbine is 1,400 cfs. All they can do
10 is pass 1,400 cfs through a single penstock. But and then
11 any flows in excess of that would be passed through the
12 valve.

13 MR. PUGLISI: But during -- okay. I think I
14 understand what you're saying.

15 MS. STEIMLE: So my understanding is that the
16 total capacity, as it is right now, is 4,000 cfs.

17 MR. PUGLISI: Okay, that's the question.

18 MS. STEIMLE: Each penstock can pass 2,000 cfs
19 through. So if we were to isolate one, we could still pass
20 up to 2,000 cfs through the other.

21 MR. PUGLISI: Okay. That was the follow-up
22 question I had. Thank you.

23 MR. GILLETTE: My name is Austin Gillette. I
24 live in La Pine, and my question is for failsafe purposes,
25 we're not talking about eliminating the original valve.

1 It's going to stay in place. You're just adding two
2 additional valves, okay. I just to make sure that we had
3 that covered.

4 Because there might be a case where you have to
5 shut it off period right now, bingo, and they might have the
6 valves open and close when -- okay, thank you.

7 MR. PUGLISI: Okay. Back to the -- do you have
8 another question?

9 MR. CUTLIP: I was just going to reiterate that
10 would be probably the best interest of Symbiotics, if you
11 guys could go ahead and file any proposed changes as soon as
12 possible, so as we move forward, you know, we address the
13 study requests appropriately.

14 MR. HOCKING: Yes, because everybody needs to
15 know that, you know, if you're going to eliminate pumping as
16 an option because it's no longer needed, we don't all want
17 to be spending time and effort looking at that in terms of a
18 study request. So how quickly do you think you could submit
19 something to the Commission?

20 MR. STEIMLE: In the next week.

21 MR. HOCKING: Yes, okay. All right. So
22 everybody just keep an eye out for, you know, a filing with
23 the Commission. Again, if you can e-subscribe, you'll get
24 that filing as soon as it shows up on E-Library.

25 MR. PUGLISI: Back to the original topic here

1 about the land rights and land ownership. Last month, Bob
2 you sent to me a memorandum of agreement.

3 MR. ROSS: Yes.

4 MR. PUGLISI: Is that okay for us to put that
5 document on the record?

6 MR. ROSS: I think I don't remember exactly what
7 it was. But I'm sure anything we gave you, you can file in
8 the record.

9 MR. PUGLISI: Okay. Because you emailed it to
10 us, but we wanted to wait until this meeting to discuss
11 issues and if the Forest Service had any concerns, maybe
12 we'll talk to the Forest Service before --

13 MR. ROSS: Those are all available.

14 MR. PUGLISI: Okay.

15 MR. LICKWAR: Peter Lickwar, U.S. Fish and
16 Wildlife Service. So just on the question of land ownership
17 and land rights, if I may Clay, could you just for the
18 record, and just for everyone's information, maybe speak to
19 the question of tribal rights, usual accustomed and the like
20 for the area? Can I put you on the spot for a second?
21 Thanks.

22 MR. PENHOLLOW: Unless one of the tribal members
23 would like to do that. But again, Clay Penhollow, Natural
24 Resources for the Tribes. Some of you know of the Treaty of
25 1855 between the tribes and the federal government.

1 In that treaty, they reserved the reservation for
2 exclusive use. Then beyond that, what is called ceded
3 lands. The ceded lands line runs basically from Cascade
4 Locks on the Columbia River, south along the crest of the
5 Cascades to the 44th parallel, and that's about the area
6 where the railroad trestle is on Highway 97, if you're
7 familiar with that. Then runs over to the headwaters of the
8 John Day system and back up to Willow Creek to the Columbia
9 River.

10 So it takes in the Hood River system, most of the
11 Deschutes, Ochoco and John Day systems. Beyond that then,
12 they have usual accustomed areas that they often utilize,
13 and this is within that area. The Wickiup is considered a
14 usual and accustomed area.

15 I guess while I'm speaking to that, just a
16 reminder then to the federal agencies, those that are here
17 especially, Forest Service, BLR, FERC and Fish and Wildlife
18 Service, that not only do you have the public trust
19 responsibility; you have a tribal trust responsibility.

20 MR. LICKWAR: Thank you Clay. Again, this is
21 (off mike). So I honestly don't know Clay. So in the range
22 of usual and accustomed lands, does that create a nexus for
23 BIA involvement and BIA exercise of 4(a) authority?

24 MR. ROSS: It probably does have involvement, but
25 not for, if I understand, for it probably to be more

1 associated with the reservation. But then, as we go through
2 and you were talking earlier about who does have 4(a)
3 authority, then there might be some connection there. Plus
4 your 10(j)'s and 10(a)'s.

5 MR. HOCKING: I've heard that both Reclamation
6 and Forest Service own the lands, you know, that would be in
7 the boundary. Is that the case, or is it just Reclamation?
8 That's what I wanted to try and get clarified? Do we know?
9 Is it joint ownership or -- I know there's joint
10 responsibility, but what about the actual ownership itself?
11 Is that clear?

12 MR. ROSS: Let me tell you. This thing is --
13 this is Bob Ross. Bureau of Reclamation (off mike). Okay,
14 yes. It looks like the National Forest has the underlying
15 ownership, and then Reclamation has withdrawn lands on top
16 of that.

17 So we have the reclamation zone as being under
18 our administration, and then the reclamation zone defaults
19 to Forest Service management. But within that, we do have
20 interests, overlapping interests.

21 MR. HOCKING: You're referring to the memo that -
22 - this was a memo that you submitted. Has this been filed?

23 MR. PUGLISI: No. We're waiting to discuss it.

24 (Simultaneous discussion.)

25 MR. HOCKING: Okay, okay. That's what you asked

1 earlier, okay.

2 MR. PUGLISI: There's two. There's the official
3 memorandum of agreement between the Forest Service and
4 Reclamation, and then there's this discussion, this one-page
5 discussion that's on the one plus page, and a summary of the
6 agreement.

7 MR. HOCKING: Okay. So it sounds like Forest
8 Service owns the lands that would be within the project
9 boundary, and Reclamation has withdrawn. Okay.

10 (Off mike comments.)

11 MR. HOCKING: We'll go ahead and file that.

12 (Off mike comments.)

13 MR. LICKWAR: So does that mean that both the BLR
14 and Forest Service have 4(a) authority in this licensing?

15 MR. HOCKING: I was afraid you were going to ask
16 that question. I don't know. I'll have to check. I'll
17 have to check with the --

18 MR. LICKWAR: It would just be good to know what
19 that is.

20 MR. HOCKING: Yes. We need to know as well.

21 MR. ROSS: This is Bob Ross again. I think the
22 answer is yes, both of them --

23 MR. HOCKING: Well, I'll need to check with our
24 Office of General Counsel.

25 (Off mike comments.)

1 VOICE: Do you want to explain what 4(a)
2 authority is?

3 MR. HOCKING: 4(a) under the Federal Power Act.
4 It basically says that any land management agency, typically
5 the Forest Service or Reclamation or Bureau of Land
6 Management, that has lands within a FERC project boundary,
7 has conditioning authority under that section of the Federal
8 Power Act.

9 It can submit mandatory conditions to the
10 Commission, that the Commission must include in any license
11 that's issued for a project that occupies those lands.
12 That's Section 4(a) authority.

13 MR. PUGLISI: Also with the land ownership and
14 land use, if you could turn to the handout that was handed
15 out here. Symbiotics prepared this map to show the -- you
16 talk about the wild and scenic river boundaries.

17 The red, pinkish line there shows the state
18 scenic boundary and the green line shows the federal wild
19 and scenic river boundary. I just wanted to make everybody
20 aware of that, to see if there's any issues or concerns or
21 questions, because that question had come up a few times
22 prior to this meeting.

23 I just wanted to know if anyone has any concerns
24 at this point with those boundaries.

25 MR. LICKWAR: So I'm just curious. My

1 understanding was that both the boundaries started at the
2 stream gauge, and that my understanding was the stream gauge
3 was at the red line, the state boundary.

4 I'm just curious, just so we have it all right.
5 They really are different, and they both don't start at the
6 stream gauge?

7 MR. STEIMLE: I can answer that question. Yes,
8 they are different, and we took a really close look at it,
9 because five years ago, we proposed a project on Arthur R.
10 Bowman Dam, and BLM on the record numerous times and in
11 writing stated that the wild and scenic river boundary was
12 downstream of the tailrace.

13 Then when we actually got down well three years
14 into the licensing process, the legal description said
15 otherwise, and it was at the top of the dam.

16 So Forest Service did indicate to us early on
17 that it was at this gauging station, and it was consistent
18 with the state boundary. But when we actually got the legal
19 description, it's upstream of that. So yes.

20 MR. WALKER: Tom Walker, Forest Service. I just
21 wanted to say (off mike).

22 (Simultaneous discussion.)

23 MR. PUGLISI: Yes. I just wanted to show you
24 this. Like I said, the purpose of this meeting, one of the
25 big issues was the land ownership. Talking to Rod Bonnaker

1 of the Forest Service, he sent me this map, which we were
2 going to discuss at this meeting, and talk about whether it
3 could be filed or not.

4 But people can't see this map. But it shows this
5 patched area, the wild and scenic river boundaries. So it
6 shows it downstream of the dam. The exact scale, I guess,
7 you'd have to figure out. But so that's something --

8 MR. STEIMLE: I can say to you. We did file the
9 legal description that we obtained with the Forest Service.
10 So it's --

11 (Simultaneous discussion.)

12 MR. HOCKING: I just want to double-check.
13 What's the process? It's my understanding that the Forest
14 Service has to do a 7(a) determination under the Wild and
15 Scenic Rivers Act, that you have to look at the project and
16 determine whether it will, I think the terminology is,
17 invade the boundary or diminish the values for which, you
18 know, the river segment was originally designated.

19 Can you -- I don't know if you're familiar with
20 that process at all. I know not everybody in the Forest
21 Service does those analyses. But do you, can you talk about
22 that briefly?

23 MR. WALKER: Yes. I've written several. It's a
24 free-flow analysis, to see how a project can run through a
25 river corridor, if it affects the free flow nature of the

1 river, and also how it may affect that's been identified as
2 the outstanding, remarkable values.

3 For that section of the river, it may be eligible
4 to be a wild and scenic river. So that's all part of the
5 process.

6 MR. HOCKING: So you would be doing that analysis
7 and filing it with any 4(a) conditions? Is that kind of the
8 time line that you're looking at?

9 MR. WALKER: I don't know about myself (off
10 mike).

11 MR. HOCKING: Well, what's typical? I mean
12 what's typically done? I'm just trying to get a sense of,
13 you know, we tried to pull together all the different
14 processes that have to be complied with in going through the
15 ILP process, and if that's one of them.

16 MR. WALKER: Yes. We've done it in the past (off
17 mike).

18 MR. HOCKING: Okay. Well, we can talk about
19 later too, as far as when that -- is it a Section 7
20 determination not under the ESA? Yes, okay, all right. If
21 we can just talk later and find out when you would be doing
22 that analysis, so that we can work that into the process
23 plan for the project, for the ILP.

24 MR. LICKWAR: Can anyone from the state weigh in
25 on what, if any, process the state has in parallel regarding

1 the state scenic boundaries?

2 MS. GRAINEY: This is Mary Grainey from Oregon
3 Water Resources, and Jan Houck from the Oregon Parks and
4 Recreation Division, could not be here today. She knows a
5 lot more about this. So I'm trying not to misstate
6 anything.

7 But we also have a process for facilities within
8 the scenic boundary, and I think that this project may be
9 outside of that boundary. But I know that she did have
10 concerns about still the recreational use, you know, that is
11 affiliated with the wild and scenic needs to be recognized,
12 especially during the construction period.

13 So we're going to have to be sure that the
14 anglers and the boaters are all notified about what the
15 construction plans are and when there's going to be
16 restrictions and how to get around it and all of those kinds
17 of things. So she was concerned about that.

18 She was also -- the other thing she was concerned
19 about was would there be noise from the new powerhouse, that
20 might affect that stretch.

21 MR. PUGLISI: Thank you. Any other property or
22 land use issues at this time, since we're on that topic?

23 (No response.)

24 MR. PUGLISI: No? Okay. We're at -- yes, that
25 is true. Thanks, Steve. We have scenic, threatened and

1 endangered species, recreation and land use, aesthetic
2 resources, cultural resources, socio-economics yet to talk
3 about. Is there a lot of issues to talk about?

4 Are there a lot of comments and questions about
5 those areas? Do you want to continue at this point to push
6 through, or do you want to take a lunch break or however you
7 want? Anybody want to weigh in on that?

8 MR. LICKWAR: Is that it, as far as you guys are
9 concerned (off mike).

10 MR. HOCKING: Typically, that's what we do and
11 then definitely at the end of that, if anybody has anything
12 else that hasn't been covered, then you know, now is the
13 time. Say what?

14 (Off mike comment.)

15 MR. PUGLISI: I don't know the answer to that,
16 but yes. Do you want to take a break for a few minutes
17 again, just to check on that?

18 VOICE: To check on lunch?

19 MR. HOCKING: Well, to check on foods. You all
20 want to take, say a half hour break and go downstairs, get
21 something to eat down there, and then come back up? Is that
22 a compromise? Does that sound reasonable to everybody?
23 Because we may have maybe one more hour left, or maybe less
24 than an hour.

25 MR. PUGLISI: Or how much more do you folks have

1 to testify on or say?

2 VOICE: We're done.

3 MR. HOCKING: All right.

4 (Laughter.)

5 MR. PUGLISI: Yes. There may not be much more,
6 so we'll continue on.

7 (Simultaneous discussion.)

8 MR. PUGLISI: All right. That's a good idea.
9 Okay. Thanks, Steve. Okay. Based on that, I guess we're
10 at threatened and endangered species. Is that correct? Is
11 that where we are? Does anyone have any --

12 MR. LICKWAR: Peter Lickwar, U.S. Fish and
13 Wildlife Service. I guess we're the agency, right, to take
14 this on. We've already touched on what the likely T&E
15 species of concern are. Bull trout, possibly there are new
16 species, but likely to be (off mike).

17 Spotted frog in the project area, but it's a
18 candidate species, not under T&E. Bald eagle present in the
19 project area. Delisted, but protected under the Migratory
20 Bird Treaty Act and Eagle Protection Act.

21 Last but not least, steelhead are not present in
22 the project area, but simply as sort of an FYI on people and
23 their larger perspective of flows and ripple effects of
24 project impacts.

25 Steelhead are currently present in the Deschutes

1 Basin below river mile 100.5, which is where the Pelton Dam
2 complex is. It will be reintroduced upstream of that dam
3 complex, and in fact already are, and will be occupying
4 areas up to river mile 127 at Steelhead Falls, and possibly
5 as far as up to river mile 132 at Big Falls.

6 Which still puts them, you know, a good 100 miles
7 short of Wickiup. I don't remember exactly what river mile
8 Wickiup is at. 226.7. Thank you, Tom. So I was close.
9 So a good 100 miles up. But it's worth noting, just in
10 terms of larger schemes of water use and project effects,
11 the Bureau of Reclamation in, was it 2003 Rick, you guys
12 consulted with us?

13 Went through a Deschutes Basin consultation of
14 the impacts of operation and maintenance of their four
15 Deschutes Basin facilities, including Wickiup and Crain
16 Prairie, and did find that hydrologically, especially during
17 the spring months, February, March and April or so, that
18 there was upwards of a 10 or 12 percent flow effect, a flow
19 deficit that reached all the way from Crain Prairie and
20 Wickiup to river mile 100.5.

21 So it's just simply worth noting for the record a
22 larger perspective of the project and hydrology and water
23 impacts, that water here at mile 226, its impoundment does
24 create a hole and biological impacts to listed fish 130
25 miles away.

1 Obviously, you guys are operating run of the
2 river, so that's probably going to fall out as an issue.
3 NOAA is not here, and I'm not NOAA. But simply to note that
4 those resources are present and are within the flow impact
5 range of this facility.

6 The same would be true of Sockeye and Chinook.
7 They are not listed species, but they are present or being
8 reintroduced into the Basin. So I think that covers
9 everything I can think of on the T&E species range.

10 MR. CUTLIP: If you look at the scoping document,
11 we have identified as potentially cumulative effect on
12 resources only water resources. Our proposed geographic
13 scope at this time was downstream to about 60 miles to where
14 I could -- it appeared as though the Fall River and I think
15 it's Spring Creek or Spring River comes in somewhere down
16 there as well, and some other spring complexes.

17 So if you have comments that you wish, if you
18 don't think that's sufficient or adequate, we would
19 appreciate any comments related to our scope of cumulative
20 effects. Especially if you want to carry that out to other
21 salmoides, you know, that are trained significantly
22 downstream.

23 You know, we'd have to modify those issues in our
24 scoping document, so we can carry them forward during
25 environmental analysis, because they're not in there at this

1 time. We have not -- I have not included the potential
2 effects on actual fish species; just the water resources.

3 MR. LICKWAR: Okay. Well, we appreciate that.
4 We'll consider that as we draft our comments, and I'm sure
5 the other resource agencies will as well. I believe in our
6 January 7th letter to Symbiotics, we did suggest that they
7 or FERC, as the action agency, request the species list.

8 If you haven't done so, that's fine. But it's
9 probably still a good idea. So if you do come to us and you
10 make us give you our official list of species in that
11 project area, so you do have that paper back from us. It's
12 up to you, but we do make that suggestion.

13 MR. HOCKING: We can do that. That's easy to do.
14 Because right now we have -- for threatened we have northern
15 spotted owls and lynx on the list. But I guess what we'll
16 do is we'll just go ahead and make the official request, and
17 then get the list back.

18 So we won't do any modifications. Maybe we'll
19 add these to Scoping Document 2, and just note that we're
20 requesting a list in that document then.

21 MR. LICKWAR: Sure.

22 MR. HOCKING: Okay.

23 MR. PUGLISI: Are there any other questions or
24 comments about T&E?

25 MR. WALKER: Yes. Tom Walker, Water Resources.

1 There's actually a (off mike) plan boundary for the northern
2 spotted owl. The northern spotted owl, I should say, is
3 located east of that, outside of the boundary.

4 MR. LICKWAR: Okay, which is what you want to
5 list with us, because we might not have northern spotted owl
6 or lynx, for that matter, on our list. So that they might
7 be outside what would be considered to be their range. So
8 that way, you would have, for our purposes, our (off mike).

9 MR. PUGLISI: All right, thank you. Any other
10 questions or comments on that? Okay. Recreation and land
11 use are the next resource. Any questions, comments or
12 concerns about any recreation land use impacts for the
13 proposed project?

14 (No response.)

15 MR. PUGLISI: Okay. I don't see anyone. All
16 right. Next is aesthetic resources. Any issues or concerns
17 about aesthetic resources?

18 (No response.)

19 MR. PUGLISI: No, okay. What about next is the
20 cultural resources. Any questions, concerns about cultural
21 resources?

22 MR. PENHOLLOW: Clay Penhollow, Natural Resources
23 for the Tribes. Just wanted to recognize in the study, or
24 proposed study, preliminary study plan, that you talk to
25 several things there in contacting the tribes. So I can get

1 you that information, if you don't already have it, who to
2 discuss that with.

3 MR. HOCKING: I asked yesterday if anybody knew
4 what the status of the dam was, in terms of being eligible
5 for listing on the National Register? Because there was,
6 Reclamation did have that retrofit in 2000 to 2002, and did
7 an EIS.

8 So we're going to get a copy of that, because I
9 assume that, you know, the cultural resources were
10 evaluated, and maybe an archaeological survey was done of
11 that whole area, that may already cover the area that is
12 proposed. So there may not be a need for a new
13 archaeological survey if one was just done in 2000, 2002.

14 Does anybody know? Does anybody here have any
15 knowledge of what was done back there in terms of surveys?
16 No. Okay. Well, we'll just --

17 MR. WALKER: I'm Tom Walker, Forest Service. I'm
18 sure -- I don't know offhand, but I can go back to the
19 office (off mike) in that area.

20 MR. HOCKING: Well, that would be great. We'll
21 check the EIS and see what information is in there. But if
22 there is a survey that was done at that time, and we can get
23 a copy of that, you know, that might be -- that would be
24 great.

25 MR. PUGLISI: Anything else on cultural

1 resources?

2 (No response.)

3 MR. PUGLISI: Okay. Then finally socio-
4 economics. Any questions or comments dealing with socio-
5 economics for this project? No, okay. Oh, sorry. Didn't
6 see your hand there.

7 MR. CRISS: I have two questions. One is -- or
8 actually three. One is how many jobs are actually going to
9 be supplied by the project? This is Ed Criss, the CAG,
10 Upper Deschutes River Coalition.

11 MR. BOYTER: During operation time, there's
12 usually one or two (off mike). During construction, there
13 will be quite a few. When you're building a 55, 60 foot
14 building, and there's a lot of concrete work typically, some
15 crane services and welding services.

16 It's not a huge operation, but there are some
17 jobs created during construction, and the operations, we
18 want to see local services brought in on inspections and
19 things like that.

20 MR. CRISS: What is the projected cost of the
21 project?

22 MR. STEIMLE: I don't remember offhand. Of
23 course, it's a concrete steel building going up. So that's
24 --

25 MR. CRISS: Can I get a general idea about what

1 we're talking about here? Well, I really don't need cents,
2 you know. Just give me a dollar amount. We can --

3 MR. STEIMLE: I can find out for you. I can find
4 out.

5 MR. CRISS: I mean ballpark. Just are we talking
6 50 million, are we talking ten million?

7 MR. BOYTER: Ten million. I think it's just over
8 ten million.

9 MR. CRISS: And has there been a cost-benefit
10 analysis done on this project?

11 MR. BOYTER: We always look at the cost and the
12 benefits of it, and as Erik talked about before, we wanted
13 to build projects that are economically and environmentally
14 feasible. We just can't build a project that can't pay for
15 itself.

16 MR. CRISS: I mean is that something that's going
17 to be available to the public?

18 MR. HOCKING: I don't know if that's something
19 FERC may require us to reveal. I know during the process,
20 you've got to do your own, right? We will do an economic
21 analysis in the NEPA document that we put together.

22 We asked for basic cost information, and then we
23 take -- FERC has a pretty standardized analysis approach.
24 We look at offset and power and other factors. So we'll put
25 that in the EA.

1 MR. CRISS: Jerry Criss. Is this power just
2 going to go on the grid, or is it for a specific purpose?

3 MR. STEIMLE: The power is yes, it's just going
4 to go on the grid. There is a demand for it locally, but we
5 don't have a power purchase agreement in place at this
6 point. It's a little too early.

7 MR. HOCKING: I have one more question about the
8 economics. Yesterday, we were talking about the terradrain,
9 and the fact that the flow through the terradrain was not
10 taken into account in your generation estimates. It sounded
11 like you were starting to recrunch some numbers with that.

12 So you're going to get back to us with a revised
13 generation estimate, after you talk to Reclamation? You
14 need to get some data from Reclamation, right, and then
15 you're going to redo that analysis? Okay, all right. I
16 just wanted to make sure, because we'll probably -- we'll
17 need to get that.

18 MR. STEIMLE: Okay.

19 MR. PUGLISI: I think we covered all the areas.
20 Is there any other, any additional comments or anything
21 else?

22 MR. WALKER: I want to back up a little to the
23 water resources part. Yes. Let's go through it again. Tom
24 Walker, Forest Services. With the tailrace being relocated
25 to the other side of the river, there could be a potential

1 for bank erosion or a change in the hydraulics of the river
2 immediately below the project.

3 That would be part of this free flow analysis.
4 So I would request a design that would limit the amount of
5 new bank erosion, which is a huge issue in the Upper
6 Deschutes. Also monitoring immediately below the project
7 for how it changes the dimensions of the channel for bank
8 erosion and possible mitigations if monitoring has found
9 that the bank erosion had increased.

10 MR. PUGLISI: All right, thank you. Any other
11 comments?

12 MR. SUPPAH: This is an earthen dam, right?
13 Would the construction compromise, you know, the integrity
14 of that dam in any way?

15 MR. ROSS: The Bureau of Reclamation has a very
16 strong safety of dams program. We will do an analysis, an
17 independent analysis of their construction, to ensure that
18 it doesn't. This will be not an insignificant cost to the
19 licensee, to have Reclamation review the design through the
20 construction inspection and through the whole process.

21 We're going through that on some other projects
22 as well. It's a very strong, very stringent program. We
23 will not allow it to jeopardize the dam. We have a very
24 strong public trust responsibility in that regard.

25 MR. PUGLISI: Thank you. Anything else? Any

1 comments or questions? Okay. So all these issues involve a
2 lot of things, talking about potential studies that need to
3 be done.

4 So the next step, as I mentioned on a much
5 earlier slide about deadlines, is September 23rd is when the
6 study requests are due. When you submit a study request,
7 there are seven criteria that you need to answer, and
8 answering these criteria helps define the study better, so
9 we make sure we get the answers we're looking for.

10 On the FERC website, under Industries,
11 Hydropower, if you go under the tab Industries, then
12 Hydropower, and then in the bottom right corner you'll see
13 guidelines. You're there.

14 You'll see a document on that page called
15 "Understanding the Study Criteria." It gives you a little
16 more detailed information about study requests. It tells
17 you exactly what we're looking for to answer these seven
18 criteria.

19 In addition, if you need help, my name and number
20 is on the scoping document. Please feel free to call me or
21 send me an email if you have any questions, you know, or
22 concerns about the -- questions about the study criteria.
23 We'll be glad to help you and send you an example any way we
24 can, okay.

25 Next slide there. Just to finalize here, once

1 again to go over these upcoming important dates, and you can
2 see who's responsible after the statement there, that
3 everyone's responsible for the study requests. That date is
4 September 23rd, 2008.

5 Then on November 7th, Wickiup will issue their
6 proposed study plan based on all these comments and
7 requests. Then they'll have a study plan meeting December
8 3rd, in which everyone gets together again for that meeting.
9 I'm assuming it's going to be Bend, probably La Pine or
10 somewhere in the local area there.

11 Then people have a chance to issue comments on
12 the proposed study plan. Then the final product will be a
13 revised study plan submitted on March 9th by Wickiup, and
14 then we will issue the final study plan March 24th next
15 year, and that's --

16 I'm sorry. There will be other, more comments on
17 March 24th. Everyone can comment on the revised study plan.
18 Then the final study plan determination will be issued by
19 FERC on April 8th, 2009, and that's when the studies will
20 begin.

21 Okay. Does everybody understand? They're also
22 in the back of the scoping document here. But I just wanted
23 to highlight the more important dates, the dates for
24 everyone there. You can see here, okay. Then that's, yes.

25 So like I mentioned, these dates are important.

1 Try to keep on these dates. Once again, my contact
2 information is in the scoping document. If you have any
3 follow-up questions that you think about, please feel free
4 to give me a call or send me an email.

5 Also, the transcripts for this morning's meeting
6 and last night's meeting will be on the FERC website in E-
7 Library, under this project number.

8 Those transcripts will be available in
9 approximately ten business days, and therefore you can go
10 back there to look, if you have any -- if you want to be
11 reminded of what someone said, it will be online there.
12 Okay. Is there any final -- yes, please?

13 MR. ROSS: This is Bob Ross again. I'm going to
14 put in a plug for I think a really excellent written
15 document. It's again on the FERC E-Library website. It has
16 lots of color pictures. It's written in simple language,
17 which means I can understand it, not in regulatory language.

18 It's called "Tools for Industry, Agencies,
19 Tribes, Non-Governmental Organizations, Citizens and FERC
20 Staff." It called "Ideas for Implementing and Participating
21 in the Integrated Licensing Process." So I am well-
22 impressed. This is my copy, but I can download another one
23 if you want this one.

24 MR. PUGLISI: Thank you very much, yes. Yeah,
25 there's a lot on -- like he said, on the FERC website, when

1 you go into Industries, Hydropower, and then Guidelines,
2 there's a lot.

3 You'll have a flow chart for the ILP, the
4 detailed version, all of our regulations. There's a lot of
5 guidance there. Thank you, Bob, for that plug. We
6 appreciate that.

7 Okay. Is there any -- anyone else have any
8 follow-up questions or comments? Okay. I don't see anyone.
9 So I guess at this point, it's 12:25, so we ended up
10 finishing in time for a little bit of late lunch. Thank you
11 all for coming, and like I said, please give us a call if
12 you have any other questions. This adjourns the meeting.

13 (Whereupon, at 12:25 p.m., the meeting was
14 adjourned.)

15

16

17

18

19

20

21

22

23

24