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UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

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- Free Flow Power Corporation : Project No. 12829-001
- FFP Project 28, LLC : Project No. 12861-001
- FFP Project 32, LLC : Project No. 12921-001
- FFP Project 41, LLC : Project No. 12930-001
- FFP Project 42, LLC : Project No. 12938-001
- FFP Project 54, LLC : Project No. 12915-001
- FFP Project 57, LLC : Project No. 12912-001

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PUBLIC SCOPING MEETING

Scotlandville Branch Library
 7373 Scenic Highway
 Baton Rouge, Louisiana 70807
 Wednesday, April 29, 2009

The public hearing, pursuant to notice, convened at 5:30
 p.m. before a Staff Panel:

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STAFF PANEL

STEPHEN BOWLER, Office of Energy Projects

ALLYSON CONNER, Federal Energy Regulatory
Commission

MICHAEL PINCUS, OGC, FERC

FRED WINCHELL, Louis Berger

TYLER RYCHENER, Louis Berger

MARTY BOWERS, Louis Berger

Also RAMYA SWAMINATHAN, Free Flower Power

JON GUIDROZ, Free Flower Power

CHRIS WILLIAMS, Free Flower Power

PUBLIC SPEAKERS

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Jackson Logan, AAG, Louisiana Department of Justice

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P R O C E E D I N G S

MR. BOWLER: Thank you for coming out tonight.

This is the seventh meeting of our -- fifth, plus two site visits -- seventh gathering of our Free Flow Power / Mississippi River Lead Hydrokinetic Projects scoping process in Baton Rouge, Louisiana on April 29, 2009. And I'm Stephen Bowler from the Federal Energy Regulatory Commission, Division of Hydropower Licensing. And I'll get us started tonight and introduce some of the staff here, introduce the process that FERC will be using as the lead agency in reviewing this proposal, and talk about our relationship with the Corps of Engineers, their role in the process, the schedule.

I'll talk about the information we're requesting of you and all the stakeholders interested in the process. We'll give Free Flow Power an opportunity to present the details of the proposal to you. And finally, we'll give you an opportunity to speak into the record. We have a court reporter here, he's keeping a formal record of this meeting for us to be in the public record of this proceeding. And at the end I will take some questions, if there are outstanding questions on the FERC procedures and how we will be reviewing this proposal over the next few years. I will leave detailed questions on the project at this stage to be directed to the Free Flow Power people on the side, and if

1 there's clarifications during their presentation, and if
2 there's details that if you want to understand better, we
3 can take some questions to understand the proposal.

4 I'm Stephen Bowler, I'm the co-coordinator,
5 actually; I'll be working on this project with Sarah
6 Florentino; she's back in Washington holding the fort there
7 this week, and she'll be in Memphis and St. Louis running
8 meetings next week, and I'll be back there.

9 Also with us today we have some of our resource
10 specialists. I'll be working on water resources, water
11 quality, water quantity and aquatic biology issues, as well
12 as co-coordinating. And also with us we have Allyson
13 Conner, who is a Recreation Specialist with the Commission;
14 and Michael Pincus from our Office of General Counsel; and
15 we have some support from, contracting help from Louis
16 Berger, who will be helping us with the work load and the
17 technical aspects, some technical specialty work on this
18 project; and leading that group, the project coordinator,
19 Fred Winchell; Marty Bowers, who will be handling recreation
20 and land use and aesthetics and cultural. And Tyler
21 Rychener, who will be dealing with terrestrial resources.
22 And we have other staff; we basically have an in-house and a
23 parallel contracting staff that cover the range of issues,
24 so we have engineers and what else isn't represented here.
25 We have a terrestrial person, Sarah Florentino does

1 terrestrial; so we have a full complement on both sides.

2 I moved the slide up to the front; it used to be
3 towards the back because I'd like to start with an overview
4 of the FERC process so you can understand where we are in
5 that process and where we're heading and where the
6 opportunities are to participate in the process.

7 First of all, the Commission is placed in the
8 Department of Energy, but it is truly an independent
9 regulatory commission; it's lead by five commissioners, all
10 are appointed by the president, confirmed by the Senate.
11 Right now we only have four because of the transition; three
12 can be from the same party. And they make the decisions
13 based on the statutes and their policy calls about both the
14 individual project decisions and about new rules and
15 policies for the Commission.

16 The Commission is a regulatory agency, pure and
17 simple; that's the function of the agency. We're about 1500
18 staff, almost all of us are based out of Washington. And
19 there's a group that does electric grid, wholesale market
20 regulation, interconnection regulation, and then the
21 Division of Hydro Licensing is in the Office of Energy
22 Projects, which does infrastructure siting including oil and
23 gas pipelines, liquid natural gas terminals, hydropower, and
24 a little bit of transmission siting; and of course this new
25 area of technology which falls in hydropower, hydrokinetic

1 technologies, which we define as power from water not using
2 the head behind a dam. So that includes wave energy, tidal
3 energy, ocean current energy and in-river hydrokinetic
4 energy.

5 The process that we're entering now is actually
6 the pre-application process. So in 2003 the Commission, in
7 cooperation with a number of agencies and stakeholder
8 groups, in order to make the process run a little more
9 quickly and to get issues out on the table as early as
10 possible to avoid sort of train wrecks late in the process,
11 for processing hydropower licenses is using what is called
12 the integrated licensing process. It's a very front-loaded
13 process, and the concept is, a couple years before the
14 license application comes in, you start the prefiling
15 process and the FERC staff are heavily engaged in that
16 process.

17 It begins with filing a pre-application document,
18 which Free Flow Power did on January 15th, and a Notice of
19 Intent to File a License. The pre-application document is
20 essentially a collection of existing information on the
21 areas where the project is proposed, and a description of
22 the proposal.

23 The next phase, and we're still in prefiling, is
24 scoping, where we put out our first estimate based on our
25 analysis of what we think the scope of the project and the

1 list of issues is, and we come out to these meetings to get
2 input from stakeholders on other issues that should be on
3 the list, and the scope of those issues.

4 A key element of the integrated licensing process
5 also in prefiling is a very prescribed study plan process
6 where the agencies and stakeholders propose study plans,
7 they make study requests; the developer responds with a plan
8 in response to those requests, and then there's sort of a
9 negotiation period with some informal discussion. The
10 developer modifies their proposal based on those
11 discussions. The stakeholders then formally respond
12 basically on, they can raise to the Commission any concerns
13 that weren't addressed through the informal process, and we
14 finally, as the lead agency, make a determination about what
15 studies need to be carried out in order to have the
16 information in the license application for the National
17 Environmental Policy Act review.

18 The developer carries out those studies. That
19 whole process establishes what studies need to be done, and
20 a schedule that everybody understands, and at the end of the
21 studies, with a couple of steps in there, they'd submit the
22 application; we then request terms and conditions and
23 comments from stakeholders and agencies, and we use that
24 response to the application and our own independent analysis
25 to generate, in this case an environmental impact statement,

1 a draft environmental impact statement, and then we go out
2 for meetings on that. So we have scoping right now; we'll
3 the have meetings about the study determination which right
4 now would be -- there's a schedule adjustment which I
5 haven't put in here yet -- would be late summer, probably.
6 Starting June 15th, June 14th through the beginning of next
7 year. In that process we'll have meetings on the study
8 plans and then when we release the draft environmental
9 impact statement, we'll have meetings as well. So three
10 sets of meetings where we'll be in the area to discuss the
11 project.

12 The information we get back from the response to
13 the Draft EIS, environmental impact statement we'll use to
14 finalize the environmental impact statement. That serves as
15 staff's recommendation to the appointed commissioners on
16 what we suggest that they do in terms of whether or not to
17 license the project and what conditions to include. And
18 then they make a decision, and if they decide to authorize
19 it, we write a license which has articles in it which are
20 essentially the conditions, and that serves as what other
21 agencies call the Record of Decision.

22 So that's how we get to a license decision and
23 order. It's a couple years before the license application,
24 depending on the study requirements, and then a couple years
25 after to do the National Environmental Policy Act and

1 Federal Power Act part.

2 Free Flow Power has 55 preliminary permits for
3 sites in the Mississippi River between St. Louis and New
4 Orleans. Up until now I've been talking about licensing;
5 before licensing, in the Federal Power Act there's this
6 concept of a preliminary permit, which does not permit
7 construction or give any authorizations or land rights; but
8 it keeps the developer's priority of application while
9 they're doing the prefiling process. Essentially, it keeps
10 somebody else from coming in and filing a license while
11 they're engaged with us in working towards, through the
12 study process towards the license.

13 In this case, as you can imagine, that integrated
14 licensing process is a lot of work for everybody, with all
15 the meetings and filings. And we've allowed Free Flow Power
16 to proceed with a lead project proposal where of the 55
17 projects, they are pursuing 7 of them that are sort of
18 representative of the issues, we hope, across many of the 55
19 sites or the other 48 sites, through the integrated
20 licensing process, through the front-loaded process. We've
21 given them a waiver on the other sites to use an older
22 process that the Commission has that's essentially more
23 back-loaded, where the schedule is much more flexible and
24 the hope is that during the prefiling and the study
25 negotiations on the seven lead sites, many of the issues can

1 be -- the consultation for many of the issues on the other
2 sites can be done so that it will be easier to process those
3 sites. We'll have some of the study issues worked out, and
4 that type of thing.

5 It's worth noting that all those sites will be
6 handled through the traditional licensing process, or the
7 TLP, will have scoping, comment periods, and a full NEPA
8 review on their own. So it doesn't mean that they will be
9 short-circuited in any way, but the hope is that we can gain
10 some efficiency through the lead project process. And
11 currently, this scoping stage only deals with the seven lead
12 projects, formally.

13 The purpose of scoping, as I referred to earlier,
14 it meets our National Environmental Policy Act and some of
15 our Federal Power Act requirements in terms of evaluating
16 environmental effects and looking at the licensing issues.
17 We have a balancing requirement where we're supposed to
18 balance the need to generate electricity with the protection
19 of fish, wildlife, the environment, recreation and other
20 competing uses, and we're trying to identify issues and
21 concerns to be addressed in our environmental impact
22 statement from all stakeholder groups.

23 We issued the Scoping Document 1 on March 16th,
24 which is essentially our first description of the issues,
25 and we'll issue a Scoping Document 2 which will include the

1 issues that we add based on the feedback we get.

2 This proposal is new and it's a new territory,
3 but there's an issue related to navigation that actually was
4 anticipated a long time ago by Congress; which is that the
5 Corps of Engineers has authority to manage navigation in the
6 waters of the U.S. That goes back to the Rivers and Harbors
7 Act in the 19th Century. When Congress passed the Federal
8 Power Act in 1920, they actually resolved the jurisdictional
9 issue rather than creating a conflict between the agencies
10 or a dual jurisdiction. They put the Corps of Engineers'
11 authority into the Federal Power Act. So the Corps will be
12 putting mandatory conditions, if there's a license issue
13 there will be mandatory conditions to manage navigation in
14 any license order that the Commission would issue.

15 And this is a statement that the Corps has
16 formally offered to us to read at the meetings about their
17 role in the project, and I'll read it quickly on their
18 behalf. It was submitted by Jeff Artman, who is the
19 Hydropower Business Coordinator for the Mississippi Valley
20 Division, and the statement is:

21 The U.S. Army Corps of Engineers
22 supports the development of
23 renewable energy projects where
24 these projects are feasible, and
25 in the case of the Mississippi

1 River, where these projects are
2 compatible with Corps missions of
3 navigation, flood risk management,
4 environmental stewardship, and
5 recreation. The Mississippi
6 Valley Division of the Corps of
7 Engineers has provided comments to
8 FERC and Free Flow Power regarding
9 the hydrokinetic projects being
10 planned for the Mississippi River.
11 The Corps will continue to work
12 with FERC and Free Flow Power in
13 the future to resolve these
14 comments.

15 Again, we're requesting information from all the
16 stakeholders on the issues. An important element is the
17 study requests to begin the study determination process. In
18 our regulations, we ask that anybody who submits study
19 requests address seven criteria that help us have a rational
20 method for analyzing the ones we finally determine have to
21 be done, if there's any disagreement about that.

22 It's very helpful if people have knowledge of the
23 river that's not in the record that would help us in our
24 decision making to file that information with us. If you're
25 a part of the tugboat industry or any industry or

1 stakeholder who has a familiarity with the river and you
2 have information that you think would help us make a better
3 analysis, a better decision about these issues, file it with
4 us by mail -- I'll go through some mechanisms for that. You
5 can read them into the record, you can hand them to the
6 recorder, you can mail them to us, you can file them
7 electronically, but get them into the official record,
8 because we can only use information that's in the record for
9 our decision making.

10 Finally, especially for agency folks, if you know
11 of resource plans or proposals, things that are going to be
12 happening in the river that we should be aware of, please
13 make us aware of that.

14 At this point I will let Ramya Swaminathan from
15 Free Flow Power describe some details of their proposal.

16 MS. SWAMINATHAN: Thank you, Stephen. Good
17 evening, my name is Ramya Swaminathan, I run project
18 development for Free Flow Power Corporation, and I wanted to
19 take a minute here to tell you a little bit about our
20 projects and then invite you to -- there's a lot more
21 information available in our pre-application document which
22 is available on our website; and the materials that I'm
23 going to go through tonight, that's the presentation itself,
24 is also available on our website, which is: [www.Free-Flow-](http://www.Free-Flow-Power.com)
25 [Power.com](http://www.Free-Flow-Power.com). There are dashes between each of the words.

1 I think Stephen probably covered a lot of this
2 information; I'm not going to linger on it. But I just
3 wanted to mention that we have 55 proposed projects on the
4 Mississippi River; they range in geographical dispersion
5 between St. Louis to slightly below New Orleans. Our
6 project sites vary between 2 and 16 river miles each, and we
7 are in seven jurisdictions, seven State jurisdictions,
8 ranging from Louisiana all the way to Missouri and Illinois.

9 The FERC preliminary permits for these 55
10 projects were issued in early 2008, and as Stephen
11 mentioned, our pre-application document and our Notice of
12 Intent which has kicked off this scoping process was filed
13 by us in January of 2009.

14 Seven of these projects, the lead sites -- and
15 I'll provide some detail about those projects a little later
16 on in this presentation -- are being processed under the
17 integrated licensing process, and we requested waivers to
18 use the traditional licensing process or the TLP for the
19 remaining 48 sites.

20 We wanted to note that hydrokinetics is a
21 compelling alternative in terms of renewable energy sources
22 in this region of the country where other sources that have
23 been harnessed by other areas, other communities and other
24 regions of the country like wind and solar are simply not
25 viable for geographic endowment reasons, and therefore we

1 believe that because of the proximity of the Mississippi
2 River, which is the third largest river basin in the world,
3 and in terms of flows and volumes in the U.S. the largest
4 such system, we believe it's a major source of renewable
5 energy and green jobs in this region.

6 To give you a sense of the turbine generators
7 I'll go a little bit further into some design features, but
8 this slide is divided with a picture of the prototype that
9 we developed, which is one meter in outside diameter --
10 that's an actual photograph -- that has been tested in a lab
11 environment in Massachusetts, and it generates 10 kilowatts
12 of output in flows of 3 meters a second.

13 The left side of the slide gives you some
14 renderings of a next-generation device where we took both
15 from an engineering perspective and also some other issues
16 like fish friendliness, we altered some of the key design
17 features. This second-generation device is 3 meters in
18 outside diameter, it generates 10 kilowatts of output in
19 flows of 2.25 meters a second. And there's an exploded view
20 in the middle that gives you a sense of the device in some
21 detail; and I'll go through some of those design features in
22 detail on this slide.

23 Some of the critical points in design are that it
24 has a low tip speed ratio, which mitigates fish injury from
25 mechanical strike. There are really no high velocity

1 regions to cause turbulent shear stress, which can be an
2 issue with some kinds of turbines; no small gaps that would
3 cause grinding injury; and there's a de minimus pressure
4 gradient across the entire device, because this is a device
5 that generates in ambient river flows rather than from a
6 head environment.

7 Our intent is to deploy these below the
8 navigational channel, as the Mississippi is a major
9 commercial waterway; and that obviously is something that
10 stakeholders like the Corps and the Coast Guard are
11 extremely concerned about. There is minimal onshore
12 equipment, which largely consists of cabling that will
13 onshore to a small shore station. We have a considerable
14 amount of flexibility in locating that onshore equipment as
15 well such that it is proximate to end users or to grid
16 equipment.

17 And the turbine was designed such that it has no
18 chemical lubrication and the bearings are hydrodynamic,
19 which means they're lubricated by water.

20 We wanted to pause a moment and talk about
21 deployment strategy. We're committed to flexible deployment
22 strategy, given site-specific conditions. In general terms,
23 the river is deeper; the deep draft part of the river
24 extends from Baton Rouge south, and we know that the channel
25 is much shallower north of Baton Rouge going all the way up

1 toward the rest of our project areas; and so we believe in
2 the end, south of Baton Rouge in the deep draft parts of the
3 river we will deploy, in all likelihood, in arrays of
4 turbines on pilings driven into the river bed; and because
5 of the depth, we'll be able to stack them in more vertical
6 arrangements such as are represented on the right hand side
7 of this diagram.

8 North of Baton Rouge, where the river becomes a
9 lot shallower, particularly the further north you go, the
10 navigation channel is maintained to a depth of 9 feet; and
11 in all likelihood, our deployment strategies will have to
12 accommodate that shallower environment, and therefore we may
13 rely more heavily on lateral installations where you have
14 either one or just two turbines stack and suspended between
15 pilings in a lateral fashion.

16 The O&M, the operation and maintenance and
17 installation are designed to be sort of standard marine
18 equipment and procedures; and obviously there's a tremendous
19 wealth of knowledge and information from people who work on
20 the river and already do fairly standard procedures on the
21 river, and our intent -- we anticipate that in terms of
22 servicing, the servicing will be done from a barge that will
23 lift a sleeve of turbines off the piling driven into the
24 river bed, service those units, take out any defective ones,
25 replace them, and continue further with the servicing of

1 further turbine fields.

2 (Slide)

3 I wanted to give you a sense of scale. I'm
4 hoping you can see some green dots in the middle of this
5 page -- Thank you, Stephen, for dimming the lights.

6 This is a site down in the New Orleans area; it's
7 our Free Flow Power Site No. 8, Greenville Bend, and the
8 small bright green dots are intended to be pilings with six
9 turbines on each one of the pilings; so if you magnified
10 this I think probably like 10,000 times you might be able to
11 see those, but those are actually to scale. And each one of
12 those pilings has six of those turbines arranged three and
13 three on either side. Those pilings, the two rows are 75
14 feet away from each other, and each piling is a distance of
15 50 feet from the next one, up-river or down-river. So
16 that's intended to give you a scale of the deployed turbines
17 relative to that site.

18 I'm not going to linger much on the next three
19 pages. As I mentioned before, this information is extracted
20 from our pre-application document, and this presentation
21 itself is available on the website, but we wanted to give
22 you some description of the lead sites, the seven sites that
23 we are going through the scoping process for. One is in the
24 New Orleans area, one is in the Baton Rouge area, two are in
25 the Memphis area, one in Cape Girardeau, and finally one in

1 St. Louis.

2 The seven projects together are intended to be
3 representative of the entire slate of 55 projects; so there
4 are some of these projects that are in heavily
5 industrialized areas, some in heavily commercial or urban,
6 residential settings; there are some in much more rural
7 areas surrounded by farmland; there is a variety of habitat
8 for both aquatic and terrestrial species, and there's a
9 variety of interconnect environments, depending on what
10 businesses, commercial, industrial or really rural areas
11 surround those sites. And you'll see on this page and the
12 previous one some notes about the surrounding land use and
13 habitat as well.

14 We have thus far engaged in a fairly extensive
15 process of consultation with various stakeholders and
16 resource agencies, and we wanted to pause for a second to
17 give you a sense of some of the most important concerns that
18 have come up that have been voiced by the resource agencies.
19 They include navigation and water quality, aquatic and
20 terrestrial species and cultural-historic sites. Each of
21 these resource areas is discussed on a site-by-site basis in
22 a fair amount of detail within our pre-application document.

23 Thank you.

24 MR. BOWLER: I'll give people an opportunity in a
25 few minutes to express opinions into the record; but at this

1 point are there any technical questions about what Free Flow
2 Power is proposing, while Ramya and the other Free Flow
3 Power people are here?

4 Yes, sir.

5 AUDIENCE: What was the website, or is it listed
6 in one of these documents?

7 MS. SWAMINATHAN: It's www.Free-Flow-Power.com.
8 And our company's name is Free Flow Power. The only trick
9 is the dashes between the words.

10 MR. BOWLER: Any other questions?

11 AUDIENCE: Curiosity. You said it's low RPM.
12 What's the average RPM for these turbines?

13 MS. SWAMINATHAN: I'll defer to Chris, our CTO.
14 But it's about 45 revolutions per minute.

15 MR. WILLIAMS: I'm Chris Williams, the Chief
16 Technology Officer.

17 The device rotates at about 40 revolutions per
18 minute, which would be 2.25 meters per second, normal
19 operating speed. And that speed is essentially linearly to
20 the water velocity, so if the speed goes down -- if the
21 water goes down 50 percent, the rotation speed goes down by
22 50 percent.

23 AUDIENCE: That's pretty -- low ratio to output?

24 MR. WILLIAMS: Well, it's large, because the edge
25 velocity is still large, and that's very important in the

1 design of the device so it's not going to chop up fish.

2 AUDIENCE: What about debris?

3 MR. BOWLER: Can you come to the microphone?

4 MR. WILLIAMS: The question is, what about debris
5 with the turbines?

6 AUDIENCE: All this stuff floating down the
7 river.

8 MR. WILLIAMS: Well, there are three classes of
9 debris. There's the things that float, there's the things
10 that float, roll along the bottom, whether sunken barges or
11 old cars or whatever, whatever tends to be rolling along on
12 any given day, And then there's the thing we have to watch
13 out for, which is waterlogged things, things of neutral
14 buoyancy floating down the middle.

15 There's two ways that we handle this; one of
16 which is with specific design choices, one of which is to
17 make the shrouds of the device -- in those diagrams, the
18 curved parts at the end out of a compliant plastic. We're
19 using polyethylene for the shrouds so that much like a car
20 bumper, they don't crack in half, they will take a dent
21 rather than do that. And we acknowledge that at a certain
22 point there are situations where events will happen which
23 will seriously damage or destroy turbines, and that becomes
24 more of, in a sense, a business issue than a technical
25 issue; it's an insurance and maintenance issue. There are

1 some things you simply cannot design a device to survive in
2 an environment like this, so it's an approach of mitigating
3 the frequent events with design and dealing with the other
4 events as part of an accurate cost assessment for
5 replacement.

6 AUDIENCE: I spoke with a few folks about my
7 representation, and aside from that, what is Free Flow's
8 policy if, say there's to be river diversions for purposes
9 of coastal restoration where you're diverting fresh water
10 and sediment in order to --

11 MR. WILLIAMS: The question is, what is our
12 policy surrounding any future changes to the parts of the
13 Mississippi River for diversions for coastal restoration?

14 We have a process; we consult actively with the
15 Corps of Engineers, both for their present activities and
16 for their planned activities in the future. But most of
17 those diversions will be taking place in areas where the --
18 it will affect the overall flow rate and sedimentation rate,
19 but the river has to be maintained as a navigable waterway;
20 so to the extent that it is maintained as a navigable
21 waterway it also has to have sufficient flow that we will be
22 able to make use of that. And I doubt that any diversions
23 for environmental reasons, much as others might wish it
24 would be otherwise, will inhibit the commercial use of the
25 river; which is also what essentially, it allows us to be

1 able to extract energy.

2 MS. SWAMINATHAN: The other point I'd make on
3 that is, in large part, the areas that we will want to
4 deploy our turbines are going to be in the deepest and the
5 fastest parts of the river, which are typically going to be
6 on the outside of bends; and a lot of those places for one
7 are revetted, and they're also where the navigation goes,
8 essentially for the same reasons that we want to be there;
9 they're deep and they're fast.

10 And so in all likelihood, our aims are really not
11 going to compete with coastal restoration aims; we're not
12 going to want to be in the same areas.

13 AUDIENCE: Well, there's a lot of competing uses
14 for the river.

15 MS. SWAMINATHAN: Absolutely, and we recognize
16 that. And obviously our business purposes and desires are,
17 have to be reconciled in the end with other competing uses.

18 MR. BOWLER: And the competing uses are the major
19 part of our analysis; and things like future plans are
20 exactly what we both would like to have entered into our
21 record so that we are analyzing those; and of course we're
22 working closely with the Corps on the things they're aware
23 of. And the other aspect is that we look at the
24 comprehensive -- the Federal Power Act requires us to look
25 at the comprehensive plans that are present in the region.

1 AUDIENCE: I just wanted to make sure that, I
2 understand what Free Flow Power is saying, that putting in
3 the deepest part has to be -- the Corps' main goal is for
4 navigation and that that channel has to remain navigable;
5 but I want to make sure that ten years down the road Free
6 Flow isn't saying "Hey, these diversions that are occurring
7 are causing us problems." Because there's about \$3.2
8 billion' worth of coastal restoration projects going on
9 currently, or that are starting and going forward; so that
10 would be a concern that the State would have.

11 MR. BOWLER: That's exactly -- I would encourage
12 you both to get it into the record and to actually -- you
13 know, you can propose a study request that would look at
14 those issues.

15 Let me wrap up with some of the procedural stuff,
16 and -- Yes, sir?

17 AUDIENCE: Would the turbine placement tend to be
18 more in the center of the river, or near the shore, or would
19 that be site-specific depending upon channel and depth?

20 MR. WILLIAMS: The question is, where would the
21 turbines be placed in the river? Basically all of our sites
22 are in bends in the river. We avoid the crossings, because
23 that is where the Corps dredges, because that's where the
24 river slows down and tends to drop silt and sediment. So we
25 place our turbines on the outside of the bend; basically the

1 outside side of the thalweg, the place in the river which is
2 the deepest and where the water runs the fastest. But
3 within each site, the turbines are placed based upon a more
4 detailed analysis of the water flow patterns in the site
5 combined with information that we learn from other competing
6 uses, whether it could be for example a wreck, or mussel
7 beds, something which would cause us to have to avoid a
8 certain area.

9 But it's an important thing to remember about our
10 sites is that the density of our turbines is not that high;
11 we have latitude in where we placed the devices so we can
12 have successful deployments even when there are reasons why
13 we can't place the turbines at particular locations in a
14 site. It's not like we're building a bridge where you can't
15 have a bridge with gaps in it and have it work very well.
16 Our sites can work if you have a group of turbines for 800 a
17 yards, a gap where there aren't any for a while, then
18 another group of turbines. And we're aware of the existence
19 of potential competing uses and factor that into the initial
20 density planning that we have done, such that we don't end
21 up with a project that won't work due to having to have
22 places where we can't place turbines.

23 MR. BOWLER: We'll take one more from the back.

24 AUDIENCE: What are the major benefits of this
25 project for the stakeholders and the university.

1 MR. WILLIAMS: The question is what is the
2 benefit of the projects for the stakeholders and the
3 university.

4 AUDIENCE: And the community.

5 MR. WILLIAMS: And the community. Well, on the
6 one hand the availability of locally-generated electricity
7 can be a secondary, resilient source of electricity in
8 situations of natural disaster and the like; there's the
9 ability for, there's considerable employment opportunity for
10 the construction; these are large civil infrastructure
11 projects which use the existing skill base that is available
12 here. We're not bringing in, this is not a rocket science
13 project, this is a construction project at the point it
14 interacts with the community, so it will have an effect on
15 local employment both during the construction phase and
16 during the maintenance phase.

17 These devices don't get put in there and just
18 ignored; they're not just a busy project for a year. They
19 will need yearly maintenance, scheduled maintenance where
20 we'll send out barges and cranes and the units will be
21 lifted up and inspected and perhaps repaired. So there will
22 be also the possibility of repair operations taking place
23 here; it's unlikely that having manufactured devices but
24 installed them here that they would disappear somewhere else
25 to be repaired; there would be local repair-rebuilding

1 facilities in order to keep the devices in operation.

2 MR. BOWLER: Yes, sir.

3 AUDIENCE: Is there a prototype that would be
4 observable instead of interpretation?

5 MR. WILLIAMS: The question is, is there a
6 prototype that's observable. We have a project which is at
7 the vanilla refinery down the road, where we'll be
8 installing one of the smaller, the 1-meter diameter
9 prototype device that we built; that will be being installed
10 here sometime in the next few months. And shortly after
11 that we will be installing additional devices; they may not
12 be in Baton Rouge, but they will be in some of our sites in
13 this general area, and that will then indeed lead to further
14 deployments as we collect information from the field about
15 how those devices behave, and what we need to do to further
16 improve their reliability and efficiency. So which will of
17 course then eventually lead to pilot installations on the
18 sites where we -- as part of the permitting process.

19 MR. BOWLER: Let me just say, there is a cross of
20 projects that which would be outside of the Commission's
21 jurisdiction if they're not connected to the electric grid
22 that could be a prototype phase that wouldn't be under our
23 authority. It was laid out in a 2005 policy by the
24 Commission, which is informally called the Verdant Rule;
25 that if people aren't connected to the national electric

1 grid or not displacing power from the grid and they're
2 testing projects for a short time, they can do things like
3 install a prototype without going through the whole
4 licensing process. When they get into generating power
5 towards the grid commercially or as a formal pilot project,
6 they do have to come to us for licensing.

7 So if they were to do a prototype experiment, it
8 could provide information to this process that would be used
9 in the analysis, and that could be very valuable
10 information; but it might not actually be part of this
11 review to authorize that.

12 I also want to mention that the benefits of the
13 proposal will be analyzed independently by the Commission in
14 the environmental impact statement. So the developer
15 obviously will put forth what they think the benefits are in
16 their application to us, and when we're looking at the
17 various issues, we will analyze the benefits as well as any
18 environmental issues.

19 Yes?

20 AUDIENCE: I'm interested in knowing about the
21 university that's right here on the river, in terms of
22 whether or not the -- whatever your projections are, would
23 that be something that may have to be looked at in terms of
24 being in that --

25 MR. BOWLER: Certainly from the Commission's

1 perspective, the university is a stakeholder in the process
2 as a riverside landowner, a major institution, a major part
3 of the community along the river; and so you have a role in
4 our process formally, but you also can -- and we encourage
5 the developer to consult with you and work with you to work
6 out the issues before they bring their application and their
7 proposal to us, their final proposal.

8 AUDIENCE: Yes. We located to Lake Charles and
9 the interstate came through. You know what I'm saying? At
10 one time you didn't have to move, then the next thing you
11 know, everybody around has to go. So there's plans for
12 expansion on the book, land that's just been sitting there,
13 now there's projections that they're going to be developed.
14 So I was curious about that.

15 MR. BOWLER: Well, I would encourage you, if you
16 see that as an issue that we should be looking at, any
17 issues that you feel we should be looking at to get that,
18 but you can get it into our record so that we consider it
19 for the list of issues to be studied; and also you can try
20 to engage the Free Flow Power people directly to work on any
21 agreements or aspects of their proposal and that they might
22 consider to work with you.

23 AUDIENCE: I'm just surprised there's no one from
24 the university here.

25 MR. BOWLER: There were two representatives of

1 the university on our site visit today, and one of the deans
2 is planning to be here tomorrow for our 10 o'clock meeting.

3 AUDIENCE: Do you know what dean of, what he was
4 dean of?

5 MS. SWAMINATHAN: His name is Dr. Samuel
6 Washington.

7 MR. BOWLER: Dr. Samuel Washington.

8 AUDIENCE: Dr. Michael --

9 MS. SWAMINATHAN: It's Dr. Washington who will be
10 here tomorrow.

11 AUDIENCE: But what department is he dean of?

12 MS. SWAMINATHAN: He's the head of the -- I'm
13 sorry.

14 SPEAKER: Center for Environmental Studies.

15 MS. SWAMINATHAN: Center for Environmental
16 Studies.

17 AUDIENCE: That makes a lot of sense. But from
18 experience with my family, that we ended up being located
19 and it was like "Sorry, we need the land after all," that
20 kind of thing.

21 MR. BOWLER: He also pointed out that there's
22 other people at the university to engage both the Commission
23 -- those people can engage us and also either Free Flow can
24 engage those people at the university or they can work to
25 communicate with Free Flow.

1 MS. SWAMINATHAN: Just on behalf of Free Flow, I
2 just want to say they were extremely interested.

3 AUDIENCE: Do you know whether he contacted you
4 all, or did you all contact him? How did that go.

5 MR. BOWLER: My understanding is that Free Flow
6 Power invited them to the site visit. We put out public
7 notices, but we can't -- and we actually called all the
8 local governments in Louisiana that are on the river, but we
9 can't call every institution. So now that we've met people
10 from the university it will be easier for us to engage them.

11 AUDIENCE: Good. I'm an activist, and I --

12 MR. BOWLER: I would encourage you in a few
13 minutes, when I ask people if they want to come up and say
14 something, to put your thoughts the record.

15 AUDIENCE: I did not know what I would say,
16 that's why I didn't feel like I needed to say something.

17 MR. BOWLER: Well, even though some people have
18 signed up, there's more than enough time for everybody to
19 speak tonight.

20 AUDIENCE: Very good. Thank you.

21 MR. BOWLER: Let me finish up on the procedural
22 part, and then we'll take formal comments and additional
23 procedural questions.

24 So again, the Scoping Document 1 that we put out
25 in March described our first cut at the issues on the scope

1 of those issues, the resources in broad terms that we're
2 looking at, our water quality, fisheries resources, wetland
3 and terrestrial resources, commercial navigation and
4 recreation.

5 The geographic scope that we're including in our
6 analysis is the middle and lower Mississippi for water
7 quality, fisheries, and terrestrial resources; and the scope
8 of navigation in the Mississippi system for navigation. And
9 the temporal scope that we're looking at is the past,
10 present and foreseeable future actions out to 30 to 50
11 years, which is the term of an original hydropower license
12 under the Federal Power Act.

13 I think with this group, there's no need to go
14 through all these; but I'd emphasize that anybody who comes
15 up to speak, if you could state your name and affiliation
16 and spell your name, and if you use any acronyms, especially
17 if you're a federal agency person, please spell them out.

18 At this point I'll ask people who want to make
19 statements into the record to come up and do so at the
20 microphone so we can get them clearly to the court reporter;
21 and because we usually go in the order of sign-ups -- if you
22 do want to speak, Jackson Logan would be the first, and then
23 basically anybody who wants to go after that. If you want
24 to make a statement into the record.

25 MR. LOGAN: As he mentioned, my name is Jackson

1 Logan, I work for the Louisiana Department of Justice. I'm
2 an Assistant Attorney General with the Lands and Natural
3 Resources section.

4 Our concern basically is that the permittee
5 comply with the laws of the State of Louisiana, in
6 particular the leasing of state water bottoms. The permit
7 from the FERC doesn't necessarily mean that they have the
8 right to the water bottoms in the state without leasing
9 those water bottoms from the state.

10 The State of Louisiana views the water bottoms as
11 a resource, and as such it being a resource, the State has
12 the legal authority to derive any benefits from those
13 resources. Additionally, the State of Louisiana believes
14 that Free Flow Power needs to be in compliance with the
15 public bid laws of the state and there needs to be an open
16 and competitive bid process for these water bottoms. Thank
17 you.

18 MR. BOWLER: Thank you. That's the only person
19 who formally signed up to speak, so I'll ask if there's
20 anybody else who would like to make a statement into the
21 record.

22 Anybody else want to add an issue to the list or
23 raise a concern that they didn't see on our scoping list?

24 Any other questions about procedures?

25 One thing I want to point out is that originally,

1 under our regulations, the date for the comments and the
2 study requests was May 15th, which is coming up quickly; and
3 as of this afternoon based on requests from the Department
4 of Interior, the Environmental Protection Agency and
5 comments from Free Flow Power, our Director of Hydropower
6 Licensing extended the deadline 60 days, to July 14th. So
7 that will be the filing deadline for comments on the scoping
8 document, comments on the pre-application document, and
9 study requests. And also agency cooperation requests.

10 Yes.

11 MR. LOGAN: I forgot to mention, the State of
12 Louisiana looks forward to working with Free Flow Power and
13 the FERC, but we do feel that the laws of the State must be
14 complied with.

15 MR. BOWLER: Any other comments or questions on
16 the procedures, what's going to happen?

17 Well, with that I'll close the meeting, and thank
18 you very much for attending, thank you for your comments and
19 your questions. My contact information is in the scoping
20 document. On your chairs there is a handout about how you
21 can use the electronic library at the Commission; you can
22 also subscribe so that you get an e-mail anytime something
23 is filed on these projects; and there is some other
24 information on how our process works.

25 So if you have questions, you can call me at the

1 number in the scoping document. Thank you very much.

2 (Whereupon, at 6:26 p.m., the scoping meeting
3 concluded.)

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