BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

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IN THE MATTER OF: : Project Number

CHESTER DIVERSION HYDROELECTRIC : 11879-001

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Best Western Cotton Tree Inn

450 West 4th South

Rexburg, ID

Thursday, October 6, 2005

The above-entitled matter came on for scoping meeting, pursuant to notice at 7:00 p.m.

MODERATOR: EMILY CARTER, FERC

P R O C E E D I N G S

MS. CARTER: Okay. I guess we'll go ahead and get started.

I want to welcome everyone to the scoping meeting for the Chester Project. The agenda for tonight -- and I don't know if everyone picked up the handouts. There are some of the slides.

We'll start with introductions. And then I'll do an explanation of the purpose of scoping and requests for information. Then Symbiotics is going to do an overview of the projects. Then we'll go over some of the environmental issues, the scope of cumulative effects, resource issues. I'll talk about the EA schedule, and then we'll take comments that everyone has signed in, and anyone who wants to make a comment can go ahead and do it then.

My name is Emily Carter. I am the FERC project coordinator, so I'm sort of overseeing the FERC process.

And then I'll let -- Do you want to go ahead and introduce yourself?

MR. FOOTE: I am Peter Foote with Lewis Berger. We're a contractor with FERC. And I'll be looking at the fisheries and overall EA preparation.

MS. DAVIS: And I'm Sue Davis. I'm also with Lewis Berger. And I've been looking at the terrestrial and endangered species issues associated with the project.

MR. MITCHNICK: And I'm Alan Mitchnick, also with the FERC, and I'll provide a little bit of focus on the EA preparation.

MS. CARTER: And this meeting is also being recorded by a Court Reporter and the transcripts will be available through our public records room in ten days.

But when you do make your comments, just so everyone knows, when you do make a comment please make sure to speak up and state your name and your affiliation so that it can go into the record.

Okay. The purpose of scoping. Under the National Environmental Policy Act, our regulations and other applicable laws, any action -- any federal action requires us to look at the environmental effects such as licensing a hydropower project. And the purpose of -- Scoping is a part of NEPA where -- it's used to identify the issues of concern and the what needs to be addressed, the significance of those issues, and any alternatives, reasonable alternatives that need to also be evaluated.

Scoping provides for participation from federal agencies, local, state agencies, NGOs, tribes and the public so that everyone has input into the NEPA process.

The request for information is any information that is out there that would help in the environmental analysis of this project. We're requesting information or

data that may help define the geographic or temporal scope of the cumulative effects or that may identify additional environmental issues, any studies, reports or other NEPA documents -- such as I know there was a NEPA document prepared for the transfer of the dam from the Bureau of Reclamation to the Madison -- Freemont Madison Irrigation District. So things like that.

Any information or data describing past or present environmental resources in the project area. And then any resource agency plans or future proposals that go in the project area, we're requesting those.

Now a description of the project, if Vince wants to do that.

DR. LAMARRA: My name is Dr. Vince Lamarra. And I'm representing Symbiotics. I have a short presentation that will last about five minutes. I'll just kind of go over the key project features.

Can you dim those lights down a little bit? It might be a little bit easier to see.

PARTICIPANT: I think it's either on or off.

DR. LAMARRA: Well, if we turn it off will that be okay with everybody?

First of all, I would like to thank the FERC for the opportunity to at least spend a few minutes and show us the project features.

Next slide, please.

(Slide.)

What I intend on doing is talking about the physical project footprint, the major features of the project in terms of the equipment, just kind of give you a brief overview of the annual and seasonal power generation, the timing for that, and then talk a little bit about how the river hydrology will be modified in and around the structure.

Okay. This is an air view of the Chester diversion structure. To kind of orient everybody, you're kind of looking northwest up the Henrys Fork River. This is the Falls River coming in here. The Chester diversion, last chance on this side, a crosscut on this side.

One of the things of interest here is this was taken in the spring, and you can see the plume of sediment coming out of the Falls River here. It was taken in 1993.

Next slide, please.

(Slide.)

Okay. This is an aerial view of the project. Unfortunately it doesn't show up that well. But I'll kind of describe what we've got here.

Here's the crosscut -- or the Chester diversion. We're looking up-river on the Henrys Fork. There's the Falls River coming in down here. The project as envisioned

will sort of sit with a modification of the structure with a small rubber collar three feet in height and all the project features will sit on the south side. This is the current canal that will be extended and a new head facility -- head gauge facility put in.

Okay. Here is the existing structure as it sits right now. This is from the U.S. Bureau of Reclamation archives. What we've essentially got here is this is an aerial view of all of the civil structure that sits right now. There's a large footing that underpins the whole structure. It's about ten to fifteen feet upstream and about the same amount of distance downstream. It's basically a large concrete slab. Along this edge right here is a series of energy dissipaters. The crest falls over; water hits the energy dissipaters and then moves downstream in a turbulent manner.

This is the Chester -- or the crosscut canal head gauge and canal going this way and the last chance. These two are -- were in the original design of the project. So that's how the existing environment sits right now.

Okay. A little bit of history. It was built in 1938 by the U.S. Bureau of Reclamation as part of the Minidoka project. Seventeen feet high, 457 feet in total width, which includes the diversions on both sides. And there's a hydrologic head -- oh, and the capacity is 12,000

cubic feet per second, which is five feet above the sill. And the hydrologic head is only ten feet.

Well, if it's 17 feet high, why is the hydrologic head ten feet? The 17 feet includes the footings and the material that's been placed on top of those footings. There's only a ten-foot difference in head.

Next, please.

(Slide.)

Okay. This is kind of an interesting picture. This came out of the archives. This is the construction of the Chester diversion. It's rather interesting. There are several things I'd like to point out.

First of all, you can see the energy dissipation structures that sit right here. This distance is about ten feet. There's the crest. And look at the size of the bed material that was placed in the bottom of the channel. That bed material in almost all cases is still present. We did some survey work and pretty well documented that that material is in fact there.

Next slide, please.

(Slide.)

This is what the cross-sectional view of the structure looks like. This is solid concrete in here. So it's a pretty massive structure sitting in the stream right now.

Here they've diverted the river back into the channel. It's about half done. And they're working their way this direction. This angle right here is the gate for the current diversion that's there. And as you guys were there, you probably saw that.

So that's pretty much what the site looked like in the late 1930s. And if we look at it, this is what it looks like right now. There's that same angle right here. And you can see what the structure looks like: Pretty much the same as it was upon completion.

Okay. Here are the three major -- or actually four major project features. First of all, there will be a transmission line that will run along the access corridor and come out to the highway. That's a 15 kv line. It will look just like a distribution line except it will have a little bit larger insulators. But it's pretty much distribution voltage, again starting here at the project and eventually running out here to the highway, just following the right-of-way that's currently there.

Across the crest of the dam there will be a three foot high maximum inflated rubber collar. Brent described that today on site. Effectively what that will do will be to set the elevation of the river exactly three feet above the sill elevation. Based on the hydrology, that elevation of water without the rubber collar occurs between 10 and 15

percent of the time, typically high flow. I think it corresponds to something like -- I could be wrong here, I don't want to speculate -- but it's something around 6- or 7000 cfs is equivalent to three feet over that structure.

As flows -- This collar will only be raised to that elevation. At times when the elevation is above that the collar will at crest so that it doesn't go over that three feet in its various natures.

Bottom line here is that we'll hold it at three feet. If the flows are less than normally coming over the spillway it will be increased or -- what we call we decrease to offset those increased flows.

The power plant itself sits over on the south side. There's two bulb Kaplan turbines that sit in a nested bay. Elevations drop through the turbines exiting about five feet below the bed level of the stream, and then they are driven back up. This is a concrete sill right here. The area coming back up is gradually increased to the bed level of the stream right here.

There will be a new head gate and a slight realignment of the canal.

The forebay is angled to allow water to enter the stream at approximately right angles. Our modeling indicates that that will rewater the whole bed of the stream prior to its movement down the stream.

There will be an eddy that forms right here, and there will be another eddy that forms right here. But those eddies are not large in magnitude.

Next slide, please.

(Slide.)

Okay. Let's look at a summary of the proposed facilities. The equipment is going to be two 1.65 megawatt horizontal Kaplan turbines. There will be a 50 foot side concrete intake structure. The low profile textured concrete block powerhouse will sit at the current location of the canal inlet works. There will be a proposed one inch fish screen upstream of the plant intake, relocation of the crosscut canal headworks, concrete tailrace angle to deflect plant flows into the lower river. There will be a three-foot rubber collar and a 15 kv transmission line about a mile and a half long.

Okay. This is what the site looks like looking on end. You will see the fish screen sticking up above the elevation of the forebay. The power plant will sit above the housing for the turbines, and then this is our deflection wall and here's the bed grade of that. Again, it re-enters the river at an angle.

Next slide.

(Slide.)

A close up view of the two turbine bays. And you

can see that these bulb turbines sort of sit at an angle. If you go to the next slide you can kind of get an idea what these guys are going to look like.

(Slide.)

This is a diagrammatic view of how these things operate. The water comes in and drives the turbine. This is an example of what the size of that turbine is going to look like. This is six blades; ours is going to be three blades. But about the same size. You can see, that's a man right there. So that's about ten foot in diameter across there, and that's about what we're looking at.

So it's going to look a little bit like this in this kind of configuration.

Okay. From a diagrammatic standpoint, this is what we envision with the textured concrete block. This is what we envision the facility to look like upon completion. In this particular example we have the rotor collar fully inflated and all the flows are coming through the power plant. So it's going to look something like that. It's going to be -- blend in cosmetically I think as close as possible to the existing structures that are there.

Next slide.

(Slide.)

Okay. The proposed operation. The project as proposed is run to the river. In other words, we're going

to use the flows available. We don't plan on peaking or storing any water. It's basically going to be whatever's in the Henrys Fork minus the irrigation flows.

The annual generation is going to be 16.8 million kilowatts per year. Peak production occurs in April and June. It's about 78 megawatts a day. Lowest production is in July to September, corresponding to the peak irrigation demand, and that's about 37 megawatts per day.

We pretty much have a constant. What makes this project so nice is that the flows in the wintertime in the Henrys Fork River are extremely constant. So we're looking at pretty constant from October all the way to the following April, pretty constant 42 megawatts per day. Good fall and winter based flows. And that's what really makes this project doable.

Next slide.

(Slide.)

This is an example. We've got the plant flows. This is day of the year across here. These are average daily flows in cubic feet per second taken from the gauging data available at the site for the period of record. It's just average daily. And you can see that this is what the plant will look. The plant will take all of this water on this curve. When it reaches right around the middle of April or so it's going to be spilling water. It will spill

water to the end of June on average, at which time all the flows go through the plant again.

So the range of flows we're looking at in this particular example is 1500 cfs up to 3500, and then the remaining flow -- which could be as high as 2000 cfs -- will be spilled over the top of the structure. So the bottom line is that there will -- and I think it's nine years out of ten there is spill water available in the river at some time during the year.

And there is once again a picture of what we anticipate the site to look like.

Thank you.

MR. FOOTE: We had some slides in there for project operations and some of the proposed environmental regulations just in case. But since you went through I think a lot of what those measures would be, I was just going to run through the issues that we're proposing to look at in the EA.

First of all, for cumulative effects, we're proposing to look at both water quality and fisheries. As far as geographic scope for water quality it would go from the upstream Vernon Fritz Bridge downstream to the Fun Farm Bridge. The fisheries would run from Ashton Dam downstream to the Fun Farm Bridge.

For the temporal scope of our analysis we

typically look 30 to 50 years into the future, versus the typical term of a new license. Of course, we can only do this to the extent that information allows us to do that.

The resource issues that we're proposing to look at for geology and soils would be looking at the potential release of sediment during the construction period, the potential for increased shoreline erosion for both upstream and downstream of the dam due to higher -- levels and project flow releases. And then in the event that there's accumulation of sediment around the fish stream -- if there is a sediment that has to be cleaned out, during cleaning, the potential effects of that.

Under water resources we'll be looking at the potential effects of the operation, project operations on water temperature, DO turbidity, total dissolved gas, and the ability to meet state water quality standards.

For aquatic resources I'll be looking at the potential effects of the project construction related sediment releases on aquatic habitat both upstream and downstream of -- particularly downstream of Chester Dam and particularly looking at rainbow and brown trout spawning and rearing.

We'll be looking at the potential effects of the higher impoundment levels on trout habitat. And we'll also be looking at the potential effects of fish entrainment

through the turbines, the effectiveness of the proposed screens, and then possible fate of fish that are hurt.

The terrestrial resources, we'll be looking at the effects of project construction on vegetation, on waterfowl. Also look at the potential for spread of noxious weeds and exotic plants.

We'll also be looking at the effects of construction operation on Idaho fish and game special status species. And we'll also be looking at the effects of the higher impoundment levels on project flow releases on existing littoral zone and wetlands riparian habitat and cottonwood trees both upstream and downstream.

For threatened and endangered species we'll be looking at the effects of -- potential effects of the operation and construction on all listed species and species of concern.

For recreation, we'll assess the effects of the proposed project and its operation on the existing recreational activities in the area, including, of course, the trout fishery. And then we'll also assess the ability of the proposed recreation facilities to meet current and future demand.

Under land use and aesthetics, we'll be assessing the effects on existing land use and the aesthetics in the project area.

For the cultural resources, again looking at the effects of construction and operation on historic properties and sites of concern for the Indian tribes.

And in developmental resources we'll be doing an economic analysis for the project looking at the costs of the mitigation and the effects on project economics.

MS. CARTER: For the EA preparation schedule as it currently stands, we issued the scoping document one in September -- and that's what we're doing at this particular meeting is to gather any information and scoping issues from you. We're having scoping meetings.

And then we're hoping -- We're proposing currently to issue the ready for environmental analysis notice in June of 2006. We'll issue this after we've received all the information that we feel we need to do a proper environmental analysis of the project.

And then we'll issue an environmental analysis document in November of 2006.

So now we take comments from you. We'll take them just in the order that you've signed in. And when you give your comments please make sure to speak clearly and state your name and spell it if you need to so that we can make sure it goes down correctly in the record. You can give them orally or, if you have written comments, we can also take those.

And you can also mail in your comments to us. There will be 30 days from the date that the scoping document is issued -- or I mean 30 days from -- yeah, 30 days from the meeting the scoping comment period lasts. And you can submit your comments written -- either you can mail them to us or you can file them electronically.

There are the addresses. You can -- To file electronically you can go to our website or the mailing address and send them to the secretary.

MR. FOOTE: Is there anyone else that hasn't filled out a registration form? Because right now there's -- unless Vince wants to say more?

DR. LAMARA: No.

MR. FOOTE: It looks like we just have Scott Christensen.

MR. CHRISTENSEN: Is there nobody else?

(Laughter.)

MR. FOOTE: Of course, anyone else is certainly free -- oh.

MR. CHRISTENSEN: Do I need to go up front or am I heard from back here.

MS. CARTER: He needs to come up here.

MR. ISHNICK: Yeah.

MS. CARTER: You can use the podium, too, if you'd like.

MR. CHRISTENSEN: And hide behind it?

MR. ISHNICK: Sure.

MR. CHRISTENSEN: My name is Scott Christensen. I represent the Greater Yellowstone Coalition. And I just wanted to be real brief because I plan on submitting written comments as well. But I did have some initial thoughts after the site visit today.

One of my thoughts had to do with the potential changes in hydrology downstream. And I'm not sure that I understand -- Maybe I just need to take a look at the modeling that's been done. But we have a real concern that potential changes in hydrology post-construction could have implications for the rainbow trout fisheries, and also brown trout and also Yellowstone petro trout downstream. In the springtime there's a large density of trout that stack up below the diversion area. And we think that there could be some issues associated with the change in hydrology because of the project.

Another issue --

MR. LAWRENCE: I'm sorry, but what hydrology do you mean specifically?

MS. CARTER: What is your name?

MR. LAWRENCE: Keith Lawrence, with Eco Systems Research.

I'm not sure what you mean by hydrology, changes

in hydrology.

MR. CHRISTENSEN: How the water -- where the water comes out -- How the water comes over the diversion now and how the water will come out post-construction of the project. I'm just concerned that with the river being routed all the way over on one side, and even though it is going to be sort of deflected back out into the main channel, I'm just concerned about how that potentially will affect trout.

MR. LAWRENCE: Out of that new stream?

MR. CHRISTENSEN: Yeah. I do think that there's going to be change. I mean, if there are going to be two eddies, one at the tip of the concrete embankment and one over in the far corner by the last chance canal, that's a lot different than what's currently there.

And I'm not saying that that's going to be hugely detrimental or not. I'm just saying that I'm concerned that that's a change and we don't know what's going to happen.

Another concern I have, I know there was a survey done for Ute ladies' tresses in the project area. One of the questions I have is will -- even thought there will be the same amount of water in the river, there are Ute ladies' tresses located downstream, I believe, on Fish and Games property on the New Ray Ranch. And I wonder if those could potentially be impacted by the change in hydrology.

One issue that is going to come up during the next several months is that if the Yellowstone cutthroat trout potentially becoming a listed species under the Endangered Species Act. And Fish & Wildlife Service is due to come out with their opinion on that on February 14th, I believe, of 2006. And when that opinion comes out if they do determine that Yellowstone cutthroat trout does warrant listing, I wonder how that will potentially affect development of this project.

My last comment has to do with some of the deficiencies in the additional information that was requested by FERC. And those contain a number of deficiencies or requests for more info related to fish, the YCT and rainbow trout and brown trout.

And our request is that those plans be submitted and finalized with agency review before this process -- or before we come to the next step in this process or before the EA is listed so that the agency and other interested parties have a better idea of how mitigation is going to take place and are able to analyze what the impacts are going to be. And I really feel that that's crucial, that everyone is clear on the plans that are proposed and how they will be carried out, and how they are going to ensure the agencies and also the public that their fishery resource won't be negatively impacted.

So anyway, that's all I have. And I appreciate the opportunity to comment.

MR. MATHIAS: Peter, do you accept -- in this proceeding do you accept questions on the presentations?

I'm Jim Mathias.

MR. FOOTE: Sure.

MS. CARTER: Sure.

MR. MATHIAS: Okay. I did have some, but unfortunately I didn't clarify this afternoon and I can't remember if they're in the reports I've read to date. But one of them is:

Will the powerhouse be manned 24 hours a day, 7/24?

MR. FOOTE: No.

MR. SMITH: No. It will be automated and remotely monitored.

MR. MATHIAS: In the winter -- For a good portion of the year you'll be taking all the flow from the powerhouse. If you lose line, lose online or have a turbine failure for some reason, will you have gates that shut to shut the gates on the -- close the gates on the --

MR. SMITH: Oh, yes. So the turbines will shut down and the water will be returned over the spillway crest.

MR. MATHIAS: Is that automated so that --

MR. SMITH: It will be automated.

MR. MATHIAS: Have you documented how fast a response can go up-channel with, particularly in the winter in the cold freezing weather?

MR. SMITH: We probably have not documented how fast that will take to react. However the timing of the shutdown of the turbines will be timed with the deflation of the rubber dam. So the transfer --

MR. MATHIAS: So we'll get immediate water flow.

MR. SMITH: Oh, yeah.

MR. MATHIAS: Okay.

Will the eddies that are created by the turbines interfere with the people's ability to launch boats? Is there going to be an issue on that from this remodeling?

DR. LAMARRA: No. The actual eddy that -- The eddy's that's suspected of being there -- or being modeled to indicate it's going to be there -- There's an eddy there right now. And the magnitude of the velocities going back upstream are probably twice what they are now. And that guy that was there walked his boat up that edge. So I don't think there will be --

MR. MATHIAS: You think he could still walk the boat to the edge--

DR. LAMARRA: Oh, yes.

MR. MATHIAS: -- from what you've seen in the models.

DR. LAMARRA: Yeah I think so.

And the one on the other side is not very strong at all. It just indicates that there will be an eddy over there, but it's not a very strong eddy, the one on the other -- the far bank in the corner.

MR. MATHIAS: So we're not whirlpool --

DR. LAMARRA: No, no.

You know, you have to understand that most of the velocity coming out of the turbine is taken out by -- coming out through the tailrace is taken out by the turbine. So we're probably looking at -- I don't know -- what? Three, four, five feet per second coming out of that tailrace, probably equivalent to what's there right now.

MR. MATHIAS: Okay.

DR. LAMARRA: It's just going to be coming in at an angle.

MR. MATHIAS: One last question:

Do you accept -- Will you be evaluating overall impacts of the project on the community?

MR. FOOTE: Do you mean the --

MR. MATHIAS: There is a study saying -- that shows what the value of the economic engine that the river as far as boating and fishing to the community. So then will you be looking at if there is a positive or negative value, a production on the fishery, then how that relates to

the economics of the community?

MR. FOOTE: I don't think normally that we get into that, you know, that type of economic analysis. It might come in I think probably in the recreation analysis. I mean that's where, I think if we were to do it, it would mostly likely be.

MR. MITCHNICK: This is Alan Mitchnick.

Are you suggesting that we do that? We understand that obviously it's a significant resource in the local area.

MR. MATHIAS: Yes. Trout Unlimited and the Henrys Fork Foundation recently completed a study done by Dr. John Williams of Colorado State --

MR. MITCHNICK: Would you be willing to provide that for the record?

MR. MATHIAS: That study?

MR. MITCHNICK: The study.

MR. MATHIAS: Yes, I have a copy if you would like it.

MR. MITCHNICK: Yes.

MR. MATHIAS: And from that you can quantify productivity of the fishery to an impact on a local economy.

Fish & Game did one earlier and the results were quite similar -- somewhat similar. They very much supported each other.

MR. MITCHNICK: We'll take a real close look at what's in here and take your suggestion.

MR. MATHIAS: My concern -- the reason I ask, if the project generates "x" number of dollars per year and the detriment to the fishery was "y" dollars, if "y" is bigger than "x" is the project justified? And I would suggest that that be looked at.

MS. CARTER: Thank you.

Does anyone else have any comments or anything they would also like to add?

Yes.

MR. PATTON: I'm John Patton of Trout Unlimited in Idaho Falls, Upper Tree River.

I didn't make the tour. And what they didn't put up there that I'm curious about is what is the actual footprint upstream? How far is it going to back up? And none of that has even been talked about.

MR. SMITH: It's in the license application and in the deficiency information that FERC talked about.

MR. PATTON: And how far upstream do you think it goes?

MR. SMITH: It goes up to that house that's up on the edge over from -- the difference between base load and the proposed three foot elevation, which corresponds to the 15 percent high flow, it's 800 feet upstream from the

current pool.

MR. PATTON: And you're going to back that number up, right?

MR. SMITH: Can we back it up?

MR. PATTON: Yes.

MR. SMITH: Well, we've got survey data that backs it up, yeah.

MR. PATTON: Okay.

MR. STEIMLE: If you're interested afterwards, I actually have a diagram that shows where it is now and where it will be.

MR. PATTON: That would be great.

MS. CARTER: Could you please state your name.

MR. STEIMLE: My name is Erik Steimle and I work for Ecosystems.

MR. MATHIAS: I think it's important to understand, it's like -- it's not where it is now but where it's going to be with the project. I think Brent explained it pretty well at the project site today that that high water mark is realized about 50 percent of the time under current conditions during high runoff. But -- under existing conditions that is realized.

But what will happen is when they put the rubber collar on they'll back that water up to that level constantly throughout the year. So that will be realized

for a long period of time.

It's not inundation to a higher level; it's just with greater frequency is what the deal is.

MR. PATTON: But that's normal changes in the river flow. He said we're going to leave it there permanently and that's a big change.

MR. MATHIAS: The high water marks on the south fork of the Snake are the same thing: they go up, they go down. They don't stay there permanently.

MR. SMITH: Right.

But I'm not saying that what you're saying isn't true. All I'm saying is that that's the distinction. It's not an increase from here to there; it's an increase in the amount of frequently. It's 100 percent versus, under currently conditions, where it's at that high level for only a portion of the time.

MS. CARTER: Does anyone else have any other comments or questions?

(No response.)

MS. CARTER: If not, then I guess we'll go ahead and close the meeting. I want to thank everyone for coming and taking your time out and coming -- if you came on the site visit, thank you again. And thank you for coming tonight.

We have another meeting tomorrow at 9:00 a.m.,

and you can come to that again if you like.

(Laughter.)

And don't forget, if you would like to file written comments we have the two options. And that information is also in the scoping document.

So thank you very much.

(Whereupon, at 7:50 p.m., the hearing in the above-entitled matter was adjourned.)