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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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Georgia Power Company : Project No. 485-063
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BARTLETTS FERRY HYDROELECTRIC PROJECT

Request for Comments on the PAD
Public Scoping Meeting

Valley Community Center
130 Sportsplex Drive
Valley, Alabama 36854
Tuesday, August 4, 2009

The public hearing, pursuant to notice, convened at 1:09
p.m. before a Staff Panel:

- BRANDI SANGUNETT, Federal Energy Regulatory
Commission
- GEORGE A. MARTIN, Project Manager, Georgia Power
- COURTENAY R. O'MARA, P.E., Southern Company

P R O C E E D I N G S

1
2 MS. SANGUNETT: Hello, everyone. my name is
3 Brandi Sangunett, I'm with the Federal Energy Regulatory
4 Commission, and I'm an ecologist in the Division of
5 Hydropower Licensing. So what we're here today for is a
6 scoping meeting. This is my first scoping meeting, and my
7 colleagues abandoned me at the airport; and I've never seen
8 this presentation except for about five minutes ago, so bear
9 with me. I will do the best I can, and I'll have to use my
10 cheat sheet here a little bit.

11 First I want everyone to introduce themselves,
12 and we'll go over the meeting protocols. We'll discuss the
13 process of the ILP, the integrated licensing process; and
14 then we'll have some discussion from Georgia Power,
15 describing the project and how it currently operates; then
16 we'll discuss the issues and then we'll discuss the study
17 proposals.

18 On the back table we have a registration form; we
19 would love it if everyone could please sign their name, give
20 us their contact information so we have a record of who
21 attended. And maybe if you want to pass that around, that
22 would be great.

23 Also, we have some things on the back table for
24 reference; I believe the scoping document is back there, the
25 organizational chart here for the integrated licensing

1 process, has all the steps printed. There's also a map of
2 the project, and some briefing cards.

3 All that is available in the back. Also we have
4 a court reporter, so everybody needs to speak loud and clear
5 and they need to introduce themselves and state what
6 organization they're from and spell your name so that he can
7 understand you clearly.

8 So the purpose of our scoping meeting is
9 basically to get information about what the issues are, and
10 those issues are described in the scoping document, which
11 all of you should have gotten in the mail; and it's
12 available on eLibrary as well, if you don't have a copy of
13 that; and it's discussed in Section 2 of that scoping
14 document. So we'd like to give the stakeholders and the
15 resource agencies an opportunity to discuss whatever issues
16 they think are relevant regarding the relicense for this
17 project.

18 Now I'll describe the integrated licensing
19 process. So first we have a pre-application document; you
20 might want to refer to this. I'm sure a lot of you are
21 familiar with this nice flow chart. The first step is we
22 have the pre-application document or PAD -- you're going to
23 hear me say "PAD" a lot -- and the key is to have FERC
24 involved in the very beginning and to get all the issues
25 addressed and dealt with, and any disputes over those

1 issues, and how they should be addressed in the beginning
2 of the acquisition process, so that when the actual
3 application is filed, all of that is worked out.

4 This procedure was developed in 2003 in the hopes
5 that the relicensing process would become a more streamlined
6 process, and have strict guidelines for the schedule. So
7 that's another key component, scheduling and getting FERC
8 involved in the beginning, and getting all this addressed
9 from the getgo.

10 (Slide.)

11 Here's that chart again. It's divided into two
12 portions; the prefiling activity. And you'll notice that
13 there are numbers on this that describe where this box is
14 discussed in the regs, the regulations for the Federal
15 Energy Regulatory Commission.

16 So you have also a timeline, so between each
17 process how much time can elapse. For example, after the
18 PAD is filed and how that procedure should go -- the numbers
19 are listed there -- you have 30 days to initiate a tribal
20 consultation meeting, for example. Sixty days for the
21 Commission to issue a notice that we've received the PAD.

22 Then you have the post-filing, and that's once
23 all the scoping documents and the scoping meetings have
24 taken place and all the study plans have been determined and
25 carried out, and the results of that have been reviewed,

1 that's when the actual application gets filed.

2 So the prefiling, preliminary license proposal
3 due 150 days prior to the license expiration, for those of
4 you who were not aware of that; and comments on the proposal
5 are due within 90 days. So those are some dates that are
6 important to know; and specifically for this project,
7 comments are due September 4th, I believe; I think there's a
8 slide that goes over the specific schedule for this project.

9 And then there are lots of places where you can
10 get information on the PAD or like our court-reported
11 meeting here today will be available on line from the FERC
12 website; and I believe there's a card in the back where
13 Georgia Power has a website designated for this project as
14 well. And the information is on the back table.

15 I guess that's it; I can turn it over to the
16 Georgia Power folks now.

17 MR. LINDSAY: It may be useful to let everybody
18 know where we are in the timeline, the overall timeline.

19 MR. MARTIN: We sure can.

20 My name is George Martin, and I'm a biologist
21 with Georgia Power, and I'm the Project Manager for the
22 Bartletts Ferry Relicensing, and I want to join Brandi in
23 welcoming you all to scoping.

24 And to answer Arnold's question, within the
25 integrated licensing process, we have already completed our

1 pre-application activities in this bar over here before the
2 blue boxes began; and we have filed our pre-application
3 document and our notice of intent to relicense. We have
4 also requested non-federal designation as the entity that
5 will negotiate Section 106 of the Historic Preservation Act
6 as well as Section 7 of the Endangered Species Act.

7 We have, through the Commission, made contact
8 with a number of tribes that were listed in the pre-
9 application document, and we have heard back that several of
10 those tribes are interested in a conference, a web
11 conference perhaps, and we're still working those details
12 out with FERC. Of course the Commission did notice the PAD,
13 and they also filed and presented their Scoping Document 1,
14 which leads us to this Box No. 4, where we are today, where
15 the Commission is hosting NEPA scoping, and tomorrow we will
16 have our site visit and project tour down at the reservoir
17 and at the dam. And then on Thursdays, much like this is
18 the scoping meeting for the State of Alabama, we'll have a
19 scoping in Fortson, Georgia for the Georgia stakeholders.

20 So there's where we are within the ILP. What I
21 wanted to talk a little bit more about was what we've done
22 prior to filing the PAD and the Notice of Intent. We wanted
23 to get out in front of this process and work with our
24 stakeholders and identify issues and identify areas of
25 interest and concern. So what we did early on was we

1 developed a relicensing website, and this is the web address
2 for that relicensing website, and everything that we filed,
3 everything that we discussed with the Commission is going to
4 be on this relicensing website as well as on the eLibrary,
5 which is FERC's website; and this is:

6 www.GeorgiaPower.com/lakes/hydro/Bartletts.aspect. And that
7 is our internal website that we initiated early on.

8 We also have an e-mail box for communications
9 with our stakeholders, and that is:
10 bfrelice@southernco.com. And you can send us e-mails; and
11 Courtenay O'Mara, who is with Southern Company Generation,
12 Hydro Services, is helping me to project manage issues, our
13 coordinator; and between Courtenay and I, we will get back
14 with you on any e-mails that you might send in to us.

15 The third thing that we did is we put together an
16 operations primer, which Courtenay is going to go over in
17 detail; we provided that with the PAD, and we also presented
18 that at our town hall meetings which we held early in
19 January.

20 You heard me mention earlier that we had the
21 briefing cards. This is a good example of one of the
22 briefing cards. This is a stakeholder involvement briefing
23 card. They are one-pagers; we have ten or eleven of them,
24 and they briefly discuss what the focus of the briefing card
25 is about. For example, we have others on the value of

1 hydropower, recreation, water resources, fisheries, a number
2 of different topics that you can just take a one-page look
3 at.

4 These are also housed on the website, as well as
5 we've got some hard copies in the back that we can talk with
6 you around the room about, the larger blown-up briefing
7 cards as posters.

8 In addition to that, we've had face-to-face
9 resource agency consultation meetings, we've met with ADCNR,
10 we've met with Fish & Wildlife, we've met with WRD and EPD
11 and some of the other NGO groups we've talked with on the
12 phone. And I mentioned earlier, we've had town hall
13 meetings; in January of this year we held one here in this
14 location, and then we also held one in Fortson where we'll
15 be having our Georgia scoping meeting. And I mentioned the
16 poster session, and we have subject matter experts. There
17 are a number of subject matter experts here today within
18 Georgia Power, and we have biologists, we have a fisheries
19 biologist, we have a wildlife biologist, we have lake and
20 reservoir managers, we have engineers, we have folks that
21 operate the plant and land managers, otherwise, and folks
22 that work with dispatching the units, and we've got some
23 environmental consultants with us.

24 So any questions that you may have, I think we've
25 got the subject matter expert in the room to discuss it and

1 fully understand it.

2 One of the last things that we had during our
3 town hall meetings was we had a full ILP training class that
4 took about an hour and a half for that class to take place;
5 and then lastly, what we did during pre-application
6 activities was we did meet with the Harding Homeowners
7 Association at their spring meeting, and we had much similar
8 to this setting, where we had a poster session with them.

9 So those are the pre-filing activities. Courtenay
10 is going to get into this a lot more; but I think everybody
11 knows where in the world we are. We're on the Chattahoochee
12 River between the States of Georgia and Alabama, just north
13 of Columbus in Phenix City, at the Bartletts Ferry project,
14 which is right here below Langdale and Riverview, upstream
15 of Oliver, North Highlands and Goat Rock, which are Georgia
16 Power facilities. Georgia Power has six facilities on the
17 Middle Chattahoochee, and this is the third project on the
18 Middle Chattahoochee reach of the river. And here's a good
19 aerial photograph; and Courtenay is going to go over some of
20 the project works when she opens up her operations primer.

21 So that's all that I wanted to cover, and to make
22 sure everybody signs in. And Brandi, did you want folks to
23 introduce themselves around? I think you mentioned that.

24 MS. SANGUNETT: Yes, that would be great.

25 MS. O'MARA: I'm Courtenay O'Mara, I'm an

1 engineer with Southern Company, Hydro, and I'm going to be
2 doing the next part of the presentation, which is an
3 overview of what is contained in the operations primer.

4 MR. WEST: My name is Ben West, I'm a biologist
5 with the U.S. Environmental Protection Agency.

6 MR. STEARNS: I'm Ricky Stearns, Georgia Power,
7 I'm a management specialist.

8 MR. HILL: I'm Keith Hill, I'm a lake resources
9 manager at the Bartletts Ferry Land Management Office.

10 MR. LINDSAY: I'm Arnold Lindsay, Georgia Power
11 Company. I'm the plant manager at Bartletts Ferry.

12 MR. BARNETT: I'm Mike Barnett, Georgia Power
13 Company, I'm a land management specialist at the Bartletts
14 Ferry office.

15 MR. DODD: My name is Tony Dodd, I'm an aquatic
16 biologist with Georgia Power Company.

17 MR. NICHOLS: Nick Nichols, a fish biologist with
18 Alabama Department of Conservation and Natural Resources.

19 MR. GREENE: I'm Chris Greene, fish biologist
20 also with Alabama Department of Conservation and Natural
21 Resources.

22 MR. SAMMONS: Steve Sammons, I'm in the
23 Department of Fisheries at Auburn University.

24 MR. LAYMAN: Steve Layman, I'm a fisheries
25 biologist with CH2M Hill.

1 MR. VEIRA: Fitzgerald Veira, Troutman Sanders,
2 legal counsel to Georgia Power.

3 MS. MEUSHAW: Hallie Meushaw, Troutman Sanders as
4 well, legal counsel to Georgia Power.

5 MR. BROADWELL: Tom Broadwell, a biologist with
6 Georgia Power.

7 MR. CHARLES: Joey Charles, I'm a hydro license
8 coordinator, Georgia Power land management and cultural
9 resources management.

10 MR. KNUDSEN: Chad Knudsen, land management,
11 Georgia Power.

12 MR. GLISSON: Bill Glisson, with Bartletts Ferry,
13 I'm a land management specialist.

14 MR. HARDIE: Wayne Hardie, Hydro Superintendent,
15 Georgia Power and Chattahoochee Hydro Group.

16 MR. SMITH: Greg Smith, Georgia Power, Hydro
17 Coordinator for Hydro Resources.

18 MR. SLAUGHTER: Joey Slaughter, fish biologist
19 for Georgia Power.

20 MR. CANDLER: Jim Candler, wildlife biologist,
21 Georgia Power.

22 MS. DYKE: Heather Dyke, CH2M Hill. I'm an
23 environmental planner, recreation, and socioeconomics
24 specifically.

25 While your eyes are on me, has anybody not signed

1 in?

2 (No response.)

3 Thanks.

4 MS. O'MARA: I've introduced myself before, I'm
5 Courtenay O'Mara, and I'm an engineer, again with Southern
6 Company. My group provides technical support to the Georgia
7 Power hydro plants, and one of our functions is relicensing.

8 So I'm going to jump right in, and refer you
9 back, I think probably you all have the PAD document. In
10 the appendix of the PAD is an operations primer. I'm not
11 sure which appendix it is, I think B. A lot of my graphs
12 that I'm going to go through come from this document. So if
13 you've got questions, you can always go back here or talk to
14 me.

15 Let's start with the project works. We have two
16 powerhouses at this plant; the West, you'll sometimes hear
17 us refer to as the 'old powerhouse.' It's got four units,
18 three were built in the '20s, one was added in the 1950s,
19 and then we have our East powerhouse which houses our Units
20 5 and 6, which are larger units.

21 This entire section in here was added in the
22 '80s. You have your principal spillway. On top of the
23 spillway, you've got gates pretty much all the way across.
24 The water goes through penstocks down to the powerhouse from
25 Lake Harding, it gets discharged from the tailrace. The

1 discharge is directly into Goat Rock Reservoir, which is our
2 plant, Goat Rock plant downstream.

3 Over here, if you come tomorrow for the site
4 visit, if you come up the Alabama side, you'll drive past
5 the flood control spillway; it's a labyrinth-shaped
6 spillway; that's designed to pass the PMF, which is the
7 probable maximum flood which is a flood which has never
8 happened in this area. In 2003 there was some major
9 flooding in Columbus; that was never activated or used.

10 What happens during a high flow event is we run
11 all the water through the turbines, as much as we can get,
12 and then if the incoming inflow exceeds the turbine
13 capacity, we start opening gates in order to match the
14 inflow. So what we're trying to do during a flood event is
15 not make flooding worse downstream but to, as much as we can
16 exactly match the inflow. And we are pure run-of-river
17 during a flood event, high enough flood event.

18 The project statistics; like I said, 1920s, we
19 first went on line. Reservoir area is 5850 acres. Our
20 normal full pool is 521. We typically operate in the range
21 between 519 and 521, so we keep our fluctuations within 2
22 feet, typically. And I'm going to go through a number of
23 graphs later that take you through different high flow,
24 medium flow, and low flow events to show you how our
25 reservoir operates during those different situations.

1 We've got 57,680 acre-feet of conservation
2 storage; that is from elevation 510 to 521. Below 510 we
3 cannot operate our turbines. So that's the range in which
4 we are allowed to fluctuate the lake; however, like I said,
5 we typically only keep it within a 2 foot range, typically.

6 The average annual inflow into the project is
7 6150 cfs, and that is a number that's based on over 100
8 years of record; that is the West Point Gage, which is just
9 downstream of West Point Dam; and then added to that the
10 local inflow from Osanippa Creek, Halawakee Creek, all the
11 local tributaries that come in below that West Point Gage.

12 If you run the average, about 82 percent of the
13 river flow coming down is from West Point Dam with 18
14 percent being from those tributaries.

15 We term our operation, modified run-of-river.
16 That means we store water for hours or days at that time;
17 and I'll get more into relative size of project and what
18 that means in relation to run-of-river versus a storage
19 project. But we are modified run-of-river on a weekly
20 basis. What comes into the project goes downstream.

21 We found that it's helpful to kind of give folks
22 some perspective on relative lake sizes. I know when I
23 first started, a lake was a lake; but that's not entirely
24 true. We have selected small, medium and large reservoirs
25 to categorize different lakes across the state, and I'll

1 take you through what are the features of each of those
2 types of lakes.

3 A small reservoir has no storage; it's what
4 termed pure run-of-river, so that means the inflow is always
5 equal to the outflow. Most of those are old mill sites.
6 Georgia Power actually has Langdale and Riverview, which are
7 just that stream in Bartletts Ferry, those are run-of-river.

8 And these were put in a long time ago because of the need
9 for a steady power; so at a mill, you need steady power
10 throughout the day. Or a lot of them today don't even have
11 any power. So that's a small reservoir.

12 The next size is a medium reservoir, and this is
13 what Bartletts Ferry is. We do have some storage; we store
14 water for hours or days with that storage, and release it.
15 But over the week, we don't have enough storage to hold any
16 more water. So at the end of the week we can't hold onto
17 any more and we have to let it go. So we modify flows with
18 our storage on an hourly or daily basis, but on a weekly
19 basis, it's coming right through our plant.

20 Georgia Power built Bartletts Ferry for the
21 purpose of power generation.

22 All right, third you have large reservoirs.
23 These are reservoirs that have significant storage. They're
24 stored for months or years, they store the water for months
25 or years; typical of that in the State of Georgia are the

1 large Corps reservoirs: West Point, Buford. They collect
2 the water during high and flow periods and then time that
3 release over the year. So they are capable, with their
4 significant storage, to hold water for months and years as
5 opposed to days and hours like a medium reservoir.

6 Because they are so large and so expensive to
7 build, those projects typically have multiple purposes.
8 Whereas Georgia Power's Bartletts Ferry is a medium
9 reservoir with power generation. The Corps is operating
10 their projects for power generation, flood control,
11 navigation in this stretch of the river, recreation -- they
12 have multiple uses, and that is used to justify the high
13 cost.

14 I've refer to all of the individual dams, or some
15 individual dams. On the Chattahoochee River we've got a
16 number of dams Georgia Power and Corps-owned. We've left
17 out Langdale
18 and Riverview, some of the really small run-of-river,
19 because they don't have storage.

20 So this is a comparison of dams on the
21 Chattahoochee River, and what percentage of the storage
22 volume is available. Buford is 63.3 percent, so it's the
23 big dam on the Chattahoochee River. West Point, 17.8
24 percent with Walter F. George at 14.2. You can see
25 Bartletts Ferry has 3.4 percent of the storage on the

1 Chattahoochee River. And that 3.4 percent is the full 510
2 to 521, the 11-foot operating range; that's where that
3 percentage comes from. So in order to access 3.4 percent
4 you'd have to drop the lake significantly.

5 In summary, the Corps has got almost 96 percent
6 of the storage in Georgia, whereas Georgia Power's got a
7 little over 4 percent.

8 MR. WEST: Quick question. Are there any water
9 supply intakes on Lake Harding?

10 MS. SANGUNETT: Can you identify yourself?

11 MR. WEST: My name is Ben West, I'm with EPA.
12 I'm wondering if there are any water supply intakes on Lake
13 Harding.

14 You mentioned the use of the river, is it used for water
15 supply?

16 MS. O'MARA: There are two intakes; I believe
17 it's Harris County and Opelika.

18 Is that right? Okay. And I'm not sure what
19 their limits are. That is in the PAD. We can look it up
20 after and talk about it to me, too.

21 (Slide.)

22 So now I want to go through a little bit about
23 the influence of what these large storage projects have on
24 flows in the river.

25 We've got a bar chart. On the left we've got

1 flow and CFS -- that's cubic feet per second. This is a
2 BYMA bar chart; and this is compiled from data from January
3 of '76 to July of '08. We chose 1976 because that was when
4 West Point first became operable.

5 So what we did was compared what the water flows
6 on the river would be with and without Buford and West
7 Point, which are the two large storage dams upstream of this
8 area of the river. Without the effect of those large
9 storage projects, that's the blue color; and with the
10 storage effect, that is the purple color.

11 So let's look at March, a high flow month, a
12 spring month. Here you go, without the reservoirs in place
13 you would see much higher flows on the river, say 9,000.
14 With the reservoirs in place, you're seeing a lower flow
15 downstream of the dam. So you're seeing 7,000 CFS. That
16 difference is the amount of water that's being stored by
17 those large storage projects; that's what they're designed
18 to do.

19 So that is in a wet month, in March. Let's go
20 down to a summer month where we've got low flow. Here it's
21 just the opposite; the effect by the dams in place results
22 in a higher flow. So with the dams in place you're sending
23 4,000 to 4,500 CFS, and the incoming flow is roughly 3,000
24 CFS. So that's the supplemental flow that's being sent
25 downstream by these storage projects. Again, it's what

1 they're designed to do.

2 This graph is on Bartletts Ferry, it's a line
3 graph, it's presenting the same kind of information that we
4 saw in the previous slide; that was a bar graph -- this is a
5 line graph. This is the seven-day average inflow and
6 outflow from Bartletts Ferry project. I said earlier we
7 modify flows on an hourly to daily basis, on a weekly basis
8 we pass everybody through.

9 You may not be able to tell, but there are two
10 lines on here, the inflow is a blue line and outflow is the
11 pink line. They're right on top of each other, and this is
12 the rolling seven day average. So on a weekly basis, the
13 inflow matches the outflow.

14 (Slide.)

15 So let's look at just Bartletts Ferry and West
16 Point; and remember, West Point is just upstream of us with
17 two run-of-river projects in between. They're both peaking
18 power plants, they have relatively similar hydraulic
19 capacity; that's the size of -- that's how much the turbines
20 can pass. So Bartletts Ferry is at 24,000 CFS and West
21 Point is 19,000 CFS. So their powerhouses are relatively
22 the same size.

23 Bartletts Ferry discharges directly into a
24 reservoir, whereas West Point discharges into a riverine
25 stretch of the Chattahoochee; I think it's 12 miles of river

1 between West Point before it starts entering Bartletts Ferry
2 project.

3 Our daily discharges at Bartletts are greater
4 than 500 CFS, 99.8 percent of the time. West Point has a
5 minimum flow because they are discharging right in the
6 river. They typically run 600 to 800 CFS all the time, with
7 peaking; and they prefer not to peak on the weekends.

8 (Slide.)

9 Now that we know kind of about the entire system,
10 I want to focus in on just Bartletts Ferry and I want to
11 take you through -- I categorize flows as medium flows, high
12 flows -- like a flood event, and low flows like the drought
13 that we're in. And I'm going to take you through what West
14 Point is doing, what Bartletts Ferry is doing in a typical
15 week.

16 So on this graph we've got flow; this is one
17 week. So if you've got -- Saturday, we're starting with
18 Saturday, Sunday, Monday, Tuesday, Wednesday, Thursday,
19 Friday. This is a medium flow week. For this particular
20 week, this is in 1998; we kind of randomly selected the week
21 to closely match what flows we were trying to target.

22 So this particular seven day weekly average was
23 4742 CFS. Recall that the average is 6150 CFS. So this
24 gets us in the range of the average. The purple is the West
25 Point release; the yellow is the Bartletts Ferry release,

1 and that corresponds to the flow over here. On this axis,
2 you've got the reservoir elevations. We're tracking
3 reservoir elevation with this light blue line, so you have
4 to look to the right when you're looking at that line.

5 Here you see, on Saturday and Sunday, you see
6 West Point at their minimum flow; they're running about 500
7 or 600 all weekend long. Georgia Power is doing a little
8 bit of peaking on Saturday and Sunday. During the week,
9 Monday through Friday, you see West Point start to peak.
10 This is happening, this line right here is 12 noon, and it's
11 running until about, really until about midnight, from low
12 spot to low spot on the graph. And I think that will make
13 sense to you; we come home from work, we fire up our
14 dishwasher and our stove and our air conditioning, and these
15 peaking areas correspond to that need for power from all of
16 us.

17 So both West Point and Bartletts Ferry peak at
18 the same time. You can see that as Bartletts Ferry is
19 peaking at this yellow line, the reservoir elevation starts
20 to pull down. So we're pulling from our storage to make
21 these peaking releases. As the water from West Point
22 arrives at Bartletts Ferry, at Lake Harding, we're refilling
23 that storage; so here you see the elevation climb back up.
24 So you're replenishing your storage with water from West
25 Point. Takes about four to six hours for water to get from

1 West Point down to Bartletts Ferry.

2 So that's a typical average flow week. Let's
3 take it to another scenario. Flood conditions. I want to
4 go ahead and focus in at, this is West Point on the purple
5 line. This is the same type graph, however I want to note
6 that the flow -- check out the change in scale here. We're
7 talking 10,000, 20,000, 30,000, 40,000 CFS and so forth. So
8 we're on a much different scale.

9 To jump right in, West Point is here, 19,000 CFS
10 is their plant capacity. So they're discharging all they can
11 from the plant. Then what they're doing is opening gates.
12 So as inflow is coming in, their flow is picking up. This
13 is going through their plant plus over their spillway
14 through the gates.

15 Bartletts Ferry, you see it takes a while for
16 that water to get there. Bartletts Ferry does the same
17 thing. We get to about 24,000 CFS, our plant capacity, and
18 then we start opening gates. And if you watch, as we're
19 opening gates, the reservoir elevation is still starting to
20 climb; so that means there's more inflow coming into the
21 project than leaving.

22 So we're opening a gate one at a time until we
23 start to see the reservoir elevation level off. And at
24 that point in time is when we stop opening gates and the
25 reverse is true of the down slope.

1 I'd like to show you the incoming flow at
2 Bartletts, the 140,000 CFS in this particular graph. This
3 is 2003, for reference; that was the flooding event in
4 Columbus that I think a lot of people from this area are
5 familiar with. The inflow to the plant at Bartletts was
6 140,000. If you'll look at the discharge from West Point,
7 it's roughly 70,000. That difference is what's coming in in
8 those local tributaries; they're just getting pelted with
9 water coming down.

10 And in the case of a flood condition, 82 percent
11 I mentioned was the amount of inflow into the project on
12 average from West Point, with 18 percent being from
13 tributary flow. In a flood condition, your percentage from
14 local tributary flow is actually greater; and the reverse is
15 true during a drought: Because of no rain you have very
16 little local inflow and a greater percentage of our flow is
17 coming from West Point.

18 So let's move on to a low inflow condition. This
19 weekly flow is from 2007. The average flow is 1350 CFS just
20 two years ago. The peaking patterns remain the same; you
21 can see that the peaks for both Bartletts and for West Point
22 are skinnier and shorter, because there's less water
23 naturally coming down the river for both plants to operate
24 by.

25 So we see that West Point has their minimum flow,

1 they're peaking a little, and that Bartletts is doing the
2 same thing. The pattern of peaking does not change, the
3 elevation of Bartletts Ferry reservoir over the week, we're
4 drawing a little bit more down out of our storage. This is
5 520 and this is 519. I told you before we typically keep it
6 between 519 and 521, and even during the drought of 2007 --
7 that was the first year of our current drought -- we stayed
8 within that two foot range. And that is because of the
9 amount of flow that's made from West Point. West Point was
10 still sending flow downstream during 2007.

11 So let me make sure I've hit everything.

12 MR. WEST: Can I ask a quick question?

13 MS. O'MARA: Absolutely.

14 MR. WEST: When you're not peaking, and with no
15 minimum flow requirement, is it just leakage out of the dam?

16 MS. O'MARA: There is a little bit of leakage.
17 We did a measurement, it's not -- I think it's a couple
18 hundred CFS. Very insignificant. But you're also
19 discharging directly into a reservoir as opposed to a
20 riverine range.

21 MR. WEST: The leakage is 200 CFS, is that what
22 you said?

23 MS. O'MARA: I'd have to go back and check. We
24 have that actual measurement. Two or three hundred, from
25 everything.

1 The next part of the presentation, I'm just going
2 to take you through the same flow scenarios, and we're just
3 going to look at reservoir elevations.

4 This was 2003, and periodically we do fall
5 maintenance drawdowns, this is for the benefit of our
6 homeowners to do dock maintenance, shoreline structure
7 repair. Throughout most of the year. 2003 is considered a
8 normal flow year. You can see 519, 521 in the fall
9 maintenance drawdown.

10 The next slide is, typically it's the same thing,
11 it's 2003 except this is 2004, so it's a year without a fall
12 drawdown; and throughout the year we maintain our typical
13 operating range.

14 Now I'm going to move into 2007. We did a few
15 calculations using flows from the West Point Gage. That
16 gage is one of the USGS's centennial gages, which means it's
17 been around for more than 100 years collecting data, so we
18 have a really good dataset. Actually have 112 years of
19 data, and in 2007 that was the second worst drought for this
20 stretch of the river. And here you see we're operating the
21 same way as we would during a normal year.

22 The next year, 2008, as we move further into the
23 drought -- that was actually the worst drought in 112 years
24 from this area. Again, we're typically operating in that
25 two foot range for most of the year. During the

1 particularly dry months you have a little bit further drop
2 in your reservoir, and that's about three feet. So still,
3 in the worst drought of record, we're in good shape at the
4 reservoir.

5 (Slide.)

6 George wants me to mention, we ran a calculation
7 the other day to see how much more we were drawing it down
8 below the 519 level, that lower level; and in 2008 we
9 dropped below 519 about 10 percent more than we did in the
10 previous ten years. So we are dropping it down more, but
11 not significantly.

12 We just added this slide. This is 3 July, so
13 through last week. You're seeing the same trend; we are
14 still maintaining the 519 to 521, not seeing too much of an
15 effect. I ran some stats. In 2009, you may be interested
16 to know that the February flows at the West Point Gage was
17 the lowest in 113 years, and July flows were also -- they
18 were the second lowest in 113 years. So we don't know how
19 the whole year is going to shape out to be, but we have a
20 few months that are showing us some trends of low flow. And
21 we are below 519 2.1 percent of the time thus far this year.

22 I think I have a summary slide. I took you
23 through a lot of information, and we can post this
24 presentation if it help you upon our website; I think I'm
25 planning on doing that anyway. The summary I'd like for you

1 to -- the take-home points are that we were the medium-sized
2 reservoir, we were built specifically for power generation,
3 we modify flow
4 on an hourly and daily basis, but not on a weekly basis;
5 we're passing it all through. That's what we term "modified
6 run-of-river."

7 We don't have a minimum flow, and that's because
8 we discharge directly into the Goat Rock Reservoir.
9 Typically, we spend a lot of time on reservoir elevations,
10 99 percent of the time we're between 519 and 521 -- if you
11 exclude those fall maintenance drawdowns. And in 2008 we
12 were below 519 about 10 percent more than we were in a
13 previous long term range, and during 2008 we were still
14 within about three feet. Because of the 82 percent average
15 inflow from West Point, obviously we are strongly influenced
16 by our inflow into the project.

17 So that's all I have. Any questions?

18 MR. WEST: Does the existing license have any
19 operating bans?

20 MS. O'MARA: There are no fluctuation limits on
21 the existing license. That's just how we typically operate.

22 MR. WEST: That's just how you operate.

23 MS. O'MARA: It's a matter of practice; we try to
24 keep it within that range.

25 MR. WEST: Are you proposing to put in an

1 operating protocol like that in the new license? Or to
2 maintain --

3 MS. O'MARA: We're proposing to continue our
4 operations; that would include no minimum flow, no
5 fluctuation limits, and we feel that we've been very
6 effective managers of the lake level and inflows in this
7 area. So we don't really feel that it's necessary and
8 aren't proposing any right now.

9 MR. HARDIE: Wayne Hardie with Georgia Power.
10 The leakage is not through the dam.

11 MS. O'MARA: No.

12 MR. HARDIE: I just want to make sure everybody
13 knows that it's for the units.

14 MS. O'MARA: That's a good point, it's through
15 the wicket gates of the turbine units.

16 MR. HARDIE: Because I don't want anybody to
17 think the we've got 200 CFS leaking through the dam.

18 (Laughter)

19 MS. O'MARA: The dam structure is fine.

20 Any other questions, even from our own crew? Did
21 I miss something?

22 MR. LINDSAY: I would like to mention a couple
23 things. One is, we do have the intake from Harris County
24 and Opelika, and that does limit also how far we can draw
25 the lake down, not just operational issues; I don't know

1 what those limits are right now.

2 MR. WEST: I was going to ask you that, the 510,
3 is that driven by the turbine or is it driven by the water
4 supply intake --

5 MS. O'MARA: Well, the 510 is actually driven by
6 the turbine. I believe that Opelika might be the furthest
7 down, they need a minimum submergence on their intake for
8 their pump. I believe 510 satisfies that as well.

9 MR. WEST: So they're below 510.

10 MR. LINDSAY: It's just something we have to be
11 aware of, but not only at low flow -- I mean, they make it
12 still pump, but they start having issues, you know,
13 cavitation.

14 MS. O'MARA: Cavitation issues. Good point.
15 Anything else on this? It's a lot of
16 information.

17 MR. LINDSAY: One other thing you might want to
18 mention, too, about, while there's not a minimum flow at
19 Bartletts Ferry, there is minimum flow at North Highlands,
20 because all these dams are connected. You can point out
21 North Highlands.

22 MS. O'MARA: Yes. Bartletts Ferry is licensed by
23 the FERC. It's got its own individual license. Goat Rock,
24 Oliver and North Highlands, they're part of our Middle
25 Chattahoochee project. It was recently relicensed, and

1 there are minimum flow requirements. Downstream, North
2 Highlands, the furthestmost, discharges directly into the
3 river.

4 So we have minimum flow requirements down there.
5 Bartletts Ferry sends pulses of water to ensure that we have
6 enough water at this lower project to meet our minimum flow
7 requirements.

8 MR. LINDSAY: I just wanted to make sure
9 everybody understood, because you talked earlier about a
10 week -- we can't hold water for a week and then generate;
11 the water --

12 MS. O'MARA: We are constantly sending it. The
13 flow requirements at Middle Chattahoochee are -- at North
14 Highlands specifically, is 800 continuous CFS all the time,
15 1350 CFS daily, and 1850 weekly.

16 MR. WEST: Is that year round, or is there
17 seasonality?

18 MS. O'MARA: No, it's year round, and all of
19 those are prefaced, we call it our Or Inflow. Because so
20 much of the water coming into our entire system is driven by
21 other operations. We have 800 CFS instantaneously or
22 inflow, whichever is less. 1350 daily or inflow, whichever
23 is less. 1850 CFS weekly or inflow, whichever is less. And
24 that's because we don't control the operations upstream of
25 us, so if we've got lower flows down through the system,

1 we've got to pass it. And if we've got lower flows coming
2 in through our system, we're going to pass the lower flows,
3 below those targets.

4 So if you've got a weekly average of 1350 CFS, if
5 that was my low inflow example, that week, if we can meet
6 the 1350 daily, we would have met that, but on a weekly
7 basis that was less than 1850. So we would have passed the
8 1350, whatever was coming to us.

9 All clear? Who wants to operate the dam
10 tomorrow?

11 Just kidding. I'm here if you have questions
12 later.

13 MS. SANGUNETT: How about we take a ten minute
14 break, until we get into our discussion of the resources.

15 (Recess.)

16 MS. SANGUNETT: All right, so what we're going to
17 do now is open it up for discussion on different resource
18 issues, and we have a list here. It's a demo list, it's not
19 exhaustive, of course; it's just a list based on the PAD
20 that we got from the licensee, from Georgia Power. It's
21 broken up into these categories: geology and soils, aquatic
22 resources, terrestrial resources, RTE, rec and land use,
23 cultural resources and developmental resources.

24 Pretty typical list of resources that are covered
25 in an environmental assessment, which again is the purpose

1 of the scoping meeting, is to address or discover issues
2 that need to be addressed in the environmental assessment
3 for NEPA.

4 So let's start with geology and soils. One of
5 the issues or concerns are the effects of continued project
6 operation on shoreline erosion and sedimentation in the
7 reservoir and tailrace of the project.

8 Anybody have any comments, concerns or questions?

9 MR. WEST: The PAD doesn't talk about effects of
10 project operations on reservoir shoreline and sedimentation.
11 Your slide says reservoir and tailrace in the project.
12 You're going to include the tailrace as well for that
13 analysis?

14 MS. SANGUNETT: Evidently. Let me just take a
15 look here at the notes.

16 MR. WEST: I'll take you at your word.

17 MS. SANGUNETT: I believe so, yes.

18 MR. WEST: Okay, thank you.

19 MS. SANGUNETT: Because once again, I didn't
20 write this. So I'm going to make assumptions.

21 Any other comments, questions, concerns?

22 All right, we'll move on to the next resource
23 issue.

24 Aquatic resources. The first one is the effects of
25 continued project operation on water quality in the

1 reservoir.

2 All right, I'll move on. The next one is the
3 effects of continued project operation on water quality,
4 particularly dissolved oxygen levels and temperatures in the
5 project tailrace and downstream project-affected waters of
6 the Chattahoochee River.

7 Okay, no comments, questions or concerns.

8 Some of the other aquatic issues: Effects of
9 continued project operation and water use on water supply
10 withdrawals and wastewater assimilation in project-affected
11 waters upstream and downstream of the project.

12 MR. MARTIN: Brandi, I just have a question.

13 MS. SANGUNETT: Okay.

14 MR. MARTIN: I was referring to the scoping
15 document, and these bullets, as written in the presentation,
16 were presented in the scoping document as the resource
17 issues identified by the FERC, not as areas of --

18 MS. SANGUNETT: That's good to point out, because
19 that answers this question. Thank you for clarifying that.

20 So in case you didn't hear that, these are issues
21 identified by FERC and they may not coincide with what is in
22 the PAD from Georgia Power.

23 Effects of continued project operations on
24 shoreline permitting, on fish habitat, and aquatic resources
25 in the reservoir including potential effects of rates and

1 duration of reservoir drawdowns on aquatic resources.

2 The next one is: Effects of continued project
3 operation on aquatic habit for shoal bass in the
4 Chattahoochee River at the upstream end of the project
5 boundary and in the lower, free-flowing reaches of
6 tributaries entering project-affected waters.

7 Effects of continued project operation and
8 maintenance on state-protected aquatic species such as the
9 blue stripe shiner, et cetera, and other state-listed
10 species.

11 The next one is the effects of continued project
12 operation on invasive aquatic species including invasive and
13 nuisance aquatic vegetation.

14 The next one is the effects of continued project
15 operation on aquatic habitat in the project tailrace area.

16 And a couple more in the aquatic resource area:
17 Effects of continued project operation on fish passage.
18 Effects of continued project operation on potential fish
19 entrainment and turbine-induced mortality at the powerhouse.

20 If anyone has any issues that are not listed here
21 that you would like to bring up, feel free to do so at any
22 time, that it preferably stick to the grouping of the
23 resource area.

24 Terrestrial resources. Does anybody have
25 anything else for aquatic resources before we move on to

1 terrestrial resources?

2 Okay, terrestrial resources. Effects of
3 continued project operation on state-protected terrestrial
4 species such as the bald eagle and other state-listed
5 species potentially occurring in the project area.

6 Effects of continued operation on shoreline
7 development and project-related recreation on native and
8 nonnative plants and wildlife, including wetlands and
9 littoral habitats and associated wildlife in the project
10 area, as well as upland invasive plant species within the
11 project area.

12 Effects of continued project operation on
13 federally listed species potentially occurring in the
14 project area. This is both aquatic and terrestrial species.

15 Next area, recreation and land use. Effects of
16 continued operation on recreational opportunities including
17 the Bartletts Ferry reservoir and project tailrace area.

18 Ability of existing public access and
19 recreational facilities to meet current and future
20 recreational demand.

21 Adequacy of existing shoreline management plan
22 and shoreline buffer zone to address land use practices
23 within the project boundary.

24 The next area is cultural resources. Effects of
25 proposed actions and alternatives on properties that are

1 included in or eligible for inclusion in the National
2 Register of Historic Places.

3 And the final grouping is the developmental
4 resources; proposed operation on project economics. And the
5 operation of the projects during the recent droughts, low
6 flow operations, drought operations, and evaluating the need
7 for a drought management plan.

8 All right. Before I move on to the proposed
9 study plans, I wanted to point out a date that you all
10 should be aware of. September 4th is the date that I was
11 referring to earlier, and that is when your comments are due
12 in regard to the scoping document and study request, which
13 is what we're going to need.

14 So the issues that we listed earlier in each of
15 the resource areas; do you have any issues or concerns, you
16 can file comments by this date, September 4, 2009?

17 Now when we start talking about study requests,
18 there are criteria that the study requests have to meet. It
19 needs to describe the goals and objectives of the study
20 proposal; and by the way, we have a handout on the back
21 table that has all this criteria. Explain the relevant
22 resource management goals, describe any existing information
23 and explain relevant public interest if the requestor is not
24 a resource agency.

25 Also, it's important to demonstrate that the

1 proposed study and its methodology is consistent with
2 accepted scientific practice.

3 Okay. This is just a summary of the study
4 criteria. I think the actual listing is more extensive than
5 that.

6 Show the nexus to the project operations and the
7 effects, and how the study results will inform the
8 development of license requirements. And it should be
9 accepted practice for the methodology. Also, there should
10 be an evaluation of the level of effort and cost behind the
11 study request; how much will it cost for the study to be
12 carried out.

13 So again we're going to look at these in the
14 different resource groupings; one -- and these are proposed
15 by Georgia Power, correct?

16 MR. MARTIN: Yes.

17 MS. SANGUNETT: Okay. Soils. Under that, we
18 have Georgia Power proposed to characterize the distribution
19 and sources of erosion and sedimentation within the project
20 reservoir based on a shoreline field reconnaissance survey,
21 and review and analyze existing information and aerial
22 photography.

23 This will be conducted within the project
24 boundary, and a literature review will also be conducted for
25 the tributary watersheds upstream of the project.

1 Any comments, issues, concerns?

2 MR. WEST: What is the project boundary? Is
3 there anything funky in the -- is it basically the dam and
4 the powerhouse facilities? Or is there any positional lands
5 either above or below.

6 MS. O'MARA: Generally within the project
7 reservoir, it follows the 525 contour. There are some areas
8 that are park areas that are adjacent to the reservoir where
9 it might be slightly different. The project boundary
10 downstream, the project is a couple hundred feet, I would
11 say. There is a figure in the PAD -- back there on the
12 board there is an actual outline of the project boundary; so
13 you probably want to go take a look at that. The 525, that
14 map is going to follow.

15 MR. MARTIN: To respond to your earlier
16 observation about the erosion and the tailrace, the project
17 boundary does extend into the tailrace. So we will be
18 evaluating erosion within the project boundary, within the
19 tailrace.

20 MS. O'MARA: It's at least after the confluence
21 of the two streams come together.

22 MR. WEST: So it's downstream.

23 MS. O'MARA: It's downstream of that.

24 MS. SANGUNETT: Okay, next one.

25 Under water resources, they will characterize

1 water use, availability and water quality in the project
2 area, and characterize the effects of project operations on
3 water quality and the project reservoir and in the tailrace
4 area immediately downstream from the dam.

5 Comments?

6 Under fish and aquatic resources, one study
7 proposal is to conduct field surveys, characterizing
8 representative aquatic habits and the species composition,
9 relative abundance and habitat use of fish communities in
10 the free-flowing habitats.

11 The next one is to evaluate the occurrence and
12 habitat use of shoal bass within the project boundary.

13 Another one is to evaluate the effects of
14 continued project operation on shoal bass habitat and
15 reservoir fisheries habitat.

16 And the next one is to evaluate the potential for
17 fish entrainment and turbine-induced mortality.

18 Any other comments or anything before I move on
19 to the terrestrial? Okay.

20 Terrestrial resources. One study proposed is to
21 describe terrestrial, wildlife and botanical resources
22 occurring in the project area, including lists of plant and
23 animal species that use representative habitats, and to
24 identify invasive species.

25 Next they propose to describe the flood plain,

1 wetlands, riparian habitats and littoral habitats occurring
2 in the project including lists of representative plants and
3 animal species, identify invasive species, and prepare a map
4 delineating wetland, riparian and littoral habitat.

5 Under rare, threatened and endangered species,
6 they propose to develop a list of species known to occur
7 near the project, identify suitable habitats within the
8 study area, and describe species distribution and habit use
9 based on habitat requirements in the field survey.

10 The next one. Moving on to recreation and land
11 use, they propose to describe recreation, land use, and
12 visual aesthetic qualities in the project area, characterize
13 current types and levels of recreational use, and evaluate
14 the need for additional recreational access or facilities at
15 the project.

16 Next area is cultural resources. They propose to
17 identify the area of potential effect, identify known
18 historic resources, identify unknown archaeological
19 resources and evaluate the potential for effects upon
20 historic properties.

21 And that's the end of the list for the proposed
22 studies, proposed by Georgia Power.

23 And again, the deadline for your comments or
24 additional study requests is September 4th, and it is very
25 important if you file something, to use the proper project

1 name and number so that it doesn't get lost in our system.
2 Basically it's just this big electronic depository, and we
3 have to search using text searches. So if the project
4 number or name is incorrect or missing, it could get lost,
5 so we don't want that to happen.

6 So you want to include not only the project
7 number, which is P-485, but also the sub-docket number,
8 which is 063. And the name. So if use both the name and
9 the project number then the chances of it getting lost are a
10 lot less. And you can follow in sections, in the scoping
11 document under Section 6, and I don't know what she means by
12 section c.

13 I know we have handouts on how to e-file, but I
14 don't have them and I believe they were going to bring them.

15 MR. MARTIN: Appendix A is the seven criteria for
16 a study request.

17 MS. SANGUNETT: Oh, I see. Okay.

18 So follow the instructions for the study
19 criteria.

20 So again, know the docket number, know the sub-
21 docket number, and this is where you go to file anything.
22 You go to this website and then click on Dockets and
23 Filings, then you go to eFilings, then you want to select to
24 electronically file a document. You can also eSubscribe, so
25 if you want to track any other filings that come in

1 regarding this project, you can set up a subscription to get
2 an e-mail sent to you that tells you something's been filed
3 on this, and it gives you a link to the filing in eLibrary.

4 Then you can also search eLibrary to find any
5 other relevant documents, and view them as well.

6 I think that concludes the scoping meeting,
7 unless anybody has any other questions.

8 (No response.)

9 All right, I guess we're finished. Thank you
10 all for coming and thanks for bearing with me. This is my
11 first time, as I said before. Georgia Power brought lots of
12 information, so check that out.

13 (Whereupon, at 2:37 p.m., the scoping meeting
14 concluded.)

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