FEDERAL ENERGY REGULATORY COMMISSION

MARKLAND HYDRO RELICENSING PROJECT

PROJECT NO. 2211-004

DUKE ENERGY INDIANA, INC.

AGENCY SCOPING MEETING

THURSDAY, SEPTEMBER 17, 2009

9:00 A.M.

BEST WESTERN OGLE HAUS

1013 WEST MAIN STREET

VEVAY, INDIANA

MS. RODMAN: I'm Dianne Rodman, I'm the FERC team lead for the relicensing of the Markland Hydroelectric Project. The first person I would actually like to introduce is our court reporter, Amy Benjamin. Extremely important person in these meetings.

She will be making a transcript of the meetings, and in order to do so she will need to know who's speaking, so before speaking identify yourself. And I suspect that at some point she's going to start figuring out who everybody is and won't need that anymore, but definitely in the beginning remember to identify yourself.

The transcripts will be -- can be purchased for the first ten days after the meeting if somebody for some reason has a burning need to have the transcripts immediately. They will probably sometime after ten days be available from my agency either on our website on eLibrary or

you can purchase hard copies from our public reference room 25 cents a page.

Amy, is there anything else that you need?

THE COURT REPORTER: I don't think so.

MS. RODMAN: Okay, great. Let me introduce the FERC staff now. To my right is Ryan Hansen, our fisheries biologist. At the end of the table we have three people from the Office of Energy Projects administrative staff, Chrystal Brown, Yulia Kalikhman, and Sheila Lampitoc. They'll be observing the meetings. And at some point our attorney, Kenneth Yu, will be joining us.

Could the Duke Power, Duke Energy folks and their contractors identify themselves?

MR. CHANLEY: I'm Bill Chanley, I'm the Markland supervisor, I work with Duke Energy.

MR. SHARP: I'm Brian Sharp, I'll be the project manager for the Markland modernization project.

MS. BEAVEN: I'm Kristie Beaven, I'm the engineering manager for Markland Station.

MR. PIKE: I'm John Pike, I work out of the biological services area out of Plainfield, Indiana.

MS. SCHAEFFER: Kelly Schaeffer, Kleinschmidt, and we are a consultant to Duke Energy for the Markland project.

MR. STUART: Alan Stuart also with Kleinschmidt.

MS. RODMAN: Would the agency representatives identify themselves?

MS. CLUNE: I'm Patricia Clune, Indiana DNR.

MS. HUNT: Courtney Hunt, Kentucky Department of Fish and Wildlife.

MR. HEATH: Jason Heath with the Ohio River Valley Water Sanitation Commission.

MS. RODMAN: Thank you. I'd like to formally describe the purposes of the scoping meetings. It's also listed on page 6 of Scoping Document 1.

Scoping is intended to identify the very important issues that are going to require detailed analysis, and also identify the small issues that

can be dismissed in a paragraph or so.

Another purpose of scoping is to request information that Duke Energy or the Commission does not know about but perhaps the agencies or public do. We describe the kind of information we're interested in on pages 18 through 19 of the Scoping Document.

And another major purpose of scoping, which I don't think is applicable this morning, is that if any local residents have concerns about the project, that they can express them. Sometimes they're extremely site specific. Maybe a local landowner whose land abuts the project has a problem with how the project is managed, something like that. I know I've heard of those in the past.

I'd like to go through the schedule of our analysis. Right now we are thinking of doing a single environmental assessment rather than

a draft and final. That decision could change, however, if comments on the environmental assessment we issue leads us to believe that we need to do further analysis. But at the moment we're thinking of only one EA. So with -- based on that assumption, here's our current schedule. Written comments on Scoping Document 2 are due October 19th. And we have -- We explain our filing procedures on page 19 of the Scoping Document. You can file either through the Internet or you can file paper copies, which should be addressed to Secretary of the Commission. On the first page they should make clear that the comments relate to the Markland Project Number 2211. And if you file paper copies, you should file an original and eight copies.
That's not necessary with the electronic version, so many people choose to file electronically. Also it gives you more time, because

electronic filing is in minutes as opposed to trying to, okay, is the post office going to deliver this in two days or are they going to deliver it in a week.

We will evaluate the written comments as well as any comments made in the meetings today, and, if necessary, revise the Scoping Document and issue a Scoping Document 2.

If we need additional information possibly as a result of something that's said in these meetings, we will send Duke Energy a request for it.

The schedule in Scoping Document 1 does assume that we won't need additional information, so the next milestone is the Ready For Environmental Analysis Notice which we would issue in November.

The Ready For Environmental Analysis Notice will set a 60-day comment period in which comments, recommendations, and agency terms and

conditions and prescriptions are to be filed. We issue the REA notice in November, that means the deadline will be sometime in January. 60 days. Okay.

That would also be Duke Energy's deadline for applying for water quality certification, the end of the REA notice period.

Markland's team will use the information Duke Energy has provided and the filings made in response to public notices to prepare the EA. I forgot to mention that the team is not just Ryan and me. We also have a civil engineer, a woman doing recreation land use and aesthetics, and an archeologist on the team working on the environmental analysis.

When we issue the EA, we'll request comments on that document and on our analysis typically within 30 days of the issuance date. At the moment the schedule assumes that we'll be issuing

the EA in May, but, as I said, that may change based on additional information needs.

The EA will discuss, among other things, the recommendations of the Fish and Wildlife Service and the Fish and Wildlife Agencies of Kentucky and Indiana and whether there are any discrepancies between those recommendations and the Federal Power Act or other applicable laws.

If there are any discrepancies, we'll issue a letter to the agency in question asking if they would like to participate in a Section 10-J meeting.

We'll hold the meeting possibly as a telephone conference, and attempt to resolve the discrepancies that we see between the agency recommendations and the laws in which we act and, in any event, we will issue a summary of the meeting if one is held.

If we stick to our planned single EA, we will discuss the comments,

recommendations, and so forth that we've received in the license -- well, license order, in the order. We're not supposing that we will issue a license -- in the licensing order itself.

I know people who are used to draft and final environmental assessments sometimes think that's odd, but if the comments are easily addressed, then it's perfectly feasible to handle that in the order.

Do you have any questions about the schedule? Or our procedures?

I guess most of you have worked with my agency before and you tend to know how we do things. If not, contact me and I can discuss procedure. Okay.

Now I'd like Duke Energy to discuss their project and their proposal.

MS. SCHAEFFER: Kelly Schaeffer representing Duke Energy. I think I handed out, everybody has a copy, we just gave you a hard copy to follow along with the visual presentation.

And most of you have been working with Duke for at least since 2005, so it's been a while. We're up to four years now, and so you probably know quite a bit about the project and what Duke Energy is proposing for the new license term at Markland.

So I'm just going to kind of -- I'm not going to insult your intelligence by reading every bullet, but if there's something that as we go through the slides and I'm summarizing, if there's something that you'd like to have clarification on or have a question on, please stop and we'll talk about that. Okay?

All right.

This is just an overview of the project. Obviously on the Ohio River, on the Indiana side is where the powerhouse is located. This is associated with the US Army Corps of Engineer lock and dam, and that is the lock and dam issues for navigation.

Just for reference, the Meldahl Lock

and Dam is 95 miles upstream on the Ohio River, and the McAlpine Ohio Falls Project is 75 miles downstream. Those are both FERC-licensed projects.

In terms of a description, we've got an installed capacity of 64.8 megawatts. Highlight for the environmental folks, three Kaplan vertical shaft units, turbine and generator units. You see the average annual generation.

And the project, probably the most important thing, is this project is operated as a run of release facility. And the reason it's run of release is because they only use -- Duke Power can only use the flows that are released by the Corps, which is a little different than run of river, because run of river is inflow equals outflow.

That's not necessarily the case when you have flows that the Corps gives you at any particular time. They're

using the Corps flow. Okay?
Cross-section of a generating unit. 40,000 cfs maximum hydraulic capacity, 3,000 minimum hydraulic capacity. You can see the forebay elevations and the tailrace elevations, 35 feet of maximum head, and river project operations would cease at river flows above 310,000 cfs.
And that's an important thing because the Ohio River is incredibly flashy. As big of a river as it is, there are times when that tailwater will rise very quickly. So it's important to kind of note when they can and can't operate. They simply use the head and there's no operation at that point.
The next slide shows, apologize because it's a little difficult to read, but if you look through your license application that I'm sure you all got -- and if you didn't get one, please let us know so we can get you

CD-ROMS and hard copies of that.
This is -- This is just a small version of a large pullout figure that we've included in there.
And the Markland project boundary, that's a really important thing for FERC to know, what the project boundary includes, because that's what they're licensing, is whatever is inside of the FERC-established project boundary.
So we've given -- provided you a description, and you'll note that there are federal lands involved in this project, and those lands are all US Army Corps of Engineers lands.
And there is -- in the proposed project, there is an additional 1.5 acres that -- of Army Corps land that will be included in the project boundary that Duke is proposing to include. That's what FERC is going to evaluate.
Any questions on that? There's also a transmission line, which we're

going to go to next. Again, I apologize for the difficulty in some of the visuals, but you can see -- you might not be able to see, but there's a blue line -- there it is. Thanks, Alan. There's a blue transmission line. That's marking the 9.37 mile long transmission line that is included in the project boundary.

So, again, the total project boundary acreage is 118.14 acres, the majority of which, 113 acres, are this transmission line.

Any questions on that? That's kind of overview of the project. And most of you that have been working with Duke are pretty familiar with where it is, what it looks like, and kind of the general description.

Let's talk about the proposed action. The proposed action is what Duke Energy is proposing and how they're proposing to operate and what they're proposing to do over the next license

term. That license term can be anywhere from 30 to 50 years, and that's a FERC decision. FERC will decide what that license term should be.

For the proposed operations, they're going to continue operation consistent with the current operations, and they have -- Duke has developed a memorandum of agreement, MOA, under development with the US Army Corps of Engineers.

So I can tell you -- just give you a little update, that is almost final between Duke and the US Army Corps of Engineers, so I'm sure that's going to be filed within the next probably 30, 30 to 45 days. I shouldn't say I'm sure. I'm anticipating that it will be filed within that time.

So that's operations, so there's really nothing changing in operations. There's a few updates that the Corps wants to put in the MOA, and Duke Energy is, again,

negotiating those final terms and conditions of the MOA.

The proposed environmental measures include five main topic areas, and then I'll go into a little bit more detail.

The first is aquatic resources. The second is T&E species, or threatened and endangered species. The third is recreation and land use and cultural resources. Those are kind of the overarching resource areas in which Duke Energy is providing some kind of proposed enhancement.

So let's go through those. I do want to highlight one bullet on here that we'll talk about in a couple minutes more in detail, but the Bryant's Creek embayment is intended to be an off-license enhancement measure. In other words, what that means is that Duke Energy is not proposing that that be included in the license. It is not within the project boundary but it's something that they felt

strongly enough to propose, and they're going to work with Kentucky and Indiana and Indiana's -- and the university, Purdue University. And they're going to be working with those entities to make that happen. But that is an off-license agreement, so it shouldn't be part of the license.

Any questions on that? Okay. Let's talk about Dissolved Oxygen, or DO, Monitoring Program.

Duke is proposing to monitor DO temperature, conductivity, and pH. This is a partnership with the USGS to monitor both upstream and downstream of the hydro project and on the lock walls. Reports will be provided annually to IDEM, ORSANCO, O-R-S-A-N-C-O, and the US Army Corps of Engineers.

There's going to be vertical profiling monitoring both upstream and downstream for five years, and then a review of the existing USGS

and Army Corps data. So that is an overall, that's a monitoring program. And this next slide shows the proposed locations of the dissolved oxygen monitoring.

Any questions? Okay. The second protection enhancement mitigation, I'll call them PM&E, measures that Duke is proposing is the Indiana Bat Powerline Maintenance Plan. That's a mouthful.

And basically what Duke is proposing to do is to implement this plan with their field crews to make sure that they are aware, it's more of an education thing, but it's also in the field they can make sure that they recognize these maternity roost trees, they call them MRTs, conduct surveys to avoid those, and remove -- avoid removing or disturbing any potential MRTs between April 15th and September 15th, which is their roosting season. Go ahead.

MS. CLUNE: Patricia Clune, DNR. The season has

been extended to April 1st to September 30th.

MS. SCHAEFFER: Okay, great, thank you for that clarification. April 1st through September 30th? Okay. We'll make a note of that.

Okay. Any other comments or questions on the Indiana Bat Powerline Protection -- Maintenance Plan?

Okay. Let's shift a little bit to the recreation plan. There's a number of enhancement measures that are included under this -- the proposed recreation plan.

There's a construction of a new access road and paved parking area, and that is this area down here.

There is also some additional I'll call them security measures. There's a security plan, and this -- the security plan was developed in cooperation and at the request of the US Army Corps of Engineers, because they needed to know that the facility

that Duke Energy is in control of and has ownership of can be locked down if there's a security -- if the security level of the area or of the whole United States goes at a certain level. They need to know that there's the ability to control that area.

So Duke Power, in addition to a lot of security cameras down here at the powerhouse and looking into the tailrace, there's fencing and barricades. These fences could be -- this fence could be -- this area could be closed in the event of a national emergency as well, so that nobody could access and get all the way down to the tailrace that way. There's an old existing road and there's a new gate being put there too, so just to be able to control that area a little bit more.

The other improvement that will be made is an improved access path. If you've ever been down in the tailrace

you know that the elevation is very steep there and the water's very flashy. It can rise very quickly and inundate that area, so there's now an improved -- well, there's not now. There is proposed to be an improved shoreline access path so that fishermen can -- and fisherwomen, anglers can access that path more easily and get to the shoreline. There will be portable seasonal rest rooms that will be available until I believe it's the first weekend in November -- April, I can't remember the exact dates, but I believe it's April 1 through the first -- between the end of the first weekend in November.

And signage and lighting that will go into that to make that area secure and safe, and, again, I mentioned the security cameras.

So this is kind of a big package of -- big suite of various measures that are falling underneath the

recreation plan.
Any questions on that? Okay.
Cultural resources, the proposed measure there, Duke proposes to evaluate the project powerhouse in 2017.
The reason 2017 as opposed to now or during the time when we were preparing the license application is because 2017 is the year that the powerhouse is eligible, meaning its -- or could be eligible. It will be 50 years old, and that's kind of the threshold that determines whether you should evaluate it for eligibility listing on the National Register of Historic Places.
And, finally, this again I mentioned before, Bryant's Creek Habitat Restoration Program, this is an off-license enhancement measure. It is located within the Markland pool, which is controlled exclusively by the US Army Corps of Engineers. It's an MOA with the Kentucky DF&W and the

Indiana Department of Natural Resources and Purdue University. It includes a onetime payment of a hundred thousand dollars. It includes founder plant colonies that will -- will enhance macroinvertebrate, water fowl, amphibians habitat, and a gravel habitat for fish spawning. So this again is something that Duke is proposing but not to be included as part of the whole license. They'll do their own off-site memorandum agreement or contract with those entities that are part of the MOA. Okay? And the last slide shows the location of the founder colonies and the gravel substrate, proposed gravel substrate, for fish spawning. Are there any questions about what Duke Energy is proposing to do, the project itself? We've got lots of people who work on it on a day-to-day basis here to answer any questions

you might have about the project or what is being proposed and being evaluated by FERC. Okay.

MS. RODMAN: Thank you, Kelly. That was extremely clear, and you've answered some of my questions already.

MS. SCHAEFFER: Okay, good.

MS. RODMAN: I'd like to point out that we have an analysis of sensitive, identification of resources that can be cumulatively affected by relicensing the Markland project. That's on page 16 of the Scoping Document.

And we believe that the resources that could be cumulatively affected would be water and fisheries resources.

And the temporal scope is set by the Federal Power Act. It's 30 to 50 years, which would be the term of any new license.

The geographic scope, we have determined that the upstream extent would be the entire Markland pool, ending 95 miles upstream to the

Meldahl Locks and Dam, and the downstream extent would be the -- from the project's tailrace to the McAlpine Lock and Dam, which are the next ones downstream.

Does anybody have any comments about our temporal and geographic scopes?

Okay. Again, if anyone has information about the cumulative effects of the project, we would appreciate you bringing it to our attention for filing it. This is an important part of an environmental analysis. We try to do a serious job of it.

MS. SCHAEFFER: Dianne, can I clarify something on that? Kelly Schaeffer.

I think it's important just to clarify that with cumulative effects analysis, it's not necessarily the effects that can be controlled by the licensee but all the effects that are -- and entities that are involved in managing those resource, I guess is the best word, or even having an

impact on those resources.
So while the Markland pool is included, it doesn't mean that there is anything that Duke Energy could do directly to influence the US Army Corps of Engineers' operation of the Markland pool. So, but it needs to be considered.

MS. RODMAN: An example could be if you had a project on a creek and somebody wanted to build a large subdivision or shopping mall upstream of that, that is not within the applicant or our agency's authority to affect that, but the sedimentation and so forth needed to be looked at with the -- along with the development of the project.
Okay. The next thing I'd like to do is quickly go over the resource issues that we've identified in the Scoping Document, which is page 17 through 18.
There are a lot of areas that we didn't feel at this time were going

to be -- needed analysis. Geology and soils, we didn't feel that there was going to be major issues. Aquatic resources, however, we did. We have the effects of the project operation on water quality, on movement of fish, effects of project operation and associated fish entrainment on fish populations, and effects of proposed recreation measures on the paddlefish, a species of special concern.

Does anybody have any comments on those -- those bullets? No? Okay.

Terrestrial Resources in general, we did not believe that there were any issues requiring extensive analysis. For threatened and endangered species, we did identify the effects of project operation and maintenance on the endangered Indiana bat and any listed mussel species.

We included mussels because the Fish and Wildlife Service identified them in their letter commenting on Duke

Energy's analysis of the effect upon threatened and endangered species, and we will be probably requesting concurrence with the Fish and Wildlife Service on our finding on the project's effects.

Then recreation and land use, the adequacy of proposed public access and recreation facility to meet current and future recreation demand including barrier-free access, the effects of recreation on -- within the project area, and effects of the frequency, timing, amplitude, and duration of Ohio River high-flow events to the proposed recreation facilities to be located near the project's tailrace, which is a fancy way of describing what Kelly has already said, that the river is extremely flashy, there are stage changes that can happen very quickly, and that would affect the fishing access in the tailrace area.

On cultural resources, we have

effects of continued project operation or changes in project operation or facilities on historic resources that may be eligible for inclusion in the national register. That would include, of course, the powerhouse itself, which Kelly has mentioned. It could also include subsurface archeological resources within the transmission line right-of-way that, over the years, as transmission line maintenance activities occur, may slowly become uncovered, so we will consider that. We don't find any impacts on aesthetic resources at this time. And for developmental resources, we would consider the effects of Duke Energy's proposed PM&E measures on project economics.

Does anybody have any comments, additions, this is a big issue, this is not a big issue? No? Great. Okay. Let's see, the only other thing that I really need to talk

about now is on page 11 -- excuse me, page 10, footnote 4, where we say that Duke Energy is evaluating refurbishing or upgrading the generating units to increase the project's capacity and would amend its application if it decides to propose such action.

Can we get an update from Duke Energy on the status of that?

MS. BEAVEN: Want me to talk on that? Kristie Beaven, Duke Energy. We are currently -- we have a preliminary engineering study underway, and Brian Sharp is the project manager for that, and what we're doing is we're working with some vendors on developing a flow model and hydraulic calculations on what are our potentials to be able to upgrade. Our intent is to stay less than 15 percent flow increase. We expect that to be complete sometime next spring, and from that point on we'll evaluate further whether or not we

want to continue with the project and actually do the installation or if it's not economically feasible at that point.

MS. RODMAN: Okay. I guess Duke Energy is aware that there is a deadline on amendments to the agreed licensing application, so it sounds like unless we have extensive additional information requests, that you probably would not be in a position to include those -- any potential changes in your current application; is that correct?

MS. BEAVEN: Yes.

MS. SCHAEFFER: That's correct.

MS. RODMAN: So I guess your fall-back position would be, if we issue a new license, to amend the license?

MS. SCHAEFFER: Yeah. And that's, you know, that's going to be dependent upon Duke's evaluation of what the information that they're not going to get until sometime later next year anyway. So, you know, it's -- they wouldn't

be in a position to move and amend this license application because the information is just not there for you to evaluate anything.

MS. RODMAN: Okay, great. We may take that footnote out of Scoping Document 2 if we issue one, because it would not be a part of the current action. Okay. Finally I can stop talking and ask the agencies and Duke if they have anything they would like to put on the record, any questions, any comments, any statements of position?

MS. CLUNE: No.

MS. HUNT: I have a question. Courtney Hunt, Kentucky Fish and Wildlife. For the Bryant's Creek Habitat Restoration Program, when is that set to commence? Like, I'm new, I'm not really sure what has been done already.

MR. STUART: Alan Stuart. My understanding is it's contingent upon FERC issuing the new license, so once the license is issued, I believe that program will

be implemented.

MS. HUNT: Okay.

MR. STUART: I believe it's spelled out in the program itself. Did you get a copy of the program?

MS. HUNT: I'm not sure.

MR. STUART: We'll make sure -- Duke Energy will make sure that you get one. It's part of the whole MOA that's been developed, and it's stated in there as part of the schedule.

MS. HUNT: Yeah, that would be good.

MS. RODMAN: Jason? Does ORSANCO have any comments?

MR. HEATH: I guess our primary issue will be with dissolved oxygen, more generally water quality of the Ohio River, but the primary concern would be for dissolved oxygen.

And I guess just to point out that we feel that the -- at least the initial purpose of the dissolved oxygen monitoring program should be to try to determine if there is any effect of the hydro on dissolved oxygen

levels, and then if it's determined that there is some effect on dissolved oxygen, to then implement a management plan that would, you know, mitigate those impacts to the extent that that can be done.

MS. RODMAN: DNR, anything?

MS. CLUNE: No.

MS. RODMAN: Yes, Kelly.

MS. SCHAEFFER: I have one clarification for the record. I want to be clear that the word -- the term -- the term flashiness that I use is a result of high-flow events. It's not a result of the project operation that would cause the tailwater to go up and down erratically, if you will.

That when I say flashy, I'm talking about high-flow events on the Ohio River in general, so that water, a lot of inflow coming down the Ohio River and a lot of water, you know, in the tailrace as a result of that high-flow event.

MS. RODMAN: This is Dianne Rodman. Just out of

curiosity, looking at the river outside the window, how much can the Corps' lock and dam attenuate the stage changes?

MR. STUART: Alan Stuart. My understanding is the Corps tries to maintain that pool level of 455 to 456. So as part -- that's just part of the navigational protocols that they do. That's about the best way I can answer it. During high-flow events, I know they'll open the gates to the extent possible to make sure that those elevations are maintained.

MS. RODMAN: Ryan, do you have any questions?

MR. HANSEN: Not currently, no.

MS. RODMAN: Okay. Nobody else? This is a quick and easy meeting. I'd like to remind you that written comments are due in by October 19th. We are conducting an environmental site review, we have a new term, environmental site review, at 1:00 at the Markland plant in Florence. Duke Energy has reminded me that

people sometimes get confused. We want to meet at the parking lot on the Florence end of the dam, not on the Warsaw end.

And we will be holding another meeting tonight at 7:00 for the working -- basically for the working public, but anyone attending this meeting is also welcome to attend and participate in the evening meeting.

Does anybody have any comments or questions? I remind you that FERC's staff is available to debate the environmental impact to this project only at this sort of meeting. You can talk to us, especially me, about procedural matters at any time, but we have to be careful what we discuss outside of public forums.

If you want to contact me, my name, phone number, and e-mail address are in the Scoping Document and any public notices that my agency issues.

And if you have problems with the FERC website, filing procedures, or

anything like that, give me a call, I'll help you straighten it out. Again, does anybody have any comments or questions? Okay. I'd like to adjourn the meeting and thank you very much for your participation.

- - -

(AGENCY SCOPING MEETING ADJOURNED AT 9:48 A.M.)

- - -

C E R T I F I C A T E

STATE OF INDIANA :

: SS.

COUNTY OF DEARBORN :

I, Amy E. Benjamin, RPR, the undersigned, a duly qualified notary public within and for the State of Indiana, do hereby certify that the above thirty-nine (39) pages were transcribed by means of computer under my supervision; that I am neither a relative of any of the parties or any of their counsel and have no interest in the result of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal of office at Lawrenceburg, Indiana, this 22nd day of September, 2009.

_____

Amy E. Benjamin-RPR-Notary Public

State of Indiana

My Commission expires:

April 10, 2016.