UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

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TransCanada Hydro Northeast, Inc.

Wilder	Project No. 1892-026 -
Bellows Falls	Project No. 1855-0145
Vernon	Project No. 1904-073

New Hampshire/Vermont

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WILDER and BELLOWS FALLS PROJECTS - Morning Meeting

Kilton Public Library

80 Main Street

West Lebanon, New Hampshire 03784

Tuesday, January 29, 2013

The morning scoping meeting, pursuant to notice, convened at 9:18 a.m., before a Staff Panel:

Panel

KENNETH HOGAN, Project Coordinator, FERC

MARY GREEN, Geology and soils, FERC

RALPH NELSON, Geology and soils, FERC

MARY McCANN, Endangered species and macroinvertebrates, FERC

MICHAEL SEARS, Fisheries and aquatic resources, FERC

BRETT BATTAGLIA, Terrestrial resources, FERC

ADAM BEECO, Recreation, land use and aesthetics, FERC

ANGIE SCANGAS, Water resources, FERC

ROBERT QUIGGLE, Archaeological and cultural resources, FERC.

With:

JOHN RAGONESE, FERC License Manager, US Northeast Hydro Region, TransCanada Accompanied by EDWIN NASON and EARL BRISSETTE, TransCanada

LIST OF COMMENTERS

Geology and Soils or Erosion Concerns

PAUL COATS, City of Lebanon, Recreation
PETER KULBREKI, Town of Hanover
SHELLEY HATFIELD, Town of Hanover
JAMES THAXTON, Upper Valley Land Trust
DAVID DEEN, River Steward, Connecticut River Watershed Council

Water Resources - Water Quantity and Quality

PETER KULBREKI, Town of Hanover
PAUL COATS, City of Lebanon, Recreation
JOHN WARNER, U.S. Fish & Wildlife Service
KATIE KENNEDY, Nature Conservancy's Connecticut River program
CARL SCHMIDT, Upper Valley River Subcommittee
DAVID DEEN, Connecticut River Watershed Council

Fishery or Aquatic Resources

BRIAN FITZGERALD, Vermont Agency of Natural Resources
DAVID DEEN, Connecticut River Watershed Council
PETER KULBREKI, Town of Hanover
MATT CARPENTER, New Hampshire Fish & Game
KATIE KENNEDY, Nature Conservancy's Connecticut River program

LIST OF COMMENTERS

Terrestrial Resources

CHRIS MARTIN, Audubon Society, New Hampshire
NICOLE CORMEN, Lebanon City Council
KATIE KENNEDY, Nature Conservancy's Connecticut River program

Threatened and Endangered Species

JOHN WARNER, U.S. Fish & Wildlife Service

Recreation, Land Use and Aesthetics

JOHN WARNER, U.S. Fish & Wildlife Service
ANDREW GAST-BRAY, City of Lebanon
GABE GRIES, New Hampshire Fish & Game
ROBERT NASDOR, American Whitewater
TOM CHRISTOPHER, New England FLOW and American Whitewater
NICOLE CORMEN, Lebanon City Council
NORMAN SIMS, Appalachian Mountain Club
BRIAN FITZGERALD, ANR

Socioeconomic Resources

JAMES THAXTON, Upper Valley Land Trust
NICOLE CORMEN, Lebanon City Council
DAVID DEEN, Connecticut River Watershed Council
KEVIN MENDIK, National Park Service.
TOM CHRISTOPHER, New England FLOW and American Whitewater

P R O C E E D I N G S

MR. HOGAN: Why don't we get started.

I'm Ken Hogan, Project Coordinator for relicensing of the Wilder project and the other four projects on the Connecticut River down to Turners Falls.

This is your first opportunity to let FERC know what our environment document needs to analyze as far as the issues go. So I hope to have a very fruitful meeting. It's not helpful for us to do this in a vacuum, and no comment is a bad comment; we want to hear it all. And we have a court reporter here today, so I'd like, before each person speaks for you to state your name and affiliation so we can make sure that everything is documented properly. This is a very public process, very transparent.

Are folks familiar with FERC's eLibrary and eSubscription processes?

Anybody not have a clue what I just said?

(Laughter)

SPEAKER: It's hard to hear you.

MR. HOGAN: Is it hard to hear me?

SPEAKER: Yes.

MR. HOGAN: Is this better?

SPEAKER: Yes.

MR. HOGAN: Okay, I apologize.

So is everybody familiar with FERC's information

systems that are available to you to do a little follow up process and things of that nature?

Okay, so I'm trying to figure out where everybody's knowledge is so we can jump right in, or do we need to do some education here. It sounds like we can jump right in. And I'm getting nods, so let's go ahead and do that.

The process that I've got set up is we'll identify the -- we're going to have TransCanada give a quick presentation of what their proposal is, a quick discussion of what their proposal is for both projects. We will identify the potential resource areas that we've incorporated into our Scoping Document 1 as potential effects, and then we're going to talk about what the Agency has done: Did FERC get it right? What are we missing? What's not an issue that we may have identified as an issue? And we'll go through resource by resource. Once we've had the Agency and NGO input, we'll turn to the audience and we'll hear that input; and towards the end of the meeting or maybe before a break, we will get the prepared statements that folks wanted to present today.

Sound like a plan?

Okay. TransCanada?

MR. NASON: Good morning. I'm Edwin Nason and this is Earl Brissette. We work for TransCanada. We're

going to give a quick hydro overview, and also do, just to quick tell you about the river timing, and then do the facility facts; and then the operations overview.

So TransCanada has hydro plants on the Connecticut River and the Deerfield River, and on the Connecticut River they have six stations starting at the top, the Moore Station; and then below that is Comerford Station and below that is McIndoes Station. Those three together are known as Fifteen Mile Falls. And then downstream from there is the Wilder and Bellows Falls and then Vernon. Those are the stations that are up for relicense.

As far as river timing is concerned, when we make a change at one station, when the effects of that change are felt at the next downstream station. And for timing between Moore and Comerford is about one hour, and Comerford and McIndoes Falls is another hour; so those three stations are really very close together.

From McIndoes Station on down to Wilder is about eight hours, and then Wilder down to Bellows Falls is another eight hours, and then between Bellows Falls and Vernon is about four hours.

All the stations on the Connecticut River are remote controlled; they're all controlled from the Wilder control center, which is located in the Wilder hydro office,

and that's staffed 24 hours a day.

So now we'll go on to facility facts. Earl will take over.

MR. BRISSETTE: Wilder. Wilder Station is located just downstream of the original dam, which was Alcott Dam, which was built in 1926. And Wilder Dam was put into service in 1950.

The dam has a normal average head of 53 feet; it has three generating units with a total authorized installed capacity of 35.6 megawatt. The Vermont/New Hampshire line goes right between number one and number 2 generators, No. 1 being in Vermont.

It has six tainter gates, that are 30x36 feet wide, with a total spill capacity of 16,900 cfs each. Two skimmer dates; they're 20x15 feet wide. It has four stanchion bays, 17 feet high by 50 feet wide, and those are the boards that you see on the New Hampshire side.

Total project discharge capacity is 157,600 cfs, and the total generator discharge is 10,000. And the flood of record was 91,000 cfs, and that was March of 1936. And 19.7 flood of record was downstream, so that didn't really affect the project.

Major projects that have been completed since 1979, the fish ladder was installed in 1987. The third generating unit was installed in 1987 as well; and that's

Unit 3. that serves two purposes; one, it's the minimum flow unit, and the second is the attraction water for the fish ladder.

And then the last one is the station automation, remote control, and that was completed in 1998.

MR. NASON: So for operations, we'll start out with the reservoir. The reservoir has a drainage area of 3,375 square miles, and the reservoir is 45 miles long; it goes all the way back to Haverhill, New Hampshire and Barre, Vermont. The usable storage in our five feet of usable range is 13, 350 acre-feet.

So the Wilder reservoir has approximately 3,000 cfs each per tenth, and that means per tenth of elevation of the reservoir, cubic feet per second-hours.

An example of that would be if the inflow is 3,000 cfs greater than the discharge for one hour, then the elevation of the reservoir would go up a tenth of a foot.

For the constraints, Wilder has a min_flow, it's the same year-round; it's 675 cfs, and that's almost always done out of Unit No. 3, which for the most part is 700 cfs. It has a fish passage, a downstream stream passage that is April 1st to June 15th, that's 512 cfs. And the downstream fish passage in the fall is done as needed.

Upstream, through the fish ladder, those dates, May 15 to July 15 and September 15 to November 15, but those

are more done on an as-needed basis, as requested by the agencies.

The operating range for the Wilder reservoir is five feet operating range from 380 feet above sea level to 385 feet. We have a downward draw limit of .3 per hour; we don't draw the pond more than .3 per hour in any one hour. And we have the weekend rec limits that we maintain in the summer on weekends and summer holidays. We just adjust our global pond limit to 382.5.

Also because of the long reservoir, we have what we call a high flow reservoir operation, profile operation. Because the elevation of the reservoir at the upstream end is always higher than the downstream end by the dam, and the higher the flows are, the more that elevation difference is, and so during high flows, which is above generation capacity, 10,000 cfs, we start lowering our max elevation. So between 10,000 cfs to 20,000 cfs, the inflow, when it's 20,000 then our max elevation is 380, which is the same as our min; so anything 20,000 cfs or greater, we just hold that elevation.

So for operating, when we schedule the megawatts for the next day, every morning the operators schedule the megawatts for the next day, their first consideration is always the license compliance, the min_flows and the elevation constraints; and then their second priority would

be to put the megawatts in the best hours of the day, the best, highest priced hours of the day.

And the amount of megawatts is just based on inflow, so they'll run all they can as long fill back up for the run the next day. Depending on the season, there might be one run -- a little longer in the summertime or two shorter runs in the wintertime, because in the winter there's two peaks, usually.

I guess we'll move on now to Bellows.

MR. BRISSETTE: Bellows Falls. Bellows Falls Station was put into service in 1928 and it's located approximately a quarter of a mile south of the dam. There's a 1700 foot canal that feeds the station, and that bypasses the normal riverbed.

It has an average head of 62 feet; there are three units with a total nameplate capacity of 40.8 megawatt. All three units in that plant are identical.

It has two roller gates located at the dam, they are 115 feet long and 18 feet high; they're capable of discharging 29,400 cfs apiece. There are three stanchion bays, 13 feet high, and those are 121 feet wide each; those are the boards that you see at the dam. There's one skimmer gate, 10 feet high and 12 feet wide, and that's located at the end of the canal, right at the power plant, in the forebay.

Total project discharge capacity is 119,785 cfs, with a total generating discharge of 11,000 cfs. And the flood of record at Bellows is 156,000 cfs, and that was in March of '36.

Major projects that have been completed since the 1979 license: The fish ladder was installed and completed in May of 1984. Along with that was the visitor's center. Downstream fish diversion barrier was completed in 1996; that's the device you see in the forebay, just in front of the plant; and the station was also automated, remote control out of Wilder in 1998.

MR. NASON: So for the Bellows reservoir, it has a drainage area of 5,414 square miles, and that reservoir is 26 miles long, goes all the way up to Cornish, New Hampshire or Windsor, Vermont. The usable storage volume in the three feet of draw that we have at that reservoir is 7,476 acre-feet. And like Wilder, that reservoir has about 3,000 cfsh per tenth of elevation.

So for constraints, Wilder has an min_flow of 1,383 cfs for inflow, that's year round, and that's done through generation, so it doesn't -- it goes down the canal and out the dam; there is no min_flow in the bypass.

The downstream fish passage is the same as Wilder; April 1st through June 15th, and in the fall as needed. That's 255 cfs there. The upstream fish ladder,

May 15th through July 15th and September 15, to November is 80 cfs, that's including a traction water. And that's done on an as-needed basis, same as Wilder is

The operating range for the reservoir at Bellows is 288.6 feet above sea level, and to 291.6 feet. That has the same drawdown limit, .3 per hour; and we also maintains recreational limits in the summertime on weekends and the summertime holidays.

So because of the long length of the reservoir, not as long as Wilder, we still have high flow profile operation which starts at about 11,000 cfs and goes up to 50,000 cfs. So at 50,000 and above, we maintain 289.1 feet above sea level or less.

And for scheduling that, Wilder is just the same as -- Bellows Falls and Wilder are just the same; the operators take into consideration their min_flow and the elevation constraints when doing their megawatt schedule for the next day. And just the same as Wilder; the megawatts always put in the best hours for the day.

I guess that's it unless there are questions.

MR. SIMS: You mentioned the maximum capacity of both Wilder and Bellows Falls. At Bellows Falls apparently the record flood was way above the maximum capacity. My question is, at both facilities, what happens when you exceed maximum capacity?

MR. BRISSETTE: At that point you'd run out of gates and you'd pull all your boards. So all your spill has been used, and then the river is on its own.

MR. SIMS: Just goes up and up.

MR. HOGAN: Name for the record.

MR. SIMS: Norman Sims, the Appalachian Mountain Club.

MR. HOGAN: Yes, sir.

MR. NASDOR: Robert Nasdor, American Whitewater.

At what level do you spill at the bypass reach?

MR. BRISSETTE: When the inflow surpasses the generation discharge. So the generation at Bellows Falls, for instance, could be 10,000 to 11,000; so when the inflow is above that, then it starts going through the bypass. Otherwise, the bypass has no inflow.

MR. RAGONESE: Except leakage.

MR. HOGAN: Do you have an estimate on what that leakage flow is? And how long is the bypass reach?

MR. NASON: I don't have an estimate on the leakage. And it varies, too, based on the condition of the boards and the seals on the gates.

MR. SIMS: How long is the bypass?

MR. BRISSETTE: .7.

MR. NASON: It's probably at least a quarter of a mile.

MR. SIMS: .7 of a mile.

CARL SCHMIDT: Carl Schmidt, Upper Valley River Subcommittee.

With regard to Wilder, you refer to a .2 per hour downward draw as the maximum. Can you explain that?

MR. NASON: Yes, the maximum drawdown, .3 per hour. Basically of the elevation of the reservoir. So we don't draw it down more than .3 in one hour, any hour. So that would mean we're discharging more than the inflow by approximately 9,000 cfs, and we don't do that.

MR. RAGONESE: I just want to add, that's a maximum. The typical drawdown rate is between .1 and .2.

MR. NASON: Oh, yes. We don't usually approach that.

MR. HOGAN: Any other questions about the projects and their operations?

At the beginning of the meeting I neglected to go around and have introductions; I'd like to do that now if I could.

Again, my name is Ken Hogan, and I'll start across the room, and we'll work our way around. How does that sound?

MR. BATTAGLIA: Brett Battaglia, I'm with FERC, and I'm doing terrestrial resources.

MS. McCANN: Mary McCann, I've been working on

endangered species and macroinvertebrates; mussels.

MR. McCLAMMER: I'm Jim McClammer, I'm a resident of Charlestown, New Hampshire, but also a commissioner on the Joint Rivers Commissions in Vermont and New Hampshire.

MS. WILL: Lara Will, Fisheries Biologist in the Vermont Fish and Wildlife department.

MS. CADUTO: Marie L. Caduto, Watershed Coordinator with Vermont December.

MR. CARPENTER: Matt Carpenter, New Hampshire Fish & Game.

MR. HOWARD: John Howard, First Light. For Northfield Mountain and Turners Falls projects.

MR. WAMSER: Mark Wamser with Gomez and Sullivan.

MR. SMITH: Jay Smith, I'm the from the Town of Lyme Selectmen.

MR. EL: Richard El (ph), Town of Lyme Selectmen.

MR. BILLINGS: John Billings, Lyme Properties. We own property above and below Wilder Dam.

MS. O'DEA Erin O'Dea with TransCanada.

MR. COLE: I'm Matthew Cole with TransCanada.

MS. WALKER: Christine Walker, the Upper Valley Subcommittee.

MR. NASON: Edwin Nason from TransCanada.

MR. CAMPANY: Chris Campany, Director of Windham Regional Commission and Vice President of Connecticut River

Joint Commissions.

MS. GRIFFIN: Jennifer Griffin, Normandeau Associates.

MR. YORK: Doug York, Louis Berger Group.

MS. * Mary Ellen [garbled] [no sign-in]

MR. SCHMIDT: Carl Schmidt for Value River Subcommittee and River Project.

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

MR. TAYLOR: Brendan Taylor, I'm documenting this process for research for Professor Eve Vogel, at U-Mass.

MR. MATTEAU: Jim Matteau, I live in Westminster, Vermont and I'm representing Trout, Unlimited.

MR. WHITE: Mark White, Upper Valley Subcommittee, Connecticut River Valley Commission.

MR. MARTIN: I'm Chris Martin, I'm a biologist with the New Hampshire Audubon Society.

MS. BLADEN: I'm Elizabeth Bladen, the FERC attorney for the project.

MR. SIMS: Norman Sims with the Appalachian Mountain Club.

MR. CHRISTOPHER: Tom Christopher, New England FLOW and American Whitewater.

MS. SCANGAS: Angie Scangas from FERC. Water resources.

MR. COATS: Paul Coats, City of Lebanon,

Recreation.

MS. HATFIELD: Shelley Hatfield, City of Lebanon.

MR. QUIGGLE: Robert Quiggle, FERC. Cultural and archaeological resources.

MR. GRIES: Gabe Gries, New Hampshire Fish & Game.

MR. SEARS: Mike Sears, fisheries and aquatic resources, FERC.

MR. NASDOR: Robert Nasdor, American Whitewater.

MS. KENNEDY: Katie Kennedy, the Nature Conservancy's Connecticut River program.

MR. GAST-BRAY: Andrew Gast-Bray, City of Lebanon.

MR. RAGONESE: And I'm John Ragonese from TransCanada, Project Manager for the relicensing.

MR. MENDIK: Kevin Mendik, National Park Service.

MR. DEEN: David Deen, River Steward, Connecticut River Watershed Council.

MR. FITZGERALD: Brian Fitzgerald, Vermont Agency of Natural Resources.

MR. CROCKER: Jeff Crocker, Vermont Agency of Natural Resources.

MR. WARNER: John Warner, U.S. Fish & Wildlife Service.

MR. THAXTON: James Thaxton, Upper Valley Land

Trust.

MR. NELSON: Ralph Nelson, with FERC for soils and geology.

MR. BEECO: Adam Beeco with FERC, with recreation, land use and aesthetics.

MS. GREEN: Mary Green with FERC, geology and soils.

MR. HOGAN: Thank you. I apologize for not doing that earlier. I got ahead of myself.

Now what I'd like to do is start by having the FERC team go there each of the resource areas; we'll do one at a time, and we'll identify the resource, potential effects of the projects that we identified in our Scoping Document 1. If you want to follow along, I believe it's page -- we're starting on page 24. Section 4.2.1 with geology and soils.

Geology and Soils

@ MR. NELSON: I'll just read the bullet.

MR. HOGAN: Would you speak up.

MR. NELSON: Sure.

The effect of project operation and maintenance on riverbank erosion, including the potential effects on protected species, cultural resources or the structural integrity of adjacent facilities. And that's soils and geology issues we've identified.

You might note also there are asterisks on some of these items; and those indicate resource issues that are going to be analyzed for both cumulative and project effects.

SPEAKER: Going right through --

MR. HOGAN: I was going to do resource by resource.

So now we're looking for TransCanada to tell us what activities they've taken to look at geology and soils, and then we'll go straight to the comment period.

MR. RAGONESE: Okay, and what I'll try to do is just go through it in a couple different categories; things that we've identified or proposed in the PAD, studies that we've performed of late or are applicable that would be considered pre-scoping, and then anything that we are intending or planning in the future.

So in terms of geology and soils, we did not specify anything in the PAD in terms of specific studies or PM&E or mitigation measures, for lack of another term. We did do a number of studies, though, ahead of time. A number of those were in consultation with the agencies, or we just decided we needed to have some background information to provide information to the PAD or processes that we knew we were going to get involved with.

So with respect to the two projects, Bellows and

Wilder, we performed a shoreline survey that included, in this case, in this topic, identification of erosion, primarily erosion that was greater than 25 feet. And those were all mapped. The general premise of this survey and study, it's on a GIS basis, there is a report -- all of the reports, as we finalized them they'll be located on our website under the public information component. That website is: www.TransCanada-Relicensing.com Just look under Overview and it's in the public information library.

So there's a synopsis of the shoreline survey, we're trying to get a map version of the GIS that you can get to from, at least download from the website as well. So look for that very shortly.

We also conducted a Phase 1A survey of the Bellows and Wilder impoundment, and downstream --well, primarily, just the comments in the project boundary. A Phase 1A survey is a survey associated with identifying impacts to cultural and historic resources; most of those impacts are associated with areas of active erosion; so we had a composite of the shoreline survey as well as field work to identify any impacts in those two projects on those resources.

With respect to downstream of Wilder, we conducted a survey and a study on the impacts of discharges from Wilder on jessup's milk vetch. We not only identified

the location but at the impact of various flow levels, both project operations and high flows on those sites.

We conducted rare and endangered species surveys, again looking at impacts on -- project-related impacts on potential rare and endangered species. That was a full survey of both projects upstream and downstream, primarily in the operational zone. We have other areas that we own land off of the reservoir or off of the water's edge. Those were not included in this component of the scope; we'll be doing that later, but this is primarily in the operational impacts associated with habitats or erosion or whatever might be going on, impacts associated with those species.

Then we also would recognize the fact that this is, geology and soils was primarily an issue in the last relicensing as well, in the '70s, and the Army Corps '79 Connecticut River Basin Erosion Study is a very applicable study that we -- that was part of that relicensing back in the '70s and still is around.

In terms of plan studies, one of the aspects that was talked about here in terms of structural integrity of the facility and et cetera, we have done a number of dam break analyses, and for Wilder it's designed to the potential maximum flood; could potentially breach Wilder Dam at the very high level -- now, this is a flood in the 200-plus thousand cfs, 280,00, 27 -- it's not something that

we've even close to seen historically. The impact of that I think rises the stream about a foot downstream. Again, this is a very high flood.

We're doing other geological and stability studies, but not associated with these two dams. That's it.

SPEAKER: Could you give the Bellows Falls?

MR. RAGONESE: Bellows Falls is a low hazard dam; we do not. It would probably -- I have to give you a better answer on that. We don't have -- I don't have a PMF calculation for Bellows Falls, but it's a type of dam that it would be, at the PMF it would probably be completely inundated, might breach, I'm not really sure. But at that point the downstream side of the dam is basically, the rise is less than a foot if that were to happen.

So you're already flooding downstream at the same level, essentially.

MR. HOGAN: At this point I'd like to turn to the agencies to hear if they have comments or concerns regarding geology and soils or erosion issues.

MR. COATS: The City of Lebanon is interested in studying the fluvial geomorphology of the areas up and downstream from the dam. In particular, what are the effects of the dam and what happens to the riverbank as a result of the presence of the dam, especially desiccation of

areas that were more typically wet, and humidity on areas that were more formally dry; and the capillary effect or other effects that experience levels going up and down much more rapidly than in natural settings.

In particular of that, the reason we're concerned is that this effect that it might have on one of our largest brownfields in the city, which we do not own; it is owned by the State, and this is Westboro Yard, which is just downstream of the dam. We have monitoring wells that are currently in place, and wondering about the leaching potential of the pumping action there, because there are nasty toxics there that would inevitably end up in the river; looking at how we'd remediate this, et cetera, etc. Again, like I said, the city doesn't own it but suffers from the consequences of it.

MS. HATFIELD: We own the north end.

MR. COATS: North end -- yes, we do own the north end. So we're interested in that in particular.

MR. HOGAN: Can you give us a little detail on what the brownfield is?

MR. COATS: The brownfield is a former rail yard, and current rail yard although the particular nasty is a former rail yard that is present right next to West Lebanon, downtown West Lebanon. And it is adjacent to the Connecticut River.

MR. HOGAN: Do we know what the toxins are that are of issue?

MR. COATS: We have not done all the Phase 1 and Phase 2, so I don't think we have a complete list, but we do --

MS. HATFIELD: We've done a Phase 1 and Phase 2 for the north end of the yard. It's primarily petroleum-based, but has naphthalene, there is a garage which is north of the bridge -- just north of Bridge Street, which had ruptured tanks some years ago. There was a plume running from that location underneath Bridge Street, comes onto the north end of Westboro Yard, and is pointing toward the Connecticut River.

We removed the monitoring wells about 18 months ago because New Hampshire DOT put a temporary bridge in, replacing the Route 4 Bridge. That bridge is supposed to be in place in 2014, at which point the temporary bridge will be removed, and we will then -- that area will become a park and we will be replacing the monitor device.

Further down the yard, there are a series of monitoring wells. And then further than that, when we get into the old rail buildings, we're about to start working on the Phase 1 of those buildings. We know there's petroleum, we know there's asbestos, we do not know what's under the building yet.

MR. HOGAN: So the north end of the brownfield is basically the Route 4 bridge area that's under construction?

MS. HATFIELD: That's correct, yes. Well, that's our north end. There are also wells to the north of that, around the glass -- there's an old garage where a tank ruptured, so they have a series of monitoring wells. They've expanded the area of monitoring to include the north end of the yard.

MR. HOGAN: I'm being told we need your name for the record.

MS. HATFIELD: I'm Shelley Hatfield.

MR. HOGAN: Other -- Yes, sir?

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

We're concerned about the roadability of the soils along the pool, particularly as the levels change, -- river. They're called full mouths for recreational boaters, oftentimes -- (inaudible)

MR. HOGAN: Can you speak up a little bit?

MR. KULBREKI: So we're concerned with the erosion, so we'd like to see a study to see how we could minimize the impact of lowering and raising of the level. See how we can minimize that, that impacts. Also how to look at, when we do have damage, silt failure, who is responsible for it and should be responding to that. Right now there's no mechanism for us to contact anybody to say

we've got a bunch of silt failure, a bunch of trees in the river. Who should be responsible for that? Should be some sort of mechanism so it's not the town responding to something on private property that's nothing to do with the town.

MR. HOGAN: Other comments on soils and erosion?

MR. THAXTON: James Thaxton, Upper Valley Land Trust.

I know that it was mentioned that TransCanada owns about a thousand acres of land along the Connecticut River, that many of the prime agricultural soils, and then previous relicensing projects. They have conserved those lands with a conservation easement and we would be interested to continue, have that as part of the mitigation; and maybe consideration of vegetated buffers along the Connecticut River.

MR. HOGAN: David?

MR. DEEN: And I did not hear it as part of the introduction of the section, and this may be coming up under fisheries; but the impact of erosion on aquatic species, in particular mussels and in the Bellows Falls reach there is a colony -- if that's the right word -- of dwarf wedgemussel, and then also the impact of erosion on the bottom of the river for other life stages of other aquatic species.

And as we said, I don't know if that will come up

later; but it certainly is an issue that is caused by erosion.

David Deen, Connecticut River Watershed Council.

MR. HOGAN: Other concerns or comments about erosion and sediment issues?

SPEAKER: One quick comment. I apologize; I know several people here had trouble hearing because of the fan.

My focus is terrestrial research, but it does take from all the topics. So if you guys can speak up, I'd really appreciate it. I know several people here can't hear.

Thank you very much.

MR. HOGAN: For the members of the public who brought prepared sometimes that they want to make, were any of those statements specific to erosion issues?

If you'd like to give that to --

SPEAKER: I have a memo that -- essentially what I just talked about, you can put it in the record when we're done.

MR. HOGAN: That would be great.

Nothing else on erosion or geology and soils?

Okay, let's move on to water resources.

@ Water Resources - Water Quantity and Quality

MS. SCANGAS: Angie Scangas, FERC.

So as identified in the scoping document, the

preliminary effects for water resources where the current and proposed project operations on water quantity and quality, and particularly identified were dissolved oxygen and temperature.

MR. HOGAN: We've heard a little bit about water quality concerns associated with the brownfield and potential for leaching. Are there other issues?

MR. KULBREKI: Pete Kulbreki, Town of Hanover.

We are in the process of renewing our MPDS permit, which is a national pollution discharge elimination system permit issued to wastewater treatment plants. And our limits are, we will be seeing limits on nitrogen, phosphorus, and also based on low flows in the river. Some of our concerns are how the lower flow might affect our (inaudible) as well as erosion and release of phosphorus into the water body, which is a contributing factor to low DO in the Long Island Sound; and that is in turn affecting levels of permitting and treatment requirements that communities like Hanover and Lebanon and communities down the river will be facing.

MR. HOGAN: Sounds like we have a cumulative effects analysis for the Long Island Sound.

MR. RAGONESE: Do you want me to identify that we did some studies on water quality or not?

MR. HOGAN: I'm sorry, John. Yes.

MR. RAGONESE: So we didn't propose, at this stage of the game, any water quality studies in the PAD, but we did conduct over the last year a baseline water quality assessment of our reservoirs and the discharges for Wilder and Bellows Falls. That information will be released very, very shortly; it's in its second final revision on the study, so look for that on the website. And we'll probably be filing that at the Commission as well.

But basically we had continuous monitoring of the reservoirs and downstream for DO and temperature, and some other nutrient and/or presence of different -- I can't remember what we had. But there were a number of different ones.

This was a study that was developed; the study plan was developed in consultation with the state agencies; they were requesting some other elements to be monitored besides temperature and DO. And we complied. We also did some profile assessments; I think it was every week in the reservoirs beyond just the continuous monitoring. And that will be available shortly.

We also, just to -- we did propose in the PAD or identified in the PAD, particularly on water quality and the impact of project operations on water quantity, We have a Connecticut River comprehensive optimization model. This model will basically use hourly natural inflows into the

main stem throughout the Connecticut. It will identify all the current constraints that are on project licensees throughout the Connecticut River; it will allow us to be able to modify the constraints using different scenarios; it will have hourly energy prices that will be basically day-ahead prices in the New England market, which is how we operate.

The outputs will be discharge -- in this case we'll be really looking at either the discharge or flows through the reservoirs, and any changes that would occur, and compared to baseline conditions, which is basically what we're doing today.

MR. HOGAN: It's Pete?

MR. KULBREKI: Yes.

MR. HOGAN: You mentioned going for an MPDS permit currently.

MR. KULBREKI: Correct.

MR. HOGAN: And you're concerned about a reduction in flows?

MR. KULBREKI: There are three things we're concerned about; lower flows change the dilution factor; requires higher level treatment. The other two issues are nitrogen and phosphorus. Nitrogen and phosphorus are found in the environment, but they're also -- phosphorus in particular is released when soils are eroded. It is a

cumulative effect. The Long Island Sound, with LDO and contributing factors.

We're the small, tiny little amount and we're required to treat to a higher level, and our concern is that the background environment could have a far greater effect, with no treatment, and we're struggling to meet a permit limit in levels that we can't do with the current technical we have, which is a huge expense to us. Not just Hanover, but any of the communities discharge to not only the Connecticut River but tributaries of the Connecticut River.

MR. HOGAN: Just a clarification; when you say lower flows, are there lower flows or a potential for lower flows?

MR. KULBREKI: Well, the permitted low flows. Whenever the permitted low flow is --

MR. HOGAN: So in the next licensing if --

MR. KULBREKI: Yes.

MR. HOGAN: -- flows were to be reduced, it would be an issue for you?

MR. KULBREKI: It could be an issue for us.

MR. HOGAN: Okay, that's what I wanted to figure out, if we were talking about a reduction caused by the licensing, or natural events --

MR. KULBREKI: That's the one thing with the low flows, the dilution, but the other factor is the erosion

caused by raising and lowering of levels, silting soils that contribute to high nitrogen and phosphorus levels, vegetation falling in the river and that sort of thing.

MR. HOGAN: Other water quality concerns?

MR. COATS: I don't know if this falls under water quality, but there is some concern about -- from the City of Lebanon again -- coordination; we are having more and more rain events and flood events, and the coordination between the other dams on tributaries and things that may have nothing to do with TransCanada. We have a number of dams on the Mascoma, and it came to our attention that there was some delays that were problematic between the communication, between -- the Connecticut obviously was worse in Vermont than we experienced; but we have dams along the Mascoma, one of the tributaries, and I assume others as well.

I don't know where that belongs in terms of understanding or how the study or a study would need to be done or whether it's just simply a matter of tweaking process -- I don't know, but it has been expressed in city --

MR. HOGAN: So you've identified in the past issues during high flow events coordination between the dam operators, the release and management of that flow for the city?

MR. COATS: Yes.

MR. HOGAN: And flooding issues.

MR. COATS: Yes.

MR. HOGAN: John, do you have a response to that as far as your current operations?

MR. RAGONESE: The Mascoma dams, that are storage, are all operated by New Hampshire Department of Environmental Services. I can't speak to exactly what the issue that the City has; their impact in the center of the city is affected by the Mascoma River versus the Connecticut River; so I can't speak to what their issues might be. They are operated to some extent on seasonal storage; they don't have a lot of storage if the storm is outside of the winter drawdown period; they're held at recreational limits; you know, there's a lot of development around them. I don't think there's a lot of flood storage in them, period.

How they operate them under high flows, I would defer.

MR. HOGAN: So there is no coordination --

MR. RAGONESE: I mean, we have coordination with flood control facilities, but -- and we are in constant contact under high flow events like Irene or Sandy with the DES and the Department of Emergency Management.

I'm not aware of the Mascoma operating for flood control to any great extent. There's just not a lot of

capacity there. But I really can't speak to what the issues are.

MR. COATS: And again we're just -- because we know that there's sort of a deficiency there, in particular it really happened at the mouth of the Mascoma, we have obviously facilities there at the mouth of the Mascoma; there was a great deal of combined effect, and this is not a critique of what happened, but it seems like a good opportunity to figure out better how to handle it in the future.

MR. RAGONESE: Yes, those storms are -- those are primarily influenced by the unregulated flow on the White River. Honestly. Those are natural inflows into the Connecticut from the White River, not from Wilder dam. Those are -- once you get above 10,000, everything is natural in the river. We're not doing anything at that point. And these flows are in the 70, 80, 90 thousand cfs range that we're talking about here.

MR. HOGAN: So we're upstream of Wilder and --

MR. COATS: Again, this is not pointing fingers or anything; just it's coordinated --

MR. HOGAN: No, I recognize that --

MR. RAGONESE: Just trying to get an idea geographically how this works, yes.

We've got no capability of Wilder doing anything

about -- or Mascoma, for that matter, at those kinds of flow levels; they're just natural flows.

MR. HOGAN: Other water quality or water quantity?

John.

MR. WARNER: John Warner, U.S. Fish & Wildlife Service. I had a question for the FERC folks.

In this section, referencing to water quantity and the subsequent issue on, section on aquatic resources looking at operation changes on downstream flows and reservoir fluctuations; but can you define what you mean in this bullet by water quantity? What you're looking at versus what's in the next bullet on aquatic resources.

MR. HOGAN: They're definitely linked, John.

MR. WARNER: I got that part.

MR. HOGAN: Water quantity can be peaking flows, reservoir storage amounts. Clearly the next bullet gets into the effects of that on aquatic resources.

MR. WARNER: So I guess going from there, the way it's phrased, and I'm pretty sure you're going to cover all this; but it's phrased -- effects of current and proposed operations and the proposed operations are the current operations right now. And I would anticipate that there will be recommended changes to those operations, so clearly any of those need to be assessed as well. But this is a

complicated system, and anything that happens at Wilder and Bellows affects Vernon and downstream; so John mentioned in his operations model, but just try and understand how we'll all be able to keep track of when things are identified for aquatic resources or whatever, that that gets put into a model and then gets returned back to us during the licensing proceedings so we don't recommend things in one place that are not achievable because of recommendations in another place.

MR. RAGONESE: Let me speak to that, because I didn't go into great detail. It's a really good question.

So just to characterize, our operations model is, basically will run from the headwaters of the Connecticut River; it's a main stem model -- that's what we're concerned about, it's a main stem model -- it will run from our headwaters. And primarily outputs of our model, is a competitive marketplace; there's basically a line of demarcation between -- we'll hand off the outputs of our model on any particular scenario.

So our model is designed to be able to look at all kinds of scenarios. We intend to engage with whoever wants to be part of sort of a model working group to look at scenarios, be able to review the results. So as we've done in all our past relicensings, we try to provide the right amount of information to be able to make the assessments.

But what we'll get out of our model is basically the discharge out of Vernon, of that scenario. Now whether or not that scenario is characterized further downstream for the First Light folks in terms of an overall sort of scenario description, we'll pass on to John and Mark the outputs of our model to be the inputs of their model. We are not trying to model and optimize First Light projects. That's a no-no in the marketplace.

But we will give the discharge, and then it will be up to them. What we'll do as well is, we'll be able to take -- and we're attempting to model or characterize their facility. So if there's a scenario that gets proposed in a cumulative effects analysis for First Light to look at, we'll be able to evaluate whether or not that constrains our system or maybe just -- the water's not there. What it might mean.

So we'll be able to move that same scenario upstream. So I don't know if I answered your question, John, but the idea is that this model is designed to look at various operating scenarios and compare it to baseline conditions.

MR. HOGAN: Let me ask, will it go as far as also feeding into habit analysis?

MR. RAGONESE: It can, more as a post-process analysis, yes.

MR. HOGAN: Does that get at your question?
MR. WARNER: Thanks.
MR. HOGAN: John mentioned actually establishing a working group on model development. Is there a show of hands of folks who would be interested in that?
(Laughter)
MR. HOGAN: Let's get your hands for the record so that John doesn't have to write them all down.
John Warner?
MR. WARNER: I'm not interested in developing a model. I have no idea of that.
MR. HOGAN: That's like reviewing --
(Simultaneous discussion)
MR. WARNER: No, just in the output side.
MR. SIMS: Norman Sims from the Appalachian Mountain Club.
MR. CHRISTOPHER: Tom Christopher from FLOW.
MR. HOGAN: Anybody else?
MS. KENNEDY: Katie Kennedy of the Nature Conservancy.
MR. CROCKER: Jeff Crocker with the Vermont ANR.
MR. HOGAN: Trapped you.
MR. RAGONESE: What's that?
MR. HOGAN: I trapped you.
MR. RAGONESE: No, no, that's good. I was trying

to figure out how we're going to try to identify some of the working groups as well, so that works for me.

MR. HOGAN: Other questions about, or comments regarding water quality or quantity, or concerns with the Bellows Falls or the Wilder project?

MR. GRIES: Gabe Gries with New Hampshire Fish & game. I just had a general question, not having been through this process before. Should we --

SPEAKER: Could you speak up, please?

MR. GRIES: Requested studies that the agencies are already working on. Is that subjects that we should be bringing up --?

MR. HOGAN: We would certainly be interested in the area. What studies you're thinking about that we need to do--

MR. GRIES: Okay.

MR. HOGAN: The first idea is, you've seen this as a potential effect or a concern, and as a result we're going to be asking for or we're contemplating studies A, B, and C. And I think that's absolutely appropriate for this forum.

Did everybody hear the question?

SPEAKER: No.

MR. HOGAN: Question was, is it appropriate in this forum to identify studies that we are contemplating?

And the answer is yes.

Yes.

SPEAKER: I apologize at this point since it's already been asked, but are you or will you be looking at studies of how the morphology has -- yes, it was asked already, and I--.

MR. HOGAN: It was asked, and we took a note and we've got it recorded that there is an interest in a fluvial geomorphology study of the project reaches.

SPEAKER: Yes. It was also particularly because the White River's geometry had changed so much.

MR. HOGAN: Would you like to elaborate on that?

SPEAKER: The confluence of the White River in West Lebanon is an area that -- it runs naturally, and has continued to flood; and now with the architecture of the White River, it's so scoured by Tropical Storm Irene -- we don't really know how, we know things will be the same but different next time, and it would be important to understand how. So just looking at sediments, looking at transport of sediments, looking at what areas continue to be vulnerable, but there might not be new areas that are vulnerable because things have changed on the White.

MR. HOGAN: And how the project is affecting that?

SPEAKER: How the project will live with the --

how the project will coordinate with the effects of that. I mean, this is downstream; but what happens when, with what the project is doing on both dams does have some interaction.

MR. HOGAN: Thank you.

Other --

MS. KENNEDY: Katie Kennedy with the Nature Conservancy's Connecticut River program.

With regard to the water quality issue, one of the speakers today mentioned phosphorus and nitrogen. We are interested in water quality to the extent that it is impacted by the flood plain community, so in the Connecticut River Basin the flood plain communities have been largely removed; and so there's potential that there's an unbalance in water quality because those flood plain communities have been removed or impacted. So we're interested in understanding have the projects impacted flood plain communities in a way that it impacts the water quality. And that's just one of the impacts, of course, that it does connect to that, potentially reestablishing riparian flood plain vegetation to mitigate nutrient impacts.

And with regard to water quantity, I would like to state that we would like water quantity to be defined in terms of the full scope of flow, so any magnitude duration, rate of change, frequency, timing; those different things.

And of course in our case, how that is important to the natural ecosystem; but we are interested in understanding how we can optimize those components so that we can continue to provide hydropower and then other interests like recreation and any other interests on the river.

And the Nature Conservancy has also been developing a model, and it is a full system model, optimization and an operations model. And then we developed a smaller sub-daily model that does encompass all of the projects. So I'm not sure exactly how that's going to be involved; but I hope that it will at least be a tool that we can use in this setting to help at least come up with potential scenarios that the power companies can then run in their operations model. So I'm hoping we can work with others to do that.

MR. HOGAN: Katie, you gave us a very specific definition for water quantity. Could you repeat that real quick?

MS. KENNEDY: Yes. So there's five kind of established components of the flow regime that are important in its magnitude; how high the peaks are, the duration, how high to preserve it, also how low. And then duration; so how long those -- how long the low flows last, how long the low flows last.

The rate of change, so how quickly the flows change on both increase and decrease, the frequency, how often those particular flows last, or how often they occur. And then the timing, when they occurred.

And those five components are essentially what defined the structure and function of the natural ecosystem.

MR. HOGAN: And when you say timing, you're talking seasonal, daily --?

MS. KENNEDY: Seasonal or anything. So from hourly to hundred year sort of thing.

MR. HOGAN: Okay. Okay. Thank you.

Yes, sir.

MR. SCHMIDT: Carl Schmidt from the Upper Valley River Subcommittee.

I have a two-part question that refers back to a point that James Thaxton raised -- concerning land lease owned by TransCanada along the river banks. And this relates to the flowage rights that were originally required and acquired when Wilder Dam was created.

Does TransCanada have a comprehensive record of those flowage rights on both sides of the river? Secondly, going forward, might it be possible to extend some sort of conservation or other protection for those areas that are covered by the flowage rights?

MR. HOGAN: The answer to Part B is yes, it's

possible. Our NEPA analysis will determine what's appropriate; so we're not there right now, we're still trying to identify the issues,l and we will do our analysis.

For Part A, I'm going to let John Ragonese --

MR. RAGONESE: Can you explain Part B again? I'm not really sure I understand it.

MR. HOGAN: He was asking --

MR. RAGONESE: Just so I can understand.

Was the question about extending our flowage rights to --

MR. HOGAN: What I answered was, is it possible to include PM&E measures within those flowage rights for potential effects of the project? And the answer is yes.

John, first part of the question was, do you have a comprehensive record of all of your flowage rights?

MR. RAGONESE: We do have -- unknown to the FERC attorneys -- the old licenses had an exhibit. So we do have an exhibit from our original license. I don't think they're required in current licenses to maintain, but there is an exhibit on the record -- it's a title, for lack of a better word -- sort of a title history of the acquisition of flow rights.

We have a record of them, or where they are in the book and page; but they're on anybody's deed currently, or there's a reference should be on anyone's deed. You

should be able to find your flowage rights by going through your records of your current deed as well as the original deed when it was purchased.

But we did have an exhibit; I think we used to call it Exhibit F, but it's not Exhibit F, that's something else. But we do have a record that we can, that we use to research what these were.

MR. HOGAN: Does that answer your question, sir?

MR. SCHMIDT: Yes. I wasn't asking from a personal standpoint, but from a comprehensive standpoint about those flowage rights.

MR. HOGAN: Other -- Yes, sir?

&- SPEAKER: Katie Kennedy mentioned about flood plain communities and the effects that those have on nutrients within the river. I don't know if this is something that would be possible, but the Upper Valley Land Trust has been interested in flood plain communities' effect on temperature within the river. It seem that the main stem of the Connecticut River is different from tributary sources where the vegetation can affect the temperature a great deal.

So it would be helpful for us to know if there were effects of flood plain communities, natural habitat communities on temperature within the main stem of the Connecticut River.

MR. HOGAN: Okay.

Is that only the main stem; doesn't extend to back water areas or --

& SPEAKER: Well, it could. Certainly I think there would be information that could be found about, you know, in general about buffer, vegetative buffer, woody buffers affecting tributaries. Yes, I think that would be part of it, But working with farmers and others who have sort of a reluctance to have a wide buffer, whether having some sort of wide vegetative buffer will actually do anything for temperature within the river.

MR. HOGAN: Other -- David?

MR. DEEN: David Deen, Watershed Council.

Those five parameters, if you will, that Katie laid out affect things other than flood plain forest and terrestrial habitat, because wetted area for aquatic species is something to be concerned about. Stranding in terms of ramping rates up and down, drawdowns in the reservoir, particularly seasonal drawdowns for spawning.

MR. HOGAN: You're jumping ahead.

MR. DEEN: Okay.

(Laughter)

But it's all in those five. Flows for migration and then minimum flows in bypass re aches, and minimum flows overall; they have not been evaluated for 30 years, so.

MR. HOGAN: That seems like a good segue to aquatic resources. Unless there's any other comments on water quality or quantity.

Do we want to go right into aquatic resources, or do we want to take a break? I'm flexible.

Do it. Okay.

MR. HOGAN: Aquatic Resources.

Aquatic Resources

@ MR. SEARS: This is Mike Sears of FERC.

Under aquatic resources, we identified the following issues: Effects of project operations and maintenance, including fluctuations in water levels and flow releases on aquatic habit and resources in the project vicinity. For example, resident and migratory fish populations, fish spawning, rearing, feeding and overwintering habitats, mussels and macroinvertebrate populations and habitats.

Also, effects of project facilities and operations, including reservoir fluctuations and generation releases on fish migration through and within project fishways, reservoirs, and the downstream riverine corridor.

And the effects of entrainment on fish populations.

MR. HOGAN: John, any --?

MR. RAGONESE: In our PAD, we did not propose any

specific studies on addressing or identifying aquatic habitat other than the fact that we did identify that we anticipate, as a continued PM&E measure, the continued operation of our up and downstream passage facilities that are currently primarily focused on anadromous fish species.

In our pre-scoping studies, we did perform a fairly comprehensive survey for dwarf wedgemussel; it's a federally endangered species, both in the impoundments of Wilder and Bellows Falls, as well as portions of the downstream areas or affected areas below. We also coordinated -- well, let me just go back to the dwarf wedgemussel. That report has just been published, and it's available on our website, for those that would like to look it up.

Historically, there have been a number of different studies relative to, assessments of migration,l use of fish ladders and there our reservoirs; but those are primarily focused on when those ladders went in, when those devices went in; and then studies about effectiveness; and those are also on the website under public information at the library.

MR. HOGAN: I have a question for State of New Hampshire, State of Vermont and Fish & Wildlife Service regarding, are the species that we're interested in different, migratory species different between Bellows Falls

and Wilder? Bellows Falls was the historic extent of shad runs, is that -- we're interested in shad passage up to Bellows Falls, or does it carry all the way through, or same question of why or other species. If you can kind of enlighten us as to the migratory concerns at each facility, whether they're the same or whether they're different, I'd like to know.

@ MR. FITZGERALD: Brian Fitzgerald, Vermont Agency of Natural Resources. We'll cover all that in our written comments that we'll be filing by the March 1 deadline.

MR. HOGAN: Okay. You're looking into it.

MR. FITZGERALD: We are now.

(Laughter)

MR. HOGAN: Perfect. I did my job. Let's all go home now.

Any comments regarding aquatic resources, fisheries issues associated with the project, David?

MR. DEEN: One thing I did not see in any of the PADs was concern about passage for American eel, and I just wanted to get that into the record.

And the existing passage facilities are not eel-friendly, if you will.

MR. HOGAN: So Brian, in your comments, I'd like input on American eel, too.

MR. FITZGERALD: You can count on that.

(Laughter)

MR. HOGAN: Pete?

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

Same thing regarding drawdown. Particularly the confluence of the Mink Brook and the river when the water is drawn down. Concerning waterfowl as well as allowing the rotting vegetation gas, creating quite a bit of odor; so that's an issue that we've noticed.

MR. HOGAN: This is at Mink Brook?

MR. KULBREKI: Mink Brook. We get blamed for it at our wastewater plant, but oftentimes, sometimes it's the mud flats. But there's an issue there. That section is a sucker run, and it has been a restoration site for Atlantic salmon, and I'm not sure there's any study on the effects of that, the timing of year on the drawdowns.

MR. HOGAN: So drawdown effects on aquatic habitats.

MR. KULBREKI: Yes.

SPEAKER: And specifically it sounds like drawdown effects on tributary access; and that goes to backwater areas as well.

I will give you a little more on the fish species, at least, from the American eel standpoint. We'll be looking at American eel passage and current distribution questions throughout, in all the project areas. Sea lamprey

passage at this point through all projects and American shad up through Vernon; but will probably give a clear --

AUDIENCE: Would you speak up a little bit?

SPEAKER: Our final comments will have more specifics relative to the management questions on anadromous fish.

MR. HOGAN: Okay.

SPEAKER: I couldn't hear what you said about shad.

SPEAKER: Shad passage is now -- shad have passed through Bellows, but the management plan has them up to the base of Bellows Falls. That has been the traditional operation. Whether that continues, that may be reassessed; I don't know. That would be a Connecticut River Atlantic Salmon Commission visit.

MR. HOGAN: Is it going to be in time for this process?

SPEAKER: I can't tell you that. I can't tell you there will be a change; I'm not aware of it. I'm not precluding that, though.

MR. HOGAN: So right now the management plan is to get shad to Bellows and not necessarily beyond.

SPEAKER: Right.

MR. HOGAN: Okay. Is that the same for river herring?

SPEAKER: I'm not really sure about the river herring.

MR. DEEN: No, it's lower down river for the herring.

MR. RAGONESE: I just want to point out, all the various fish management plans for shad or American eel or salmon, those are all in the public library on the website as well, so people can get to those easily. Whereas, you probably can't find them on the FERC website.

MR. HOGAN: One thing we've identified, to get a little more specific is, potential project effects of changing flows and operations on the migration runs themselves of anadromous fish.

Is that an actual issue or is that just something I made up?

SPEAKER: No, it's an actual issue. You're right. You wrote it so I didn't have to say it.

MR. HOGAN: Just want to make sure I -- I'm looking for vindication.

(Laughter)

MR. HOGAN: And I'm sure you have some ideas about how to investigate this issue?

SPEAKER: I think I'm going to punt that to Brian's answer.

(Laughter)

But we'll give -- complete study requests, at the end of the process.

MR. HOGAN: Okay.

Other comments regarding fish and aquatic resource issues with the projects, at one or both?

Yes, sir.

MR. CARPENTER: I think the PAD identified bridal shiner in the Wilder comment, state threatened species in New Hampshire, and I think that might have been a misidentification. So I think they will be proposed a general fish community study for the impoundments of these, and I just don't want to tell you when to go off and try to propose management-specific for bridal shiner before we know whether they are there, surely.

Matt Carpenter, New Hampshire Fish & Game.

MR. HOGAN: Are you proposing a, or going to be requesting a fisheries survey of just Wilder, or all three projects, or Bellows Falls also?

MR. CARPENTER: I think fish community surveys will be proposed as part of the written package that's going to be submitted.

MR. HOGAN: Okay. Thank you.

Other comments on fish and aquatic resources?

MS. KENNEDY: Kate Kennedy, Nature Conservancy. This may be a question for Thursday's meeting, but I just

would like to ask why this is not a cumulative effect.

MR. HOGAN: What is 'this'?

MS. KENNEDY: Oh, the project operations, the first bullet in aquatic resources. Perhaps that's a question for Thursdays.

SPEAKER: Could you repeat the question?

MS. KENNEDY: So the starred, asterisk bullets are fully analyzed, implemented effects, and I'm just curious in terms of whole populations.

MR. HOGAN: So your comment is you think it should be.

MS. KENNEDY: Perhaps. I was proposing there might be a reasonable explanation.

MR. HOGAN: No?

MS. KENNEDY: Okay.

MR. HOGAN: Would you say that it should be even the resident species, or just cumulative effect on anadromous species?

MS. KENNEDY: I think just, if we're talking about -- you know, we had talked about what if you can't provide some kind of management scenario at one facility because of the management of another facility? So it may be the case where, if you look at the whole system you can do better for the whole population rather than trying to meet needs at different facilities.

So in other words, if management can be adjusted at one facility to better manage at another facility for the population.

MR. HOGAN: So if you lost bass spawning habitat at one, but you can provide it at another --

MS. KENNEDY: Or better. So in other words, it could be the case where you could either spread it out so that everything is just barely getting it by, or -- I'm just throwing out possibilities, or you can provide excellent habitat, and it's the same community at one facility.

So there's just potential for that, to have that. I don't know -- that sounds really traumatic -- so I don't know if it would be anything like that, but it's just a potential, I think, when you're talking about manipulating flows.

MR. HOGAN: Thank you.

David?

MR. DEEN: David Deen, Watershed Council.

Part of that discussion is seasonal. You have to put it in the context of seasonal; because as you said, bass spawning. Well, that's a springtime event, and potentially as you manage to ecological values, you manage on a seasonal basis, not in sort of an abstract, all-year-round is where you strike your balances.

So I think the seasonal nature of happenings is

of import with that. And that goes to your question about flows and migration; it is seasonal. You know, spring and fall, in and out. And you'd have to be aware of that also in terms of operations.

MR. HOGAN: Other aquatic resource issues or concerns?

Okay. Terrestrial Resources.

@ Terrestrial Resources

MR. BATTAGLIA: Terrestrial resource issues identified thus far: Effects of project fluctuations in the water levels of flow releases from the projects on riparian, wetland and littoral vegetation community types, and the spread of invasive species as a result of project operations along the shoreline of the project. Effects of project operation and maintenance activities, for example, road and facility maintenance, and project-related recreation on wildlife habitat and wildlife.

The effects of project operation and maintenance on river bank integrity and shoreline erosion along the project reservoir and stream reaches, and its potential effects on riparian vegetation.

Effects of the frequency, timing, amplitude and duration of reservoir fluctuations on waterfowl and on riparian and wetland habitats.

And the effects of project operation and

maintenance and project-related recreation on bald eagles and their habitat.

MR. HOGAN: John, have you got --?

MR. RAGONESE: Yes. In the PAD, we didn't particularly specific a specific study that we were proposing at the time, waiting for input and feedback from agencies and stakeholders; and we didn't propose any particular PM&E measures. I would note that we do, just thinking of the last one, we are a primary sponsor of bald eagle surveys in monitoring of the Connecticut River, but that's something we, we're just supporting the Audubon Society's efforts in that regard.

In terms of pre-scoping, I mentioned earlier that our shoreline survey, the survey also included identification of wetlands, riparian vegetation types including invasive species. As I said earlier, we conducted jessup's milk vetch assessments downstream of Wilder, and then we did conduct a full blown rare, threatened and endangered species survey of all the projects; this includes the impoundment and the downstream reaches between the impoundments below Wilder and Bellows Falls.

That survey, as well as the jessup's milk vetch survey, both those reports are just about ready to go to the agencies; and I think they will -- well, eventually they will be on the website, people will address the agency

comments first. But the rare and endangered species survey not only took the historic records and identified whether or not there were potential impacts to the project operations on those locations; we had to find the locations, but it's fair to say that we identified in some cases up to 40 percent additional sites through the survey. So that information will be out there.

There may not be specific locational information on this stuff that's available in the public versions of these; but you'd have to request the state, go to the state agencies for further information other than what we might produce or publish publicly, public record. And that's it.

MR. HOGAN: Okay. Yes, sir?

MR. MARTIN: Chris Martin from the Audubon Society of New Hampshire.

John, can I ask you a question about the last thing you just said.

MR. RAGONESE: Sure.

MR. MARTIN: Those threatened and endangered studies, were those --

MR. RAGONESE: Plant species. Sorry.

MR. MARTIN: Plant species, okay.

Were they on the federally-listed species or state-listed species?

MR. RAGONESE: State and federal.

MR. MARTIN: Okay. All right.

MR. RAGONESE: Yes, we really coordinated those through the state offices, actually.

MR. MARTIN: With both states?

MR. RAGONESE: Yes.

MS. CORMEN: I'm Nicole Cormen, Lebanon City Council.

Our City of Lebanon Natural Resource Inventory is one of the ten that was done by Rick Van Der Pol, some of you know, identified a very unusual community immediately below the Wilder Dam itself. I mean, just on the rocks to which the dam is attached. And I thought to bring it -- I didn't bring the list today, but I would just encourage you to look at the City of Lebanon Natural Resource Inventory and/or contact Dr. Van der Pol. There are state and possibly many rare species in that. It has to do with the misting community that happens there, immediately adjacent to where the flow is.

MR. HOGAN: Is that a list that's readily available?

MS. CORMEN: It's a public document and -- our planning and zoning director is here. It's on the City's website: LebanonNH.net.

MR. HOGAN: L e b?

MS. CORMEN: LEBNH.net. And there is a plant list in the appendix there, but in terms of where, the exact location of the exact species, I think Dr. Van der Pol would probably be a better resource.

MR. HOGAN: We'll certain take written comments. I don't know that we're going to actually give him a call; so if there's anything that you feel needs to be in our public record, we should try to get it there. Interesting.

Other comments regarding terrestrial resources?

John?

MR. WARNER: One bullet identifies the effects of operation and maintenance on bald eagles and their habitat, and it's specified that we want to see an inventory of riparian forest communities, you know, potential nesting trees, and that would probably integrate with Audubon's survey of where the birds have been; but also look at what's out there and whether or not protection of certain resources are necessary.

MR. MARTIN: I do want to add a clarification, or a clarification to your question.

Chris Martin from New Hampshire Audubon.

We are involved in a two state effort in New Hampshire and Vermont to fully understand the distribution and the breeding locations of bald eagles up and down the entire watershed from the Massachusetts state line north, in

both states. Not just the main stem of the Connecticut but the tributaries -- well, so essential watershed-based study. And to the extent that FERC is interested in that information as we have it currently, we'd be happy to provide that.

MR. HOGAN: That would be fantastic.

MR. MARTIN: What format that takes would be something you'd have to explain, what you're looking for specifically.

MR. HOGAN: Okay, well, why don't we get together after the meeting and we can --

MR. MARTIN: Yes. I'll make a point of that.

MR. HOGAN: Other terrestrial resource concerns associated with the projects?

SPEAKER: It may be wrapped into this, but the riparian areas also include agricultural lands, and maybe that would be something to look into, about impacts on agricultural use of the property.

MR. HOGAN: I think we'll discuss that a little bit more when we get to land use issues.

Katie?

MS. KENNEDY: I had a question about the vegetation community types. How far that's planning on extending, and I guess that would suggest that extended to the hundred year flood plain.

MR. HOGAN: For surveys?
MS. KENNEDY: For the vegetation, yes.
MR. HOGAN: Vegetation surveys.
SPEAKER: Would you repeat the question?
MS. KENNEDY: I was asking about the extent of the vegetation community types; so particularly flood plains are looked up until the 100 year flood plain, then you get the full complement of the transition from the bottom lands to the upland flood plain communities.
MR. HOGAN: So if vegetation surveys are conducted --
MS. KENNEDY: Yes.
MR. HOGAN: -- it's you recommendation that the do it with an 100 year flood plain/
MS. KENNEDY: Right, so that this vegetation community type should include the full flood plain.
MR. SIMS: Can I ask a question of the resource agencies. Norman Sims --
MR. HOGAN: Can't promise you you're going to get an answer.
MR. SIMS: From watching the news this morning, I learned that Northeastern Australia had an 100 year flood three years ago and they had another one yesterday. My question is, is anybody revising that terminology of the 100 year flood?

MR. RAGONESE: I think they're just revising the line.

SPEAKER: An 100 year flood refers to the probability of occurrence of, it's -- take 100 and divide it, 1 over 100, that will be the probability of it recurring in any one year. So you will change it; 100 year flood will exist, but it may be a higher number.

SPEAKER: Higher probability.

SPEAKER: Well, no; the number may be greater.

MR. RAGONESE: No.

SPEAKER: It may be a greater number but there will still be an 100 year flood.

MR. SIMS: Is there any way of finding out how that number is increasing?

SPEAKER: I don't -- there is some data --

MR. RAGONESE: I mean, I can note that -- your source for that is FEMA, probably; they are your primary source to go to for finding out whether or not they're adjusting.

Literally days after Irene, FEMA was out mapping the water's edge along the Connecticut River. There are flags everywhere that mark -- and they wouldn't necessarily say that this is an 100 year flood; they were just marking it, they were revising it. I think they were focusing on a 500 year flood adjustment, as opposed to maybe an 100 year,

perhaps because that exceeded it in a lot of places.

But FEMA is your agency that would be dealing with that.

SPEAKER: Or USGS.

MR. RAGONESE: Exactly, yes. They would be working with them.

SPEAKER: I think UNH's work with the lamprey river watersheds to re-delineate a lot of those flood boundaries, so that might be a place to look at, too. See how they did that.

MR. RAGONESE: Yes. That actually got mentioned last night after the meeting as well. The caller notes that we had. There is -- UNH has a study, and they're doing it on four or five different basins at a time, and I think the Connecticut River is the next basin that may be coming up for some information that's going to get released. I don't know when, but I think it's in the next five, six months; something like that.

MR. HOGAN: Other concerns associated with terrestrial resources?

Anybody need a break?

I'm seeing a lot more activity with the door.

(Laughter)

Threatened and Endangered Species

@ All right, we've kind of covered threatened and

endangered species through the other resource areas. Is there anything people would like to add specific to threatened and endangered species that they feel that hasn't been covered? I don't think we need to go into the bullets now.

We have a question that came up last night -- yes?

MR. MARTIN: General question on that regard, and I guess this goes back to -- Chris Martin, New Hampshire Audubon.

This goes back to the statement you made at the start about the T&E plant studies that were done.

Am I to infer from that there haven't been any T&E animal studies that were done along the watershed?

MR. RAGONESE: Haven't done that.

MR. MARTIN: That's a correct statement.

MR. RAGONESE: That is a correct statement.

MR. MARTIN: Okay.

SPEAKER: Well, we did the walkway --

MR. RAGONESE: Oh, yes. Aquatic species, but --

SPEAKER: But terrestrial species.

MR. RAGONESE: Terrestrials, no. Thank you.

SPEAKER: State-listed bird species, but --

MR. RAGONESE: The state-listed birds, state listed bugs.

MR. HOGAN: Last night we had a comment that one of those species that we identified was incorrect?

SPEAKER: No, actually it's listed in their PAD as a federally threatened species.

MR. HOGAN: Give us the background.

SPEAKER: For -- well, last night, the question in the preliminary issues; for example, the dwarf wedgemussel and the jessup's milk vetch which John has mentioned before, and the puritan tiger beetle, which was for Bellows Falls last night but not for Wilder.

I think the clarification I'm going to make and an estimate, too is that they had it listed in the PAD as a federally threatened species, but they also have a little qualifier that it's likely extirpating because it hasn't been found since 1932.

MR. HOGAN: John?

MR. WARNER: Maybe I can clarify. On the first bullet, the list is incomplete in one way.

So the dwarf wedgemussel is correct, that these three projects, the way this is characterized, and jessup's milk vetch is correct. What's missing is Northeastern bullrush, which should be in this, in the project area, for TransCanada's projects. And maybe that's part of their vegetation surveys.

MR. RAGONESE: Do what.

MR. WARNER: Have already looked at that?

MR. RAGONESE: Already RT&E. geology and soils

MR. WARNER: And then puritan tiger beetle does not occur in these project areas; however, it's appropriate that this review of these licenses continue to look at that. Puritan tiger beetles currently occur only in the Rainbow Beach area in Northampton below First Light's Turners Falls projects, and downstream in Connecticut, but their existence is predicated on water level, water levels above Holyoke. Water levels above Holyoke are dictated by Turners Falls discharges, as all these projects are interconnected. The review of these licenses don't have direct effect, but if flow changes can't be implemented, or operation changes cannot be implemented that help puritan tiger beetles below Turners Falls due to upstream operations, then they are affected. So it probably should be in there, but it's not a direct impact.

MR. HOGAN: So a cumulative effect on puritan tiger beetle.

MR. WARNER: Right, it will be more of a cumulative issue.

MR. HOGAN: Okay.

MR. WARNER: And otherwise, the list is fine.

MR. HOGAN: That's exactly the clarification I was looking for. Thank you, John.

SPEAKER: I just want to understand what he said. So the bullrush is within these three upper projects, you're saying?

MR. WARNER: Last we know. We don't have good survey data on bullrush, so.

Maybe we have a better survey from what they have.

SPEAKER: Which would have been in -- and we don't need to ask the question, then.

MR. RAGONESE: Yes. Honestly, I can't paraphrase the study, but it was clearly looked at.

MR. WARNER: And found?

MR. RAGONESE: I believe so. I'm not sure which project.

MR. HOGAN: Other thoughts regarding threatened and endangered species?

Okay, we'll move on to recreation, land use and aesthetics.

Recreation, Land Use and Aesthetics

@ MR. BEECO: So with Recreation, as opposed to last night, we're going to cover recreation, land use and aesthetics all together. So I'll just read off the bullet points. Starting with recreation:

The adequacy of existing recreation and public use facilities in meeting existing and future regional

public use and river access needs.

Effects of project operations on quality and availability of flow-dependent and water level-dependent recreation opportunities, including boating.

The adequacy of structural integrity, physical capacity, and/or management methods to support recreation use at existing facilities.

And under Land Use, the adequacy of existing shoreline management policies and programs to control non-project use of project lands.

Adequacy of shoreline buffers to achieve project purposes and compliance with local and state requirements.

And under Aesthetic Resources, at this time we have not identified any aesthetic resource issues.

MR. HOGAN: Do folks have any concerns associated with recreation access, facilities at the project.

MR. GAST-BRAY: Andy Gast-Bray, City of Lebanon.

We are interested in -- I don't have this neatly tied up into a direct study. We have a number of resources, we've talked about them already, as a potential resource for access to the river. There are few access points to the river in a meaningful recreational, aesthetic or public access sort of sense. We are looking at our facilities as becoming a part of that, but we are also cognizant of a coordination between many of such things all along the river

front. This is an opportunity, it's something that has not been done well in the past, coordinating say river access at strategic points all along the areas where you might want vegetated or pristine areas, and the points where you want more recreational public access.

So a coordination of that all along the river front including the City of Lebanon's potential resources, we would be an ally, a proponent of doing a good job with that, and would seem to maybe use resources that we currently have in a better, smarter manner for gaining access to the river and benefiting from the river.

In particular, the Westboro Yard that we had talked about, right now is a tremendous detriment but could be turned into a real asset for river management, river access.

MR. HOGAN: Did I hear there are plans to turn that into some type of park facility?

MR. GAST-BRAY: Yes, although again, we only own part of it at this time, and the state, via the former rail past, they own a large portion of it but have been in negotiations and talks with us on trying to fix all of that, so.

MR. BEECO: Is that particular railway linked to any of the Rails-to-Trails conversions that have happened in the area?

MR. GAST-BRAY: It is a part of the projected Rails-to-Trails work that's being proposed, although it does not currently have any official access formalized in its complete form, in their informal methods; and we are talking about including perhaps access across the river to Vermont going through this channel.

MR. HOGAN: Other?

MR. GRIES: Gabe Gries, New Hampshire Fish & Game.

John, there's reference to, for Bellows Falls, to one car top boat launch?

MR. RAGONESE: Is it --

(Laughter)

MR. HOGAN: Is that the one downstream?

MR. RAGONESE: Car top boat launch in Bellows Falls?

MR. GRIES: Yes.

MR. RAGONESE: I think it's below Bellows.

MR. GRIES: So that's just on the sand bar on the New Hampshire side, essentially?

MR. RAGONESE: Correct, it's on the New Hampshire side.

MR. GRIES: And then it talks about two boat ramps.

MR. RAGONESE: Yes.

MR. GRIES: That should be three, right? For Harrick's Pine Street and then River Road in Charlestown?

MR. RAGONESE: Yes, I don't -- I mean, there are three. There is one in Harrick's Cove, there is one in Walpole and one -- I'm not sure.

MR. GRIES: Are there any plans for the maintenance, upgrading to any of those as part of a relicensing?

MR. RAGONESE: There will be a recreation plan as part of relicense. Upgrading is likely to be a strong option.

MR. HOGAN: Tell me where you are; you're in our scoping document?

MR. GRIES: I was just looking on page 16.

MR. HOGAN: Well, 16, we needed a correction for. That's what I'm trying to get at.

MR. GRIES: Right. It just sounds like three boat ramps instead of two.

MR. RAGONESE: That was from the scoping document?

MR. GRIES: Yes.

MR. RAGONESE: The PAD's out there. There are three, though, however. We didn't close one between the PAD and the scoping document.

(Laughter)

MR. GRIES: Can I just make sure that, when I was talking about that river-coordinated thing, boat access was one of those points, because obviously you can't do that -- it's important that be coordinated along the river bank.

MR. HOGAN: When you specified boating; motorboats, kayaks, canoes or all of the above?

MR. GRIES: Well, as far as I'm concerned, that I'm aware of the only ones that we have been talking as a city about are car top.

MR. HOGAN: Car top.

MR. BEECO: So I can get some clarification; so these are the current license requirements for Bellows Falls that you were reading off of?

MR. GRIES: Correct.

MR. HOGAN: So what you're saying is the one car top boat launch is actually launching below Bellows Falls rather than into the reservoir; is that what you were saying?

MR. RAGONESE: It's on project land, but it is below. Again, this is your document, so I'm not sure what you read out of our document, but --

MR. HOGAN: Yes. I think it's the facility that we visited when we went downstream and looked at --

MR. RAGONESE: I think it is, too.

MR. HOGAN: -- and I believe it's a New

Hampshire Fish & Game ramp --

MR. RAGONESE: Correct.

MR. HOGAN: It's not a --

MR. BEECO: Oh, okay, that's --

MR. RAGONESE: It's on project land.

MR. BEECO: -- so that's quite a bit further below --

MR. HOGAN: Yes, it's a few miles downstream.

SPEAKER: It's at the Westminster Station bridge.

MR. HOGAN: Go through a field to get through it.

SPEAKER: There's also the original bridge site.

MR. HOGAN: Sorry, we're confusing the court reporter; and I apologize.

Where do you need to get caught up to?

THE REPORTER: Well, we had two separate conversations going --

(Laughter)

I can only do one.

MR. HOGAN: So we'll back up a little bit. The car top access that was discussed in the scoping document by FERC staff I'm pretty sure is referring to a small boat launch downstream from Bellows Falls in the riverine reach --

MR. RAGONESE: Out of project.

MR. HOGAN: -- out of project; between Vernon and

Bellows. I believe it's a New Hampshire Fish & Game facility; I don't know what road we access it off of.

MR. RAGONESE: But it is, as I think -- the one we stopped at was at Westminster Bridge. We did also stop and look at one right below Bellows Falls Dam, again on the New Hampshire bank. That is also a car top access point to the river reach, and that is on project land.

So you may have seen something on the site visit that we correlated to a statement in the PAD on a car top, but they may have been two different locations. That's my suspect.

MR. HOGAN: In any case, it's identified that we need to clarify, in Scoping Document 2, the rec facilities, and we will do that.

David, you had another conversation that was going on?

MR. DEEN: Well, I was just talking with John because there is the first bridge across the Connecticut River historic site,which is the one immediately below the dam on the New Hampshire shore.

MR. HOGAN: Which dam?

MR. DEEN: And then there's the Fish & Game site further down on the shore.

One of the things I wanted to bring up is primitive river camping sites are not readily available

below Wilder. Portage can be for non-motorized, through travelers could be improved at both sites. And once you get away from the dams, there is little access for non-motorized boating. It's 26 miles above Bellows, 45 miles above Wilder; that's a lot of river that people don't have access to.

And I'll mention this one other thing and then tie them both together, that there's no real non water-based recreational opportunities; hiking, biking, bird watching, et cetera. There aren't trails. And tying together the primitive camping, non motorized boating access and non water-based recreational opportunities the company could consider, where necessary, buying land and access in order to provide those recreational opportunities. And in addition working with the state and other local jurisdictions to improve those recreational opportunities.

MR. HOGAN: Yes, sir.

MR. NASDOR: Yes. Robert Nasdor, American Whitewater.

We represent the interest, the recreational interests of whitewater boaters through the United States; and in particular we have at least a thousand members within easy reach of these hydroelectric dams on the Connecticut River.

This is an important resource for quality of life

in New England and particularly the economy of New England. I certainly want to mention and credit TransCanada for the agreements that it reached on the Deerfield River and the important impact that that had on recreational boaters there as well as the economy in the Charlemont area. And we think it's possible that similar things could be done here at Bellows Falls.

With that said, we have a lot of concerns about the, having read the PAD, about its lack of any discussion whatsoever of whitewater boating opportunities at Bellows Falls. In particular, we're interested in this .7 mile bypass reach that's mostly dewatered, except in certain high water events.

The operation of this hydroelectric dam has eliminated all opportunities for recreational boating in this area, and we believe that the dam operator has an obligation to provide for meaningful opportunities for boating there; and if it's not possible, to look for appropriate compensation to mitigate the loss of those resources.

Now talking about Bellows Falls in particular, this is an extremely important area. We believe there's a potential to create a whitewater park in this area; and a whitewater park is a short stretch of river with intense rapids that people can run over and over again and perform

freestyle maneuvers; spinning, surfing, aerial tricks, and it can be really a cornerstone, an economy of a local town, as people come to that area both to participate in those activities and to watch and enjoy them.

We intend to follow up these remarks with formal comments and study requests. In particular, we're looking for a controlled flow study where TransCanada would release at different levels using standard protocols so it could be determined what is the appropriate level for recreational boating in that section. We also need to look at the safety issues, what are the obstacles that currently exist in this area, and how would they have to be managed.

We want a study done of access to the river. If we do get these studies, how can people safely get to those reaches of the river? And finally, to look at what the impact is of this activity on the economy, this economic valuation study that was talked about last night in the Wilder Dam. We believe the same should be done here.

So we are excited about the opportunity to participate in this process here, and are hopeful that this issue can be addressed. Thank you.

MR. HOGAN: Thank you.

MR. BEECO: I have a question. Do you know the feet per mile on that bypass reach? The dry section?

MR. NASDOR: At the drop?

SPEAKER: What was the question?

MR. BEECO: Feet per mile.

SPEAKER: What's the slope?

SPEAKER: We don't know the feet per mile.

MR. CHRISTOPHER: But I can tell you that an appropriate drop would be four feet per thousand feet, which would be adequate for a whitewater park. In this particular case you have .7 of a mile and even just a casual review of a photograph indicates that there would be enough drop to handle that.

My name is Tom Christopher, I am with American Whitewater and also New England FLOW. There's just a couple of comments I'd like to add to Bob. First of all, FERC has advocated and used the whitewater parks as mitigation in some other relicensings, and I would ask you to look at the whitewater park agreement that recently was constructed on the Lower Chattahoochie down in Alabama and Georgia, several parks; and throughout the United States, the creation of whitewater parks
has added a significant amount of revenue to the communities that have hosted these parks.

The other thing that I would ask you to look at: Bob spoke a little bit about access. It is, at the present time there is no access into that reach and there's no access out of that reach. There is a low head weir there

that probably should be removed, because even under moderate or low flows, through leakage, that does provide something that is extremely dangerous.

And if a park were to be created, we would expect something like that to be resolved. At the present time, there is such little flow in there during normal leakage events, that I can't imagine why they wouldn't remove it.

And the other point that I wanted to make relative to the construction of whitewater parks, there have been several parks that have been constructed whereby there were also different types of structures that were put into the parks that were there primarily for fish. Essentially I think that there's no reason why fish can't find suitable habitat within these whitewater parks, and I don't know if there is any viable fish habitat in this particular region at this time, perhaps --

MR. RAGONESE: Request a study.

(Laughter) (Simultaneous discussion)

SPEAKER: No water, no fish.

MR. CHRISTOPHER: Because you know we won't have any conflicts with you, with John Warner sitting over there, who is kind of laughing at me now.

But anyway, whitewater parks are compatible with fish, and there's no reason that this could not be designed

such that both services could be provided to those separate interests.

MR. HOGAN: I have a question for you, Tom. You mentioned a low head weir. Are you referring to the fish barrier dam at the base of that reach?

MR. CHRISTOPHER: I believe they called it 'the salmon stopper.' And since we no longer have salmon as a priority, I think perhaps some consideration should be given for that removal. But again, the access and whitewater park, this is an ideal opportunity for the Town of Bellows Falls to really capitalize on a significant add-on.

Thank you.

MR. HOGAN: Thank you.

MS. CORMEN: Nicole Cormen, Lebanon City Council.

I heartily endorse that idea for Bellows Falls, I think it's a great idea. I wanted to piggyback onto what Mr. Gast-Bray, our City Planning Director said earlier, and also Mr. Deen.

Looking holistically at the recreation picture up and down both sides of the river, in the reach that we're discussing today, I hope that there is a study of the existing as well as the proposed, because some of the existing facilities, in my opinion -- I've used probably all of them at one time or another -- many of them suffer from erosion, many of them are heavily, heavily used, possibly

because as the river's gotten cleaner and population changes, an excitement about using the river all have to be increased.

I'm just going to give you one example, but I think it could speak for any of the facilities that are in existence under the current legacy arrangement. The Wilder Dam picnic area has a hard pack parking lot that is heavily, heavily, heavily eroded. It runs sediment into and across Route 10, into the drainage pond next to Route 10, actually quite trashing; and otherwise, a wetland that has cattails in it.

So I'd like to see some kind of study of, or at least to look at which facilities are being used. I think they are all being heavily used. How could these parking areas be redesigned? We know so much more about storm water management on site, designs where maybe we could have previous pavement or something that works with the grades in question, and with the types of access in question, to keep -- people able to access the river but also keep the river healthy.

So that's something I really could see on both sides of the river, and partnering with state agencies operating some of these; some of them are municipal, and we have one in Lebanon that's been as fully operated. I'd love to see that all be coordinated and just spiffed up for what

we know now about storm water management.

MR. HOGAN: So a quick summary; you'd be interested in a study that evaluates facility use and condition and potential environmental concerns?

MS. CORMEN: Yes, upgrades really that address both environmental and recreational needs, because it's pretty clear now that there are ways to do both. And I think that as we go forward, we should be doing that.

MR. RAGONESE: Both existing and proposed.

MS. CORMEN: Existing and proposed, yes.

MR. HOGAN: When you say existing and proposed, what do you mean by proposed?

MR. RAGONESE: The Westboro area, for instance, and other areas.

MR. HOGAN: Okay, not TransCanada's proposed, because I didn't think they had any.

MR. RAGONESE: No, there are a number of sites along the river that have been proposed for different activities.

MS. CORMEN: The portage at Sumner Falls is another one. That could be really good.

MR. RAGONESE: I don't have the complete list in my head.

MR. CHRISTOPHER: Yes, that's what I meant -- my comment about portages. It's the dams and things like

Sumner Falls.

MS. CORMEN: And actually if I may just follow up; the portage at Wilder is really tough for a lot of people. It's really high steps go down; a lot of people do travel the entire river now. And carrying loaded canoes down those steps, which I have done is really, you know, it's pretty tough. Thanks.

MR. SIMS: I'm Normal Sims from the Appalachian Mountain Club, which is headquartered in Boston and has been there since 1876. It's currently the largest recreation and conservation organization; we have about 90,000 members.

Our interest in the Connecticut River relicensings is mainly in the areas of conservation and recreation. I'd like to add just a couple comments to what's already been said.

The dewatered bypass reach at Bellows Falls, as has been mentioned, is a prime paddling opportunity. And beyond that it might become something that could be the heart of a community development in Bellows Falls, because it would generate a lot of economic activity, a lot of tourism activity.

I also endorse removing that low head weir at the bottom of the dam, which seems to serve no function at the moment.

One of the problems with dams is the need head,

and as a result they tend to be constructed on top of anything named 'falls.' Olcott Falls is where Wilder is located, Bellows Falls is where that dam is located, Turners Falls has a dam. And this eliminates whitewater opportunities. We think the dams are going to remain, except perhaps that low head weir; and what I would like to add to the idea of offsite mitigation that Bob and Tom both mentioned, is that there's now a National Blueway system and the Connecticut River has been proclaimed the first, the Connecticut River and Watershed has become the first National Blueway river.

I think that opens the opportunity for offsite mitigation and these Connecticut River dams. The National Park Service and U.S. Army Corps of Engineers are both involved in the National Blueway system. And we should look into the opportunities that are provided by that system.

In a broader sense, the Norman Sims, the Appalachian Mountain Club has an interest in multiple-day canoe trips and kayak trips on the river. I'm sorry, I'm repeating a little bit of what I said last night about the Wilder Dam, but it also applies to Bellows Falls and in perhaps a more important way.

We think that the existing portage routes, basically all of the portage routes at these dams are inadequate. the Bellows Falls portage is one and a half

miles long, and for much of that distance, it follows the breakdown lane for a high speed state highway. Paddlers are one gust of the wind away from a catastrophic event, if they portage that route.

The put in at the bottom is four, at best.

In general, and allow me to read this: We have an interest in the study and we will be proposing a study of the quantity, quality and adequacy of the land-based facilities associated with boating on the Bellows Falls region of the Connecticut River. This study should examine put in and take out facilities, especially for canoeing and kayaking, portage routes, campsites, parking, road access, seasons of operation, maintenance and sanitary facilities.

The Connecticut River Paddlers Trail exists in this area; they have already done a study of the primitive campsites in the area and found them to be not in great shape. I also think that the study should involve a 30-year projection of use. As you said, there are more and more people trying to do multiple day trips on the river; it's very difficult because of the dams, the lack of campsites, the portages; a number of issues.

I think also that put-ins, while there are a number that have boating ramps, these are designed for motorboats, and they're not particularly useful for canoes. So if you have a non-trailered boat, the access sites need

to provide some safer and more convenient use for you. Especially if you're padding something like a wooden canvas canoe that doesn't merge well with concrete.

The land has been mentioned; I think that should be studied in terms of the opportunity for the power company to put more effort into the conservation easement or into a parklike situation.

I mentioned last night the historical study and the educational benefits, and I won't repeat that today.

In terms of the economic study or a contingent valuation that would compare recreational uses of the water, say in the bypass reach with the power generation from that water. We think that a contingent valuation study should be done of those opportunities so that they can be compared; and also that should be done in terms of multiple day canoeing and kayaking.

And then lastly, as I mentioned last night, we have an interest in there being an escrowed decommissioning fund created by the power company to ensure that the public is not responsible for removing these facilities, in case we get a thousand year flood every three years and the facilities actually do fail, and the facilities maybe transferred to another owner that is not as stable as TransCanada. It could happen, as they say. Thank you.

MR. HOGAN: Other recreation. David?

MR. DEEN: When we were on our site visit, the captain of our vessel ran aground on a mid-river rock. How about some channel markers for obstructions?

MR. HOGAN: Other recreation-related comments? Okay.

MR. BEECO: Or land use or aesthetics.

MR. HOGAN: For land use we had an issue raised with agricultural land. Can you elaborate on that?

MR. THAXTON: These significant prime agricultural soils, other agricultural soils that TransCanada I understand, has been leasing to farmers; and we want to make sure that that is able to continue. Also could explore the possibility of conservation easement to ensure that they could remain open in the future. My understanding of these flowage prices, there's no permanent protection for the agricultural resources there or any of those natural resources.

And just to mention that back in 2006 the Upper Valley Land Trust, through a grant from the Connecticut River Joint Commissions did a study on conservation options for protecting agricultural land in Rockingham and Charlestown; and so this report is available if anyone's interested, it was given --

MR. RAGONESE: Can you just repeat that report name again?

MR. THAXTON: We call it the Riparian Meadows Preservation Feasibility Study, and this was I think given to Ken Alton at the time, so it may exist somewhere; but it's very limited printings so probably you would not have a copy of this. But if anyone was interested, we could share that.

And it just provides an overview of the agricultural use of these, about a thousand acres and offer some options for protecting it with a conservation easement.

MR. HOGAN: Would it be possible to get a copy of that report filed into the Commission's record, or do you have that one?

MR. THAXTON: I could give this to you today, or we have PDF --

MR. HOGAN: PDF would be great.

MR. THAXTON: Okay, sure.

MR. HOGAN: You get to keep your limited print edition.

And just file it with the Commission's Secretary under eFiling.

Other land use concerns?

MS. CORMEN: It's kind of an overall question, if I may. Nicole Cormen, Lebanon City Council.

Do you folks look at, for example the Silvio Conti, their plans for the -- do you look a existing plans

for, like the Connecticut River Joint Commission's Carter Management Plan. All these things, because I think that many of the things I've heard mentioned today are recommendations for example in the Connecticut River Carter Management Plan.

Is that something that you folks have looked at, or? Or will be looking at?

MR. HOGAN: We have a list of comprehensive plans that, if that plan was part of the FERC-approved comprehensive plan, it is something that we do take into consideration and look at. I don't have the list in my head, so I --

MS. CORMEN: Sure.

MR. HOGAN: -- so I don't know what all --.

MS. CORMEN: I guess where would one see the list of what you -- it's in the back here. So -- thanks.

MR. HOGAN: I think it's in the back here.

MR. RAGONESE: It's also on our website.

MR. HOGAN: Yes, and it is our website, too.

The FERC group comprehensive plans, they have to meet a certain criteria. You know, any plan can get filed with FERC and have it sought to be identified as a FERC comprehensive plan.

And it is in there.

MS. CORMEN: It is in there, yes. Thanks.

MR. SIMS: Norman Sims again. Could I ask John Ragonese for a little clarification on what was included in the recreation plan? Said to be a part of the application.

MR. RAGONESE: I don't have the scope of what the recreation plan included, so I can't really give you an answer that may meet your needs, but we would be doing a recreation plan as part of our Exhibit E in our application.

We're going to look at opportunities for providing adequate public recreation.

I really -- I'm here to listen, not so much to prepare and propose and agree to mitigation enhancements.

(Laughter)

MR. RAGONESE: Really, I'm not --

(Laughter)

MR. HOGAN: Just for clarification, though, John, your recreation plan, it's your intent to have that as part of your license application.

MR. RAGONESE: We intend, at this stage of the game, to file a draft EA as our Exhibit E.

MR. HOGAN: So no recreation plan?

MR. RAGONESE: It would be part of it.

MR. HOGAN: It would be included.

So that would be available for public comment and review, so if something wasn't included that was thought to be necessary it will be an opportunity to comment on it.

MR. SIMS: In the Fifteen Mile Falls, prior to the actual development of the plan you had a public engagement process. Would you plan to do that on this plan as well?

MR. RAGONESE: Only if somebody requests us to do it.

(Laughter)

MR. RAGONESE: I anticipate that we will be doing a lot of recreational use, adequacy, opportunity analysis, probably regardless of whether or not it gets specifically questioned, so that we can develop an adequate plan. There will be opportunities for public input in a lot of our analyses.

SPEAKER: Yes, because it worked well at Fifteen Mile Falls.

MR. HOGAN: Okay. Other land use issues associated with either Bellows or Wilder Falls? Bellows Falls or Wilder?

Okay. We didn't identify any aesthetic resource concerns; is that an error on our part that should be corrected?

SPEAKER: Keep it beautiful.

MR. HOGAN: So it's already beautiful and don't harm it. Okay. Got it.

Brian.

MR. FITZGERALD: Brian Fitzgerald from ANR.

Ken, would that include aesthetics of flow?

MR. HOGAN: Sure.

MR. FITZGERALD: Okay. We will be commenting on that.

(Laughter)

MR. HOGAN: Okay.

MR. SIMS: Ken, Norman Sims again. Just as a comment, I find a dewatered bypass reach that was the natural route out of Connecticut to be ugly.

MR. HOGAN: Okay. Any other comments regarding aesthetics?

No? Okay.

Socioeconomic Resources

MR. HOGAN: Socioeconomic resources, what we've heard so far have been tied to recreation concerns. If you provide this, it will have these various economic benefits. Is there another scope of socioeconomics that we should be looking at as well, or is it strictly, socio with recreation? Any issues with socioeconomics?

MR. THAXTON: I hadn't really thought through it, but agricultural use definitely provides economic benefits, so that would be along with land use; but there is the economic benefit of continued agricultural use of project land, land associated with the project.

MR. HOGAN: Just to clarify, you're specifically talking about the applicant's making available lands in their flowage rights for agricultural purposes?

MR. THAXTON: Yes, right.

MR. HOGAN: Nicole.

MS. CORMEN: A suggestion. Nicole Cormen, Lebanon City Council.

The existing interpretive signage, such as it still remains from the previous licensing is a great example of something that we can do more of and better; so I would ask that as the dam, the recreational facilities, any other associated facilities, access ways -- wherever the public is interfacing with your facilities, interpretive signage is something that we all love and learn from; whether it's describing the operation of the dam or of the flowage or what the watershed looks like, or you know, where Lake Hitchcock was -- whatever. I think that that type of opportunity to educate and engage the public is really important.

We've seen examples of that at Adams State Falls, for example, in Manchester. It's just any way that we can I think further engage people with their river is a welcome addition.

MR. HOGAN: David.

MR. DEEN: David Deen, Watershed Council.

Environmental programs, in terms of education about the river, about the history of the river, about the ecology of the river, about the uses of the river, and I harken back to it is also an American Heritage river. And a lot of that background analysis has been done, but it's never actually been brought to the public.

The Connecticut River is a designated byway, and I think that recreational, educational and environmental programming activities should be coordinated with the byway; there are centers all the way up the river, both sides of the river, that they probably ought to be actively participating with. And just something that I know from a place that I go when I vacation, we should have a birding trail along the Connecticut River. And there is a mapping effort to designate that, but that is something that the project ought to be actively supporting.

And I do know, even though my comments earlier were that there's little in the way of river, primitive camping available below Wilder, I do know that the applicant has been participating with the Vermont River Conservancy in order to extend that paddler's trail, and they should continue doing that.

MR. HOGAN: Question for you, David: A birding trail. Is that different than a hiking trail, or could it be multi-use?

MR. DEEN: Well, a birding trail would extend from Canada say down to the mid-Massachusetts area where there are hot spots designated like Harrick's Cove, which is one of the recreation facilities that the applicant maintains right now, is an area of -- an important bird area designated by Audubon. And those areas that are known should be mapped and offered to people who visit our valley, because it is an activity that has economic spin-off, having those people in the valley.

MR. HOGAN: Kevin?

MR. MENDIK: Kevin Mendik, National Park Service.

I guess in order to develop a complete picture of recreational use, user needs and goals, TransCanada needs to identify the user groups, both in the federal, state and regional level through their mailing and membership lists, website info.

And also they need to identify user preferences. One of the limitations of an onsite survey, what's typically done in the formation, doesn't capture people who do not use certain facilities, which may be due to overcrowding, lack of desired facilities, or the conditions at the existing facilities.

So there's a lot of groups in here and others in the area which have a considerable amount of information and access to various users; and that information needs to be

pulled in as well.

MR. HOGAN: Is the Park Service planning to have -- a study request?

MR. MENDIK: Yes, we'll be filing.

MR. HOGAN: Other comments on recreational land use, aesthetics, or educational opportunities?

MR. CHRISTOPHER: Ken. Tom Christopher.

I don't often get philosophical about FERC proceedings. However, it is rather serendipitous that the relicensing of these facilities is occurring at the same time we have the first National Heritage River and the first National Blueway coming together collectively. It's an opportunity to do some really, really good things between user groups and state agencies, federal agencies, and the licensee.

And I don't think a group people like this gets together very often to do a good thing. This is an opportunity to do a good thing. Yes, some of it is very optimistic, some of it is going to be very hard to accomplish, but a lot of good can come out of a concerted effort if everybody cooperates.

I'd like to see that happen. That's my statement.

MR. HOGAN: Sounds like a pitch for a settlement agreement.

(Laughter)

MR. HOGAN: Cultural Resources.

Cultural Resources

MR. QUIGGLE: Rob Quiggle with FERC.

Section 4.2.10 of the scoping document describes issues we've identified related to cultural resources, and those are primarily project effects on archaeological and historic resources, including properties of traditional, religious or cultural significance, listed in or eligible for inclusion in the National Register of Historic Places.

MR. HOGAN: John?

MR. RAGONESE: Yes, just a couple things.

We identify in the PAD that our intent is to continue working with the State Historic Preservation Offices; develop programmatic agreements on dealing with effects and cultural resources. Primarily one of the outcomes of that programmatic agreement would be to develop a cultural resources management plan.

We've already conducted Phase 1A surveys of Bellows and Wilder's impoundments, and downstream -- well, no, those are actually just -- I think within the project boundaries. Those reports have not been finalized yet to go to the State Historic Preservation Offices, but it will. Oftentimes there's some follow up in some of those sites that may require for a Phase 1B, and potentially recovery

efforts in certain locations; those have not been identified and those are things we work out with the SHPOs at this time.

We also -- I don't think I mentioned this last night, but we've done a comprehensive system-wide facilities assessment for historic properties throughout all of our projects; and that includes Wilder and Bellows, so we have you know large scale photography, large format black and white photograph that serves as a historic record of all of our facilities, and whatever the forms are the National Park Service requires for archaeological resource assessment documentation. So that's all been done for our project; has been done for many years. That's it.

MR. HOGAN: Anybody have concerns with project effects on cultural or historic properties?

SPEAKER: Can I just ask a question?

MR. HOGAN: Yes.

SPEAKER: Are the Bellows Falls petroglyphs National Register, on the National Register?

SPEAKER: I just looked at the PAD; I don't know off the top of my head if they are. I believe they were determined eligible, but I don't know for sure.

MR. RAGONESE: I think they're eligible.

Basically it means the same thing to me.

There's an historic district in Bellows Falls;

I'm not sure that it's been for petroglyphs. I think it's more for the--

SPEAKER: -- might extend to the mill.

MR. RAGONESE: There's an old mill complex.

MR. HOGAN: Other cultural resource concerns? No? Okay.

Developmental Resources

@ MR. HOGAN: So under Developmental Resources, this is where FERC will take a look at any proposed mitigation enhancements, changes in flow modifications and the effect on the value of the project and the power generation; basically what we do internally and how we do our balancing. If there's any questions associated with that, I didn't bring an engineer with me; I'm sorry.

But typically it's just all internally, and it's not so much a resource issue that's part of scoping; but if anybody has any comments on that, I'd be happy to hear them.

Okay.

MR. RAGONESE: Ken, I just want to also mention, this is where we think the river model that we would be using to evaluate opportunities, this is where we're going to be coming up with what we feel is our position on the --

MR. HOGAN: Right. And then typically we would heavily use any operations model to help us evaluate, if we're looking at a change in flow regime, how does that

affect project economics?

MR. RAGONESE: Flow regime, reservoir operations.

MR. HOGAN: Yes.

At the beginning of the meeting there were a handful of folks who had prepared statements that they wanted to read into the record. Is that still the case?

Anybody? Everybody feels like they got their comments out already?

Okay. I'd like to make everybody aware of March 1st is the deadline for comments and study requests, so comments on the PAD study requests, comments on the Commission Scoping Document 1.

John's giving me cues.

We have, study requests have to meet the Commission's study criteria. For convenience, I appended them to this handout that I had up front. It's our Integrated Licensing Process. I included the licensing schedule, the process plan for all the Connecticut River projects just for your convenience, and the last page I have the Commission's study criteria; there's seven of them, Criterias 2 and 3 are mutually exclusive depending on whether you're a member of the public or a resource agency, so you actually have six study criteria to address.

I highly suggest that you address the study criteria; it's a litmus test the Commission uses to evaluate

whether a study is appropriate or not. I can't stress that enough. So if you're serious about supplying study requests, please address the criteria.

We do have a new guidance document that we produced in March of last year; it's a Guide to Understanding the Study Criteria. It's got examples -- tells us what our expectations are for each criteria and then it has examples of study requests and how to write or address each criteria. I think this is a pretty useful tool. So something that's available, like I said new to folks now; we've had the ILP now for about eight or nine years. This is new, so take advantage of it. It's your cheat sheet.

Does anybody have any questions about the licensing process. I asked the room early about, how familiar are you? But I'm going to give you an opportunity now to ask it. I didn't want everybody to have to sit down and do my entire spiel, try to expedite it for John, particularly.

John just happens to be the most vocal about it.

Any question about the FERC process? Nicole.

MS. CORMEN: Yes. Forgive my newness to this process. So in the process plan, over here it says stakeholders; when reports, other documents, draft plans are released, are stakeholders automatically -- are they

noticed? Are the stakeholders that are in the document, are they automatically notified? We may be keeping an eye on that calendar ourselves, and how does that?

MR. HOGAN: That's a good question.

If it's an issuance by the Commission, it will typically go to that list in the back of the scoping document.

If it's filed by any other entity, it's unlikely you're going to get notified. however, in our brochure here, on page 12 I think it is, there's a guide to how to get -- page 12 and 13, how to get information from FERC -- because we like to hold onto it very tightly -- there are electronic services that we provide; one is eLibrary, where you can search eLibrary on a regular basis and see everything that's been filed with or issued by the Commission, and actually download the documents.

We also have a service called eSubscription, where if you eSubscribe you put in your e-mail address, you identify the projects that you're interested in. Anytime the Commission makes an issuance or an entity files a document with the Commission, you will receive an e-mail, and in that e-mail we'll have a link embedded in it that will take you straight to the document so you can read the document. And that's in our eLibrary system.

So yes, take a look at page 12, and it will give

you the information on how to utilize those systems, and exploit them.

MS. CORMEN: Thank you.

SPEAKER: Could I ask John Ragonese to repeat one more time the location on your website that studies that you referred to earlier will be posted. You talked about several studies, reports; and I got the TransCanada part, but I --

MR. RAGONESE: It's just TransCanada-Relicensing.

SPEAKER: TransCanada dash Relicensing.

MR. RAGONESE: Dot com.

SPEAKER: Dot com. Okay, Thank you.

MR. RAGONESE: And then there's a --

SPEAKER: Anybody else need that?

MR. RAGONESE: And then on the site there are some tabs -- an overview tab, and then under the overview tab there are documents, and then there's a public information library. And they will probably reside in the public information library.

SPEAKER: And some of that is still to come, is that correct?

MR. RAGONESE: Yes.

SPEAKER: Okay. Dash Relicensing.

MR. HOGAN: So the steps to come are on March 1st, comments and study requests are due, and the Commission

will be issuing its comments and study requests. Following comments and study requests, TransCanada will provide a proposed study plan; and then there's an opportunity for discussion of that proposed study plan. Within that 90 day period there is at least one required meeting to discuss concerns with the proposed study plan. And then at the end of that 90-day period, TransCanada will produce its revised study plan, which is then available for comment; and following that the Commission will provide a study plan determination based on the requested studies, ongoing disputes to determine what studies are appropriate for the relicensing of the TransCanada facilities. In a nutshell.

SPEAKER: It's easier said than done.

SPEAKER: Is there going to be a single study plan for the three projects, or three study plans?

MR. HOGAN: How TransCanada structures it, I don't know. FERC's intent is to do a single study plan determination for TransCanada and a single study plan determination for First Light.

I don't know how -- did you want to answer the question out loud, John?

(Laughter)

MR. RAGONESE: It depends a little bit on what we get.

MR. HOGAN: And what the study is.

MR. RAGONESE: I have a pretty good feel for what we'll get.

(Laughter)

MR. HOGAN: Okay.

SPEAKER: Regarding study requests, we have to file them project by project, so.

MR. HOGAN: Well, if it's a single study request that's going to apply for all projects; just make sure you put all three project numbers, and you clearly identify that this study request applies to Wilder, Bellows and Vernon.

SPEAKER: But for example, the whitewater park at Bellows Falls will only apply to that project.

MR. HOGAN: Right. Right.

SPEAKER: Thanks.

MR. HOGAN: You don't need to file three duplicates; if you say that it's the river from here to here, that's --.

Any other questions regarding the FERC process?

No. All right.

MR. RAGONESE: The other thing is, it didn't get mentioned last night,l but what's the disposition of the transcript from the meeting?

MR. HOGAN: The transcripts will be available, I believe it's ten days from -- well, five. [To court reporter] I think our contract says ten, so you might give

it to us in five, and we'll release it to the public in ten.

Anytime prior to, between that five days and the ten days they are available for purchase from Ace Reporting -- and he doesn't talk because he doesn't want to have to get recorded.

(Laughter)

But following the ten days, they will be put into eLibrary; anybody who is eSubscribed will get notification of their availability; and they're available to the public at no charge.

Any other questions?

All right. Thank everybody. I really appreciate it; I think this is very helpful for us.

(Whereupon, at 11:47 a.m., the scoping meeting concluded.)

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

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TransCanada Hydro Northeast, Inc.

Wilder Project No. 1892-026 -

Bellows Falls Project No. 1855-0145

Vernon Project No. 1904-073

New Hampshire/Vermont

- - - - - - - - - - - - - - - - - - - x

WILDER and BELLOWS FALLS PROJECTS - Morning Meeting

Kilton Public Library

80 Main Street

West Lebanon, New Hampshire 03784

Tuesday, January 29, 2013

The morning scoping meeting, pursuant to notice, convened at 9:18 a.m., before a Staff Panel:

Panel

KENNETH HOGAN, Project Coordinator, FERC

MARY GREEN, Geology and soils, FERC

RALPH NELSON, Geology and soils, FERC

MARY McCANN, Endangered species and macroinvertebrates, FERC

MICHAEL SEARS, Fisheries and aquatic resources, FERC

BRETT BATTAGLIA, Terrestrial resources, FERC

ADAM BEECO, Recreation, land use and aesthetics, FERC

ANGIE SCANGAS, Water resources, FERC

ROBERT QUIGGLE, Archaeological and cultural resources, FERC.

With:

JOHN RAGONESE, FERC License Manager, US Northeast Hydro Region, TransCanada Accompanied by EDWIN NASON and EARL BRISSETTE, TransCanada

LIST OF COMMENTERS

Geology and Soils or Erosion Concerns

PAUL COATS, City of Lebanon, Recreation
PETER KULBREKI, Town of Hanover
SHELLEY HATFIELD, Town of Hanover
JAMES THAXTON, Upper Valley Land Trust
DAVID DEEN, River Steward, Connecticut River Watershed Council

Water Resources - Water Quantity and Quality

PETER KULBREKI, Town of Hanover
PAUL COATS, City of Lebanon, Recreation
JOHN WARNER, U.S. Fish & Wildlife Service
KATIE KENNEDY, Nature Conservancy's Connecticut River program
CARL SCHMIDT, Upper Valley River Subcommittee
DAVID DEEN, Connecticut River Watershed Council

Fishery or Aquatic Resources

BRIAN FITZGERALD, Vermont Agency of Natural Resources
DAVID DEEN, Connecticut River Watershed Council
PETER KULBREKI, Town of Hanover
MATT CARPENTER, New Hampshire Fish & Game
KATIE KENNEDY, Nature Conservancy's Connecticut River program

LIST OF COMMENTERS

Terrestrial Resources

CHRIS MARTIN, Audubon Society, New Hampshire
NICOLE CORMEN, Lebanon City Council
KATIE KENNEDY, Nature Conservancy's Connecticut River program

Threatened and Endangered Species

JOHN WARNER, U.S. Fish & Wildlife Service

Recreation, Land Use and Aesthetics

JOHN WARNER, U.S. Fish & Wildlife Service
ANDREW GAST-BRAY, City of Lebanon
GABE GRIES, New Hampshire Fish & Game
ROBERT NASDOR, American Whitewater
TOM CHRISTOPHER, New England FLOW and American Whitewater
NICOLE CORMEN, Lebanon City Council
NORMAN SIMS, Appalachian Mountain Club
BRIAN FITZGERALD, ANR

Socioeconomic Resources

JAMES THAXTON, Upper Valley Land Trust
NICOLE CORMEN, Lebanon City Council
DAVID DEEN, Connecticut River Watershed Council
KEVIN MENDIK, National Park Service.
TOM CHRISTOPHER, New England FLOW and American Whitewater

P R O C E E D I N G S

MR. HOGAN: Why don't we get started.

I'm Ken Hogan, Project Coordinator for relicensing of the Wilder project and the other four projects on the Connecticut River down to Turners Falls.

This is your first opportunity to let FERC know what our environment document needs to analyze as far as the issues go. So I hope to have a very fruitful meeting. It's not helpful for us to do this in a vacuum, and no comment is a bad comment; we want to hear it all. And we have a court reporter here today, so I'd like, before each person speaks for you to state your name and affiliation so we can make sure that everything is documented properly. This is a very public process, very transparent.

Are folks familiar with FERC's eLibrary and eSubscription processes?

Anybody not have a clue what I just said?

(Laughter)

SPEAKER: It's hard to hear you.

MR. HOGAN: Is it hard to hear me?

SPEAKER: Yes.

MR. HOGAN: Is this better?

SPEAKER: Yes.

MR. HOGAN: Okay, I apologize.

So is everybody familiar with FERC's information

systems that are available to you to do a little follow up process and things of that nature?

Okay, so I'm trying to figure out where everybody's knowledge is so we can jump right in, or do we need to do some education here. It sounds like we can jump right in. And I'm getting nods, so let's go ahead and do that.

The process that I've got set up is we'll identify the -- we're going to have TransCanada give a quick presentation of what their proposal is, a quick discussion of what their proposal is for both projects. We will identify the potential resource areas that we've incorporated into our Scoping Document 1 as potential effects, and then we're going to talk about what the Agency has done: Did FERC get it right? What are we missing? What's not an issue that we may have identified as an issue? And we'll go through resource by resource. Once we've had the Agency and NGO input, we'll turn to the audience and we'll hear that input; and towards the end of the meeting or maybe before a break, we will get the prepared statements that folks wanted to present today.

Sound like a plan?

Okay. TransCanada?

MR. NASON: Good morning. I'm Edwin Nason and this is Earl Brissette. We work for TransCanada. We're

going to give a quick hydro overview, and also do, just to quick tell you about the river timing, and then do the facility facts; and then the operations overview.

So TransCanada has hydro plants on the Connecticut River and the Deerfield River, and on the Connecticut River they have six stations starting at the top, the Moore Station; and then below that is Comerford Station and below that is McIndoes Station. Those three together are known as Fifteen Mile Falls. And then downstream from there is the Wilder and Bellows Falls and then Vernon. Those are the stations that are up for relicense.

As far as river timing is concerned, when we make a change at one station, when the effects of that change are felt at the next downstream station. And for timing between Moore and Comerford is about one hour, and Comerford and McIndoes Falls is another hour; so those three stations are really very close together.

From McIndoes Station on down to Wilder is about eight hours, and then Wilder down to Bellows Falls is another eight hours, and then between Bellows Falls and Vernon is about four hours.

All the stations on the Connecticut River are remote controlled; they're all controlled from the Wilder control center, which is located in the Wilder hydro office,

and that's staffed 24 hours a day.

So now we'll go on to facility facts. Earl will take over.

MR. BRISSETTE: Wilder. Wilder Station is located just downstream of the original dam, which was Alcott Dam, which was built in 1926. And Wilder Dam was put into service in 1950.

The dam has a normal average head of 53 feet; it has three generating units with a total authorized installed capacity of 35.6 megawatt. The Vermont/New Hampshire line goes right between number one and number 2 generators, No. 1 being in Vermont.

It has six tainter gates, that are 30x36 feet wide, with a total spill capacity of 16,900 cfs each. Two skimmer dates; they're 20x15 feet wide. It has four stanchion bays, 17 feet high by 50 feet wide, and those are the boards that you see on the New Hampshire side.

Total project discharge capacity is 157,600 cfs, and the total generator discharge is 10,000. And the flood of record was 91,000 cfs, and that was March of 1936. And 19.7 flood of record was downstream, so that didn't really affect the project.

Major projects that have been completed since 1979, the fish ladder was installed in 1987. The third generating unit was installed in 1987 as well; and that's

Unit 3. that serves two purposes; one, it's the minimum flow unit, and the second is the attraction water for the fish ladder.

And then the last one is the station automation, remote control, and that was completed in 1998.

MR. NASON: So for operations, we'll start out with the reservoir. The reservoir has a drainage area of 3,375 square miles, and the reservoir is 45 miles long; it goes all the way back to Haverhill, New Hampshire and Barre, Vermont. The usable storage in our five feet of usable range is 13, 350 acre-feet.

So the Wilder reservoir has approximately 3,000 cfs each per tenth, and that means per tenth of elevation of the reservoir, cubic feet per second-hours.

An example of that would be if the inflow is 3,000 cfs greater than the discharge for one hour, then the elevation of the reservoir would go up a tenth of a foot.

For the constraints, Wilder has a min_flow, it's the same year-round; it's 675 cfs, and that's almost always done out of Unit No. 3, which for the most part is 700 cfs. It has a fish passage, a downstream stream passage that is April 1st to June 15th, that's 512 cfs. And the downstream fish passage in the fall is done as needed.

Upstream, through the fish ladder, those dates, May 15 to July 15 and September 15 to November 15, but those

are more done on an as-needed basis, as requested by the agencies.

The operating range for the Wilder reservoir is five feet operating range from 380 feet above sea level to 385 feet. We have a downward draw limit of .3 per hour; we don't draw the pond more than .3 per hour in any one hour. And we have the weekend rec limits that we maintain in the summer on weekends and summer holidays. We just adjust our global pond limit to 382.5.

Also because of the long reservoir, we have what we call a high flow reservoir operation, profile operation. Because the elevation of the reservoir at the upstream end is always higher than the downstream end by the dam, and the higher the flows are, the more that elevation difference is, and so during high flows, which is above generation capacity, 10,000 cfs, we start lowering our max elevation. So between 10,000 cfs to 20,000 cfs, the inflow, when it's 20,000 then our max elevation is 380, which is the same as our min; so anything 20,000 cfs or greater, we just hold that elevation.

So for operating, when we schedule the megawatts for the next day, every morning the operators schedule the megawatts for the next day, their first consideration is always the license compliance, the min_flows and the elevation constraints; and then their second priority would

be to put the megawatts in the best hours of the day, the best, highest priced hours of the day.

And the amount of megawatts is just based on inflow, so they'll run all they can as long fill back up for the run the next day. Depending on the season, there might be one run -- a little longer in the summertime or two shorter runs in the wintertime, because in the winter there's two peaks, usually.

I guess we'll move on now to Bellows.

MR. BRISSETTE: Bellows Falls. Bellows Falls Station was put into service in 1928 and it's located approximately a quarter of a mile south of the dam. There's a 1700 foot canal that feeds the station, and that bypasses the normal riverbed.

It has an average head of 62 feet; there are three units with a total nameplate capacity of 40.8 megawatt. All three units in that plant are identical.

It has two roller gates located at the dam, they are 115 feet long and 18 feet high; they're capable of discharging 29,400 cfs apiece. There are three stanchion bays, 13 feet high, and those are 121 feet wide each; those are the boards that you see at the dam. There's one skimmer gate, 10 feet high and 12 feet wide, and that's located at the end of the canal, right at the power plant, in the forebay.

Total project discharge capacity is 119,785 cfs, with a total generating discharge of 11,000 cfs. And the flood of record at Bellows is 156,000 cfs, and that was in March of '36.

Major projects that have been completed since the 1979 license: The fish ladder was installed and completed in May of 1984. Along with that was the visitor's center. Downstream fish diversion barrier was completed in 1996; that's the device you see in the forebay, just in front of the plant; and the station was also automated, remote control out of Wilder in 1998.

MR. NASON: So for the Bellows reservoir, it has a drainage area of 5,414 square miles, and that reservoir is 26 miles long, goes all the way up to Cornish, New Hampshire or Windsor, Vermont. The usable storage volume in the three feet of draw that we have at that reservoir is 7,476 acre-feet. And like Wilder, that reservoir has about 3,000 cfsh per tenth of elevation.

So for constraints, Wilder has an min_flow of 1,383 cfs for inflow, that's year round, and that's done through generation, so it doesn't -- it goes down the canal and out the dam; there is no min_flow in the bypass.

The downstream fish passage is the same as Wilder; April 1st through June 15th, and in the fall as needed. That's 255 cfs there. The upstream fish ladder,

May 15th through July 15th and September 15, to November is 80 cfs, that's including a traction water. And that's done on an as-needed basis, same as Wilder is

The operating range for the reservoir at Bellows is 288.6 feet above sea level, and to 291.6 feet. That has the same drawdown limit, .3 per hour; and we also maintains recreational limits in the summertime on weekends and the summertime holidays.

So because of the long length of the reservoir, not as long as Wilder, we still have high flow profile operation which starts at about 11,000 cfs and goes up to 50,000 cfs. So at 50,000 and above, we maintain 289.1 feet above sea level or less.

And for scheduling that, Wilder is just the same as -- Bellows Falls and Wilder are just the same; the operators take into consideration their min_flow and the elevation constraints when doing their megawatt schedule for the next day. And just the same as Wilder; the megawatts always put in the best hours for the day.

I guess that's it unless there are questions.

MR. SIMS: You mentioned the maximum capacity of both Wilder and Bellows Falls. At Bellows Falls apparently the record flood was way above the maximum capacity. My question is, at both facilities, what happens when you exceed maximum capacity?

MR. BRISSETTE: At that point you'd run out of gates and you'd pull all your boards. So all your spill has been used, and then the river is on its own.

MR. SIMS: Just goes up and up.

MR. HOGAN: Name for the record.

MR. SIMS: Norman Sims, the Appalachian Mountain Club.

MR. HOGAN: Yes, sir.

MR. NASDOR: Robert Nasdor, American Whitewater. At what level do you spill at the bypass reach?

MR. BRISSETTE: When the inflow surpasses the generation discharge. So the generation at Bellows Falls, for instance, could be 10,000 to 11,000; so when the inflow is above that, then it starts going through the bypass. Otherwise, the bypass has no inflow.

MR. RAGONESE: Except leakage.

MR. HOGAN: Do you have an estimate on what that leakage flow is? And how long is the bypass reach?

MR. NASON: I don't have an estimate on the leakage. And it varies, too, based on the condition of the boards and the seals on the gates.

MR. SIMS: How long is the bypass?

MR. BRISSETTE: .7.

MR. NASON: It's probably at least a quarter of a mile.

MR. SIMS: .7 of a mile.

CARL SCHMIDT: Carl Schmidt, Upper Valley River Subcommittee.

With regard to Wilder, you refer to a .2 per hour downward draw as the maximum. Can you explain that?

MR. NASON: Yes, the maximum drawdown, .3 per hour. Basically of the elevation of the reservoir. So we don't draw it down more than .3 in one hour, any hour. So that would mean we're discharging more than the inflow by approximately 9,000 cfs, and we don't do that.

MR. RAGONESE: I just want to add, that's a maximum. The typical drawdown rate is between .1 and .2.

MR. NASON: Oh, yes. We don't usually approach that.

MR. HOGAN: Any other questions about the projects and their operations?

At the beginning of the meeting I neglected to go around and have introductions; I'd like to do that now if I could.

Again, my name is Ken Hogan, and I'll start across the room, and we'll work our way around. How does that sound?

MR. BATTAGLIA: Brett Battaglia, I'm with FERC, and I'm doing terrestrial resources.

MS. McCANN: Mary McCann, I've been working on

endangered species and macroinvertebrates; mussels.

MR. McCLAMMER: I'm Jim McClammer, I'm a resident of Charlestown, New Hampshire, but also a commissioner on the Joint Rivers Commissions in Vermont and New Hampshire.

MS. WILL: Lara Will, Fisheries Biologist in the Vermont Fish and Wildlife department.

MS. CADUTO: Marie L. Caduto, Watershed Coordinator with Vermont December.

MR. CARPENTER: Matt Carpenter, New Hampshire Fish & Game.

MR. HOWARD: John Howard, First Light. For Northfield Mountain and Turners Falls projects.

MR. WAMSER: Mark Wamser with Gomez and Sullivan.

MR. SMITH: Jay Smith, I'm the from the Town of Lyme Selectmen.

MR. EL: Richard El (ph), Town of Lyme Selectmen.

MR. BILLINGS: John Billings, Lyme Properties. We own property above and below Wilder Dam.

MS. O'DEA Erin O'Dea with TransCanada.

MR. COLE: I'm Matthew Cole with TransCanada.

MS. WALKER: Christine Walker, the Upper Valley Subcommittee.

MR. NASON: Edwin Nason from TransCanada.

MR. CAMPANY: Chris Campany, Director of Windham Regional Commission and Vice President of Connecticut River

Joint Commissions.

MS. GRIFFIN: Jennifer Griffin, Normandeau Associates.

MR. YORK: Doug York, Louis Berger Group.

MS. * Mary Ellen [garbled] [no sign-in]

MR. SCHMIDT: Carl Schmidt for Value River Subcommittee and River Project.

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

MR. TAYLOR: Brendan Taylor, I'm documenting this process for research for Professor Eve Vogel, at U-Mass.

MR. MATTEAU: Jim Matteau, I live in Westminster, Vermont and I'm representing Trout, Unlimited.

MR. WHITE: Mark White, Upper Valley Subcommittee, Connecticut River Valley Commission.

MR. MARTIN: I'm Chris Martin, I'm a biologist with the New Hampshire Audubon Society.

MS. BLADEN: I'm Elizabeth Bladen, the FERC attorney for the project.

MR. SIMS: Norman Sims with the Appalachian Mountain Club.

MR. CHRISTOPHER: Tom Christopher, New England FLOW and American Whitewater.

MS. SCANGAS: Angie Scangas from FERC. Water resources.

MR. COATS: Paul Coats, City of Lebanon,

Recreation.

MS. HATFIELD: Shelley Hatfield, City of Lebanon.

MR. QUIGGLE: Robert Quiggle, FERC. Cultural and archaeological resources.

MR. GRIES: Gabe Gries, New Hampshire Fish & Game.

MR. SEARS: Mike Sears, fisheries and aquatic resources, FERC.

MR. NASDOR: Robert Nasdor, American Whitewater.

MS. KENNEDY: Katie Kennedy, the Nature Conservancy's Connecticut River program.

MR. GAST-BRAY: Andrew Gast-Bray, City of Lebanon.

MR. RAGONESE: And I'm John Ragonese from TransCanada, Project Manager for the relicensing.

MR. MENDIK: Kevin Mendik, National Park Service.

MR. DEEN: David Deen, River Steward, Connecticut River Watershed Council.

MR. FITZGERALD: Brian Fitzgerald, Vermont Agency of Natural Resources.

MR. CROCKER: Jeff Crocker, Vermont Agency of Natural Resources.

MR. WARNER: John Warner, U.S. Fish & Wildlife Service.

MR. THAXTON: James Thaxton, Upper Valley Land

Trust.

MR. NELSON: Ralph Nelson, with FERC for soils and geology.

MR. BEECO: Adam Beeco with FERC, with recreation, land use and aesthetics.

MS. GREEN: Mary Green with FERC, geology and soils.

MR. HOGAN: Thank you. I apologize for not doing that earlier. I got ahead of myself.

Now what I'd like to do is start by having the FERC team go there each of the resource areas; we'll do one at a time, and we'll identify the resource, potential effects of the projects that we identified in our Scoping Document 1. If you want to follow along, I believe it's page -- we're starting on page 24. Section 4.2.1 with geology and soils.

Geology and Soils

@ MR. NELSON: I'll just read the bullet.

MR. HOGAN: Would you speak up.

MR. NELSON: Sure.

The effect of project operation and maintenance on riverbank erosion, including the potential effects on protected species, cultural resources or the structural integrity of adjacent facilities. And that's soils and geology issues we've identified.

You might note also there are asterisks on some of these items; and those indicate resource issues that are going to be analyzed for both cumulative and project effects.

SPEAKER: Going right through --

MR. HOGAN: I was going to do resource by resource.

So now we're looking for TransCanada to tell us what activities they've taken to look at geology and soils, and then we'll go straight to the comment period.

MR. RAGONESE: Okay, and what I'll try to do is just go through it in a couple different categories; things that we've identified or proposed in the PAD, studies that we've performed of late or are applicable that would be considered pre-scoping, and then anything that we are intending or planning in the future.

So in terms of geology and soils, we did not specify anything in the PAD in terms of specific studies or PM&E or mitigation measures, for lack of another term. We did do a number of studies, though, ahead of time. A number of those were in consultation with the agencies, or we just decided we needed to have some background information to provide information to the PAD or processes that we knew we were going to get involved with.

So with respect to the two projects, Bellows and

Wilder, we performed a shoreline survey that included, in this case, in this topic, identification of erosion, primarily erosion that was greater than 25 feet. And those were all mapped. The general premise of this survey and study, it's on a GIS basis, there is a report -- all of the reports, as we finalized them they'll be located on our website under the public information component. That website is: www.TransCanada-Relicensing.com Just look under Overview and it's in the public information library.

So there's a synopsis of the shoreline survey, we're trying to get a map version of the GIS that you can get to from, at least download from the website as well. So look for that very shortly.

We also conducted a Phase 1A survey of the Bellows and Wilder impoundment, and downstream --well, primarily, just the comments in the project boundary. A Phase 1A survey is a survey associated with identifying impacts to cultural and historic resources; most of those impacts are associated with areas of active erosion; so we had a composite of the shoreline survey as well as field work to identify any impacts in those two projects on those resources.

With respect to downstream of Wilder, we conducted a survey and a study on the impacts of discharges from Wilder on jessup's milk vetch. We not only identified

the location but at the impact of various flow levels, both project operations and high flows on those sites.

We conducted rare and endangered species surveys, again looking at impacts on -- project-related impacts on potential rare and endangered species. That was a full survey of both projects upstream and downstream, primarily in the operational zone. We have other areas that we own land off of the reservoir or off of the water's edge. Those were not included in this component of the scope; we'll be doing that later, but this is primarily in the operational impacts associated with habitats or erosion or whatever might be going on, impacts associated with those species.

Then we also would recognize the fact that this is, geology and soils was primarily an issue in the last relicensing as well, in the '70s, and the Army Corps '79 Connecticut River Basin Erosion Study is a very applicable study that we -- that was part of that relicensing back in the '70s and still is around.

In terms of plan studies, one of the aspects that was talked about here in terms of structural integrity of the facility and et cetera, we have done a number of dam break analyses, and for Wilder it's designed to the potential maximum flood; could potentially breach Wilder Dam at the very high level -- now, this is a flood in the 200-plus thousand cfs, 280,00, 27 -- it's not something that

we've even close to seen historically. The impact of that I think rises the stream about a foot downstream. Again, this is a very high flood.

We're doing other geological and stability studies, but not associated with these two dams. That's it.

SPEAKER: Could you give the Bellows Falls?

MR. RAGONESE: Bellows Falls is a low hazard dam; we do not. It would probably -- I have to give you a better answer on that. We don't have -- I don't have a PMF calculation for Bellows Falls, but it's a type of dam that it would be, at the PMF it would probably be completely inundated, might breach, I'm not really sure. But at that point the downstream side of the dam is basically, the rise is less than a foot if that were to happen.

So you're already flooding downstream at the same level, essentially.

MR. HOGAN: At this point I'd like to turn to the agencies to hear if they have comments or concerns regarding geology and soils or erosion issues.

MR. COATS: The City of Lebanon is interested in studying the fluvial geomorphology of the areas up and downstream from the dam. In particular, what are the effects of the dam and what happens to the riverbank as a result of the presence of the dam, especially desiccation of

areas that were more typically wet, and humidity on areas that were more formally dry; and the capillary effect or other effects that experience levels going up and down much more rapidly than in natural settings.

In particular of that, the reason we're concerned is that this effect that it might have on one of our largest brownfields in the city, which we do not own; it is owned by the State, and this is Westboro Yard, which is just downstream of the dam. We have monitoring wells that are currently in place, and wondering about the leaching potential of the pumping action there, because there are nasty toxics there that would inevitably end up in the river; looking at how we'd remediate this, et cetera, etc. Again, like I said, the city doesn't own it but suffers from the consequences of it.

MS. HATFIELD: We own the north end.

MR. COATS: North end -- yes, we do own the north end. So we're interested in that in particular.

MR. HOGAN: Can you give us a little detail on what the brownfield is?

MR. COATS: The brownfield is a former rail yard, and current rail yard although the particular nasty is a former rail yard that is present right next to West Lebanon, downtown West Lebanon. And it is adjacent to the Connecticut River.

MR. HOGAN: Do we know what the toxins are that are of issue?

MR. COATS: We have not done all the Phase 1 and Phase 2, so I don't think we have a complete list, but we do --

MS. HATFIELD: We've done a Phase 1 and Phase 2 for the north end of the yard. It's primarily petroleum-based, but has naphthalene, there is a garage which is north of the bridge -- just north of Bridge Street, which had ruptured tanks some years ago. There was a plume running from that location underneath Bridge Street, comes onto the north end of Westboro Yard, and is pointing toward the Connecticut River.

We removed the monitoring wells about 18 months ago because New Hampshire DOT put a temporary bridge in, replacing the Route 4 Bridge. That bridge is supposed to be in place in 2014, at which point the temporary bridge will be removed, and we will then -- that area will become a park and we will be replacing the monitor device.

Further down the yard, there are a series of monitoring wells. And then further than that, when we get into the old rail buildings, we're about to start working on the Phase 1 of those buildings. We know there's petroleum, we know there's asbestos, we do not know what's under the building yet.

MR. HOGAN: So the north end of the brownfield is basically the Route 4 bridge area that's under construction?

MS. HATFIELD: That's correct, yes. Well, that's our north end. There are also wells to the north of that, around the glass -- there's an old garage where a tank ruptured, so they have a series of monitoring wells. They've expanded the area of monitoring to include the north end of the yard.

MR. HOGAN: I'm being told we need your name for the record.

MS. HATFIELD: I'm Shelley Hatfield.

MR. HOGAN: Other -- Yes, sir?

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

We're concerned about the roadability of the soils along the pool, particularly as the levels change, -- river. They're called full mouths for recreational boaters, oftentimes -- (inaudible)

MR. HOGAN: Can you speak up a little bit?

MR. KULBREKI: So we're concerned with the erosion, so we'd like to see a study to see how we could minimize the impact of lowering and raising of the level. See how we can minimize that, that impacts. Also how to look at, when we do have damage, silt failure, who is responsible for it and should be responding to that. Right now there's no mechanism for us to contact anybody to say

we've got a bunch of silt failure, a bunch of trees in the river. Who should be responsible for that? Should be some sort of mechanism so it's not the town responding to something on private property that's nothing to do with the town.

MR. HOGAN: Other comments on soils and erosion?

MR. THAXTON: James Thaxton, Upper Valley Land Trust.

I know that it was mentioned that TransCanada owns about a thousand acres of land along the Connecticut River, that many of the prime agricultural soils, and then previous relicensing projects. They have conserved those lands with a conservation easement and we would be interested to continue, have that as part of the mitigation; and maybe consideration of vegetated buffers along the Connecticut River.

MR. HOGAN: David?

MR. DEEN: And I did not hear it as part of the introduction of the section, and this may be coming up under fisheries; but the impact of erosion on aquatic species, in particular mussels and in the Bellows Falls reach there is a colony -- if that's the right word -- of dwarf wedgemussel, and then also the impact of erosion on the bottom of the river for other life stages of other aquatic species.

And as we said, I don't know if that will come up

later; but it certainly is an issue that is caused by erosion.

David Deen, Connecticut River Watershed Council.

MR. HOGAN: Other concerns or comments about erosion and sediment issues?

SPEAKER: One quick comment. I apologize; I know several people here had trouble hearing because of the fan.

My focus is terrestrial research, but it does take from all the topics. So if you guys can speak up, I'd really appreciate it. I know several people here can't hear.

Thank you very much.

MR. HOGAN: For the members of the public who brought prepared sometimes that they want to make, were any of those statements specific to erosion issues?

If you'd like to give that to --

SPEAKER: I have a memo that -- essentially what I just talked about, you can put it in the record when we're done.

MR. HOGAN: That would be great.

Nothing else on erosion or geology and soils?

Okay, let's move on to water resources.

@ Water Resources - Water Quantity and Quality

MS. SCANGAS: Angie Scangas, FERC.

So as identified in the scoping document, the

preliminary effects for water resources where the current and proposed project operations on water quantity and quality, and particularly identified were dissolved oxygen and temperature.

MR. HOGAN: We've heard a little bit about water quality concerns associated with the brownfield and potential for leaching. Are there other issues?

MR. KULBREKI: Pete Kulbreki, Town of Hanover.

We are in the process of renewing our MPDS permit, which is a national pollution discharge elimination system permit issued to wastewater treatment plants. And our limits are, we will be seeing limits on nitrogen, phosphorus, and also based on low flows in the river. Some of our concerns are how the lower flow might affect our (inaudible) as well as erosion and release of phosphorus into the water body, which is a contributing factor to low DO in the Long Island Sound; and that is in turn affecting levels of permitting and treatment requirements that communities like Hanover and Lebanon and communities down the river will be facing.

MR. HOGAN: Sounds like we have a cumulative effects analysis for the Long Island Sound.

MR. RAGONESE: Do you want me to identify that we did some studies on water quality or not?

MR. HOGAN: I'm sorry, John. Yes.

MR. RAGONESE: So we didn't propose, at this stage of the game, any water quality studies in the PAD, but we did conduct over the last year a baseline water quality assessment of our reservoirs and the discharges for Wilder and Bellows Falls. That information will be released very, very shortly; it's in its second final revision on the study, so look for that on the website. And we'll probably be filing that at the Commission as well.

But basically we had continuous monitoring of the reservoirs and downstream for DO and temperature, and some other nutrient and/or presence of different -- I can't remember what we had. But there were a number of different ones.

This was a study that was developed; the study plan was developed in consultation with the state agencies; they were requesting some other elements to be monitored besides temperature and DO. And we complied. We also did some profile assessments; I think it was every week in the reservoirs beyond just the continuous monitoring. And that will be available shortly.

We also, just to -- we did propose in the PAD or identified in the PAD, particularly on water quality and the impact of project operations on water quantity, We have a Connecticut River comprehensive optimization model. This model will basically use hourly natural inflows into the

main stem throughout the Connecticut. It will identify all the current constraints that are on project licensees throughout the Connecticut River; it will allow us to be able to modify the constraints using different scenarios; it will have hourly energy prices that will be basically day-ahead prices in the New England market, which is how we operate.

The outputs will be discharge -- in this case we'll be really looking at either the discharge or flows through the reservoirs, and any changes that would occur, and compared to baseline conditions, which is basically what we're doing today.

MR. HOGAN: It's Pete?

MR. KULBREKI: Yes.

MR. HOGAN: You mentioned going for an MPDS permit currently.

MR. KULBREKI: Correct.

MR. HOGAN: And you're concerned about a reduction in flows?

MR. KULBREKI: There are three things we're concerned about; lower flows change the dilution factor; requires higher level treatment. The other two issues are nitrogen and phosphorus. Nitrogen and phosphorus are found in the environment, but they're also -- phosphorus in particular is released when soils are eroded. It is a

cumulative effect. The Long Island Sound, with LDO and contributing factors.

We're the small, tiny little amount and we're required to treat to a higher level, and our concern is that the background environment could have a far greater effect, with no treatment, and we're struggling to meet a permit limit in levels that we can't do with the current technical we have, which is a huge expense to us. Not just Hanover, but any of the communities discharge to not only the Connecticut River but tributaries of the Connecticut River.

MR. HOGAN: Just a clarification; when you say lower flows, are there lower flows or a potential for lower flows?

MR. KULBREKI: Well, the permitted low flows. Whenever the permitted low flow is --

MR. HOGAN: So in the next licensing if --

MR. KULBREKI: Yes.

MR. HOGAN: -- flows were to be reduced, it would be an issue for you?

MR. KULBREKI: It could be an issue for us.

MR. HOGAN: Okay, that's what I wanted to figure out, if we were talking about a reduction caused by the licensing, or natural events --

MR. KULBREKI: That's the one thing with the low flows, the dilution, but the other factor is the erosion

caused by raising and lowering of levels, silting soils that contribute to high nitrogen and phosphorus levels, vegetation falling in the river and that sort of thing.

MR. HOGAN: Other water quality concerns?

MR. COATS: I don't know if this falls under water quality, but there is some concern about -- from the City of Lebanon again -- coordination; we are having more and more rain events and flood events, and the coordination between the other dams on tributaries and things that may have nothing to do with TransCanada. We have a number of dams on the Mascoma, and it came to our attention that there was some delays that were problematic between the communication, between -- the Connecticut obviously was worse in Vermont than we experienced; but we have dams along the Mascoma, one of the tributaries, and I assume others as well.

I don't know where that belongs in terms of understanding or how the study or a study would need to be done or whether it's just simply a matter of tweaking process -- I don't know, but it has been expressed in city --

MR. HOGAN: So you've identified in the past issues during high flow events coordination between the dam operators, the release and management of that flow for the city?

MR. COATS: Yes.

MR. HOGAN: And flooding issues.

MR. COATS: Yes.

MR. HOGAN: John, do you have a response to that as far as your current operations?

MR. RAGONESE: The Mascoma dams, that are storage, are all operated by New Hampshire Department of Environmental Services. I can't speak to exactly what the issue that the City has; their impact in the center of the city is affected by the Mascoma River versus the Connecticut River; so I can't speak to what their issues might be. They are operated to some extent on seasonal storage; they don't have a lot of storage if the storm is outside of the winter drawdown period; they're held at recreational limits; you know, there's a lot of development around them. I don't think there's a lot of flood storage in them, period.

How they operate them under high flows, I would defer.

MR. HOGAN: So there is no coordination --

MR. RAGONESE: I mean, we have coordination with flood control facilities, but -- and we are in constant contact under high flow events like Irene or Sandy with the DES and the Department of Emergency Management.

I'm not aware of the Mascoma operating for flood control to any great extent. There's just not a lot of

capacity there. But I really can't speak to what the issues are.

MR. COATS: And again we're just -- because we know that there's sort of a deficiency there, in particular it really happened at the mouth of the Mascoma, we have obviously facilities there at the mouth of the Mascoma; there was a great deal of combined effect, and this is not a critique of what happened, but it seems like a good opportunity to figure out better how to handle it in the future.

MR. RAGONESE: Yes, those storms are -- those are primarily influenced by the unregulated flow on the White River. Honestly. Those are natural inflows into the Connecticut from the White River, not from Wilder dam. Those are -- once you get above 10,000, everything is natural in the river. We're not doing anything at that point. And these flows are in the 70, 80, 90 thousand cfs range that we're talking about here.

MR. HOGAN: So we're upstream of Wilder and --

MR. COATS: Again, this is not pointing fingers or anything; just it's coordinated --

MR. HOGAN: No, I recognize that --

MR. RAGONESE: Just trying to get an idea geographically how this works, yes.

We've got no capability of Wilder doing anything

about -- or Mascoma, for that matter, at those kinds of flow levels; they're just natural flows.

MR. HOGAN: Other water quality or water quantity?

John.

MR. WARNER: John Warner, U.S. Fish & Wildlife Service. I had a question for the FERC folks.

In this section, referencing to water quantity and the subsequent issue on, section on aquatic resources looking at operation changes on downstream flows and reservoir fluctuations; but can you define what you mean in this bullet by water quantity? What you're looking at versus what's in the next bullet on aquatic resources.

MR. HOGAN: They're definitely linked, John.

MR. WARNER: I got that part.

MR. HOGAN: Water quantity can be peaking flows, reservoir storage amounts. Clearly the next bullet gets into the effects of that on aquatic resources.

MR. WARNER: So I guess going from there, the way it's phrased, and I'm pretty sure you're going to cover all this; but it's phrased -- effects of current and proposed operations and the proposed operations are the current operations right now. And I would anticipate that there will be recommended changes to those operations, so clearly any of those need to be assessed as well. But this is a

complicated system, and anything that happens at Wilder and Bellows affects Vernon and downstream; so John mentioned in his operations model, but just try and understand how we'll all be able to keep track of when things are identified for aquatic resources or whatever, that that gets put into a model and then gets returned back to us during the licensing proceedings so we don't recommend things in one place that are not achievable because of recommendations in another place.

MR. RAGONESE: Let me speak to that, because I didn't go into great detail. It's a really good question.

So just to characterize, our operations model is, basically will run from the headwaters of the Connecticut River; it's a main stem model -- that's what we're concerned about, it's a main stem model -- it will run from our headwaters. And primarily outputs of our model, is a competitive marketplace; there's basically a line of demarcation between -- we'll hand off the outputs of our model on any particular scenario.

So our model is designed to be able to look at all kinds of scenarios. We intend to engage with whoever wants to be part of sort of a model working group to look at scenarios, be able to review the results. So as we've done in all our past relicensings, we try to provide the right amount of information to be able to make the assessments.

But what we'll get out of our model is basically the discharge out of Vernon, of that scenario. Now whether or not that scenario is characterized further downstream for the First Light folks in terms of an overall sort of scenario description, we'll pass on to John and Mark the outputs of our model to be the inputs of their model. We are not trying to model and optimize First Light projects. That's a no-no in the marketplace.

But we will give the discharge, and then it will be up to them. What we'll do as well is, we'll be able to take -- and we're attempting to model or characterize their facility. So if there's a scenario that gets proposed in a cumulative effects analysis for First Light to look at, we'll be able to evaluate whether or not that constrains our system or maybe just -- the water's not there. What it might mean.

So we'll be able to move that same scenario upstream. So I don't know if I answered your question, John, but the idea is that this model is designed to look at various operating scenarios and compare it to baseline conditions.

MR. HOGAN: Let me ask, will it go as far as also feeding into habit analysis?

MR. RAGONESE: It can, more as a post-process analysis, yes.

MR. HOGAN: Does that get at your question?
MR. WARNER: Thanks.
MR. HOGAN: John mentioned actually establishing a working group on model development. Is there a show of hands of folks who would be interested in that?
(Laughter)
MR. HOGAN: Let's get your hands for the record so that John doesn't have to write them all down.
John Warner?
MR. WARNER: I'm not interested in developing a model. I have no idea of that.
MR. HOGAN: That's like reviewing --
(Simultaneous discussion)
MR. WARNER: No, just in the output side.
MR. SIMS: Norman Sims from the Appalachian Mountain Club.
MR. CHRISTOPHER: Tom Christopher from FLOW.
MR. HOGAN: Anybody else?
MS. KENNEDY: Katie Kennedy of the Nature Conservancy.
MR. CROCKER: Jeff Crocker with the Vermont ANR.
MR. HOGAN: Trapped you.
MR. RAGONESE: What's that?
MR. HOGAN: I trapped you.
MR. RAGONESE: No, no, that's good. I was trying

to figure out how we're going to try to identify some of the working groups as well, so that works for me.

MR. HOGAN: Other questions about, or comments regarding water quality or quantity, or concerns with the Bellows Falls or the Wilder project?

MR. GRIES: Gabe Gries with New Hampshire Fish & game. I just had a general question, not having been through this process before. Should we --

SPEAKER: Could you speak up, please?

MR. GRIES: Requested studies that the agencies are already working on. Is that subjects that we should be bringing up --?

MR. HOGAN: We would certainly be interested in the area. What studies you're thinking about that we need to do--

MR. GRIES: Okay.

MR. HOGAN: The first idea is, you've seen this as a potential effect or a concern, and as a result we're going to be asking for or we're contemplating studies A, B, and C. And I think that's absolutely appropriate for this forum.

Did everybody hear the question?

SPEAKER: No.

MR. HOGAN: Question was, is it appropriate in this forum to identify studies that we are contemplating?

And the answer is yes.

Yes.

SPEAKER: I apologize at this point since it's already been asked, but are you or will you be looking at studies of how the morphology has -- yes, it was asked already, and I--.

MR. HOGAN: It was asked, and we took a note and we've got it recorded that there is an interest in a fluvial geomorphology study of the project reaches.

SPEAKER: Yes. It was also particularly because the White River's geometry had changed so much.

MR. HOGAN: Would you like to elaborate on that?

SPEAKER: The confluence of the White River in West Lebanon is an area that -- it runs naturally, and has continued to flood; and now with the architecture of the White River, it's so scoured by Tropical Storm Irene -- we don't really know how, we know things will be the same but different next time, and it would be important to understand how. So just looking at sediments, looking at transport of sediments, looking at what areas continue to be vulnerable, but there might not be new areas that are vulnerable because things have changed on the White.

MR. HOGAN: And how the project is affecting that?

SPEAKER: How the project will live with the --

how the project will coordinate with the effects of that. I mean, this is downstream; but what happens when, with what the project is doing on both dams does have some interaction.

MR. HOGAN: Thank you.

Other --

MS. KENNEDY: Katie Kennedy with the Nature Conservancy's Connecticut River program.

With regard to the water quality issue, one of the speakers today mentioned phosphorus and nitrogen. We are interested in water quality to the extent that it is impacted by the flood plain community, so in the Connecticut River Basin the flood plain communities have been largely removed; and so there's potential that there's an unbalance in water quality because those flood plain communities have been removed or impacted. So we're interested in understanding have the projects impacted flood plain communities in a way that it impacts the water quality. And that's just one of the impacts, of course, that it does connect to that, potentially reestablishing riparian flood plain vegetation to mitigate nutrient impacts.

And with regard to water quantity, I would like to state that we would like water quantity to be defined in terms of the full scope of flow, so any magnitude duration, rate of change, frequency, timing; those different things.

And of course in our case, how that is important to the natural ecosystem; but we are interested in understanding how we can optimize those components so that we can continue to provide hydropower and then other interests like recreation and any other interests on the river.

And the Nature Conservancy has also been developing a model, and it is a full system model, optimization and an operations model. And then we developed a smaller sub-daily model that does encompass all of the projects. So I'm not sure exactly how that's going to be involved; but I hope that it will at least be a tool that we can use in this setting to help at least come up with potential scenarios that the power companies can then run in their operations model. So I'm hoping we can work with others to do that.

MR. HOGAN: Katie, you gave us a very specific definition for water quantity. Could you repeat that real quick?

MS. KENNEDY: Yes. So there's five kind of established components of the flow regime that are important in its magnitude; how high the peaks are, the duration, how high to preserve it, also how low. And then duration; so how long those -- how long the low flows last, how long the low flows last.

The rate of change, so how quickly the flows change on both increase and decrease, the frequency, how often those particular flows last, or how often they occur. And then the timing, when they occurred.

And those five components are essentially what defined the structure and function of the natural ecosystem.

MR. HOGAN: And when you say timing, you're talking seasonal, daily --?

MS. KENNEDY: Seasonal or anything. So from hourly to hundred year sort of thing.

MR. HOGAN: Okay. Okay. Thank you.

Yes, sir.

MR. SCHMIDT: Carl Schmidt from the Upper Valley River Subcommittee.

I have a two-part question that refers back to a point that James Thaxton raised -- concerning land lease owned by TransCanada along the river banks. And this relates to the flowage rights that were originally required and acquired when Wilder Dam was created.

Does TransCanada have a comprehensive record of those flowage rights on both sides of the river? Secondly, going forward, might it be possible to extend some sort of conservation or other protection for those areas that are covered by the flowage rights?

MR. HOGAN: The answer to Part B is yes, it's

possible. Our NEPA analysis will determine what's appropriate; so we're not there right now, we're still trying to identify the issues,l and we will do our analysis.

For Part A, I'm going to let John Ragonese --

MR. RAGONESE: Can you explain Part B again? I'm not really sure I understand it.

MR. HOGAN: He was asking --

MR. RAGONESE: Just so I can understand.

Was the question about extending our flowage rights to --

MR. HOGAN: What I answered was, is it possible to include PM&E measures within those flowage rights for potential effects of the project? And the answer is yes.

John, first part of the question was, do you have a comprehensive record of all of your flowage rights?

MR. RAGONESE: We do have -- unknown to the FERC attorneys -- the old licenses had an exhibit. So we do have an exhibit from our original license. I don't think they're required in current licenses to maintain, but there is an exhibit on the record -- it's a title, for lack of a better word -- sort of a title history of the acquisition of flow rights.

We have a record of them, or where they are in the book and page; but they're on anybody's deed currently, or there's a reference should be on anyone's deed. You

should be able to find your flowage rights by going through your records of your current deed as well as the original deed when it was purchased.

But we did have an exhibit; I think we used to call it Exhibit F, but it's not Exhibit F, that's something else. But we do have a record that we can, that we use to research what these were.

MR. HOGAN: Does that answer your question, sir?

MR. SCHMIDT: Yes. I wasn't asking from a personal standpoint, but from a comprehensive standpoint about those flowage rights.

MR. HOGAN: Other -- Yes, sir?

&- SPEAKER: Katie Kennedy mentioned about flood plain communities and the effects that those have on nutrients within the river. I don't know if this is something that would be possible, but the Upper Valley Land Trust has been interested in flood plain communities' effect on temperature within the river. It seem that the main stem of the Connecticut River is different from tributary sources where the vegetation can affect the temperature a great deal.

So it would be helpful for us to know if there were effects of flood plain communities, natural habitat communities on temperature within the main stem of the Connecticut River.

MR. HOGAN: Okay.

Is that only the main stem; doesn't extend to back water areas or --

& SPEAKER: Well, it could. Certainly I think there would be information that could be found about, you know, in general about buffer, vegetative buffer, woody buffers affecting tributaries. Yes, I think that would be part of it, But working with farmers and others who have sort of a reluctance to have a wide buffer, whether having some sort of wide vegetative buffer will actually do anything for temperature within the river.

MR. HOGAN: Other -- David?

MR. DEEN: David Deen, Watershed Council.

Those five parameters, if you will, that Katie laid out affect things other than flood plain forest and terrestrial habitat, because wetted area for aquatic species is something to be concerned about. Stranding in terms of ramping rates up and down, drawdowns in the reservoir, particularly seasonal drawdowns for spawning.

MR. HOGAN: You're jumping ahead.

MR. DEEN: Okay.

(Laughter)

But it's all in those five. Flows for migration and then minimum flows in bypass re aches, and minimum flows overall; they have not been evaluated for 30 years, so.

MR. HOGAN: That seems like a good segue to aquatic resources. Unless there's any other comments on water quality or quantity.

Do we want to go right into aquatic resources, or do we want to take a break? I'm flexible.

Do it. Okay.

MR. HOGAN: Aquatic Resources.

Aquatic Resources

@ MR. SEARS: This is Mike Sears of FERC.

Under aquatic resources, we identified the following issues: Effects of project operations and maintenance, including fluctuations in water levels and flow releases on aquatic habit and resources in the project vicinity. For example, resident and migratory fish populations, fish spawning, rearing, feeding and overwintering habitats, mussels and macroinvertebrate populations and habitats.

Also, effects of project facilities and operations, including reservoir fluctuations and generation releases on fish migration through and within project fishways, reservoirs, and the downstream riverine corridor.

And the effects of entrainment on fish populations.

MR. HOGAN: John, any --?

MR. RAGONESE: In our PAD, we did not propose any

specific studies on addressing or identifying aquatic habitat other than the fact that we did identify that we anticipate, as a continued PM&E measure, the continued operation of our up and downstream passage facilities that are currently primarily focused on anadromous fish species.

In our pre-scoping studies, we did perform a fairly comprehensive survey for dwarf wedgemussel; it's a federally endangered species, both in the impoundments of Wilder and Bellows Falls, as well as portions of the downstream areas or affected areas below. We also coordinated -- well, let me just go back to the dwarf wedgemussel. That report has just been published, and it's available on our website, for those that would like to look it up.

Historically, there have been a number of different studies relative to, assessments of migration,l use of fish ladders and there our reservoirs; but those are primarily focused on when those ladders went in, when those devices went in; and then studies about effectiveness; and those are also on the website under public information at the library.

MR. HOGAN: I have a question for State of New Hampshire, State of Vermont and Fish & Wildlife Service regarding, are the species that we're interested in different, migratory species different between Bellows Falls

and Wilder? Bellows Falls was the historic extent of shad runs, is that -- we're interested in shad passage up to Bellows Falls, or does it carry all the way through, or same question of why or other species. If you can kind of enlighten us as to the migratory concerns at each facility, whether they're the same or whether they're different, I'd like to know.

@ MR. FITZGERALD: Brian Fitzgerald, Vermont Agency of Natural Resources. We'll cover all that in our written comments that we'll be filing by the March 1 deadline.

MR. HOGAN: Okay. You're looking into it.

MR. FITZGERALD: We are now.

(Laughter)

MR. HOGAN: Perfect. I did my job. Let's all go home now.

Any comments regarding aquatic resources, fisheries issues associated with the project, David?

MR. DEEN: One thing I did not see in any of the PADs was concern about passage for American eel, and I just wanted to get that into the record.

And the existing passage facilities are not eel-friendly, if you will.

MR. HOGAN: So Brian, in your comments, I'd like input on American eel, too.

MR. FITZGERALD: You can count on that.

(Laughter)

MR. HOGAN: Pete?

MR. KULBREKI: Peter Kulbreki, Town of Hanover.

Same thing regarding drawdown. Particularly the confluence of the Mink Brook and the river when the water is drawn down. Concerning waterfowl as well as allowing the rotting vegetation gas, creating quite a bit of odor; so that's an issue that we've noticed.

MR. HOGAN: This is at Mink Brook?

MR. KULBREKI: Mink Brook. We get blamed for it at our wastewater plant, but oftentimes, sometimes it's the mud flats. But there's an issue there. That section is a sucker run, and it has been a restoration site for Atlantic salmon, and I'm not sure there's any study on the effects of that, the timing of year on the drawdowns.

MR. HOGAN: So drawdown effects on aquatic habitats.

MR. KULBREKI: Yes.

SPEAKER: And specifically it sounds like drawdown effects on tributary access; and that goes to backwater areas as well.

I will give you a little more on the fish species, at least, from the American eel standpoint. We'll be looking at American eel passage and current distribution questions throughout, in all the project areas. Sea lamprey

passage at this point through all projects and American shad up through Vernon; but will probably give a clear --

AUDIENCE: Would you speak up a little bit?

SPEAKER: Our final comments will have more specifics relative to the management questions on anadromous fish.

MR. HOGAN: Okay.

SPEAKER: I couldn't hear what you said about shad.

SPEAKER: Shad passage is now -- shad have passed through Bellows, but the management plan has them up to the base of Bellows Falls. That has been the traditional operation. Whether that continues, that may be reassessed; I don't know. That would be a Connecticut River Atlantic Salmon Commission visit.

MR. HOGAN: Is it going to be in time for this process?

SPEAKER: I can't tell you that. I can't tell you there will be a change; I'm not aware of it. I'm not precluding that, though.

MR. HOGAN: So right now the management plan is to get shad to Bellows and not necessarily beyond.

SPEAKER: Right.

MR. HOGAN: Okay. Is that the same for river herring?

SPEAKER: I'm not really sure about the river herring.

MR. DEEN: No, it's lower down river for the herring.

MR. RAGONESE: I just want to point out, all the various fish management plans for shad or American eel or salmon, those are all in the public library on the website as well, so people can get to those easily. Whereas, you probably can't find them on the FERC website.

MR. HOGAN: One thing we've identified, to get a little more specific is, potential project effects of changing flows and operations on the migration runs themselves of anadromous fish.

Is that an actual issue or is that just something I made up?

SPEAKER: No, it's an actual issue. You're right. You wrote it so I didn't have to say it.

MR. HOGAN: Just want to make sure I -- I'm looking for vindication.

(Laughter)

MR. HOGAN: And I'm sure you have some ideas about how to investigate this issue?

SPEAKER: I think I'm going to punt that to Brian's answer.

(Laughter)

But we'll give -- complete study requests, at the end of the process.

MR. HOGAN: Okay.

Other comments regarding fish and aquatic resource issues with the projects, at one or both?

Yes, sir.

MR. CARPENTER: I think the PAD identified bridal shiner in the Wilder comment, state threatened species in New Hampshire, and I think that might have been a misidentification. So I think they will be proposed a general fish community study for the impoundments of these, and I just don't want to tell you when to go off and try to propose management-specific for bridal shiner before we know whether they are there, surely.

Matt Carpenter, New Hampshire Fish & Game.

MR. HOGAN: Are you proposing a, or going to be requesting a fisheries survey of just Wilder, or all three projects, or Bellows Falls also?

MR. CARPENTER: I think fish community surveys will be proposed as part of the written package that's going to be submitted.

MR. HOGAN: Okay. Thank you.

Other comments on fish and aquatic resources?

MS. KENNEDY: Kate Kennedy, Nature Conservancy. This may be a question for Thursday's meeting, but I just

would like to ask why this is not a cumulative effect.

MR. HOGAN: What is 'this'?

MS. KENNEDY: Oh, the project operations, the first bullet in aquatic resources. Perhaps that's a question for Thursdays.

SPEAKER: Could you repeat the question?

MS. KENNEDY: So the starred, asterisk bullets are fully analyzed, implemented effects, and I'm just curious in terms of whole populations.

MR. HOGAN: So your comment is you think it should be.

MS. KENNEDY: Perhaps. I was proposing there might be a reasonable explanation.

MR. HOGAN: No?

MS. KENNEDY: Okay.

MR. HOGAN: Would you say that it should be even the resident species, or just cumulative effect on anadromous species?

MS. KENNEDY: I think just, if we're talking about -- you know, we had talked about what if you can't provide some kind of management scenario at one facility because of the management of another facility? So it may be the case where, if you look at the whole system you can do better for the whole population rather than trying to meet needs at different facilities.

So in other words, if management can be adjusted at one facility to better manage at another facility for the population.

MR. HOGAN: So if you lost bass spawning habitat at one, but you can provide it at another --

MS. KENNEDY: Or better. So in other words, it could be the case where you could either spread it out so that everything is just barely getting it by, or -- I'm just throwing out possibilities, or you can provide excellent habitat, and it's the same community at one facility.

So there's just potential for that, to have that. I don't know -- that sounds really traumatic -- so I don't know if it would be anything like that, but it's just a potential, I think, when you're talking about manipulating flows.

MR. HOGAN: Thank you.

David?

MR. DEEN: David Deen, Watershed Council.

Part of that discussion is seasonal. You have to put it in the context of seasonal; because as you said, bass spawning. Well, that's a springtime event, and potentially as you manage to ecological values, you manage on a seasonal basis, not in sort of an abstract, all-year-round is where you strike your balances.

So I think the seasonal nature of happenings is

of import with that. And that goes to your question about flows and migration; it is seasonal. You know, spring and fall, in and out. And you'd have to be aware of that also in terms of operations.

MR. HOGAN: Other aquatic resource issues or concerns?

Okay. Terrestrial Resources.

@ Terrestrial Resources

MR. BATTAGLIA: Terrestrial resource issues identified thus far: Effects of project fluctuations in the water levels of flow releases from the projects on riparian, wetland and littoral vegetation community types, and the spread of invasive species as a result of project operations along the shoreline of the project. Effects of project operation and maintenance activities, for example, road and facility maintenance, and project-related recreation on wildlife habitat and wildlife.

The effects of project operation and maintenance on river bank integrity and shoreline erosion along the project reservoir and stream reaches, and its potential effects on riparian vegetation.

Effects of the frequency, timing, amplitude and duration of reservoir fluctuations on waterfowl and on riparian and wetland habitats.

And the effects of project operation and

maintenance and project-related recreation on bald eagles and their habitat.

MR. HOGAN: John, have you got --?

MR. RAGONESE: Yes. In the PAD, we didn't particularly specific a specific study that we were proposing at the time, waiting for input and feedback from agencies and stakeholders; and we didn't propose any particular PM&E measures. I would note that we do, just thinking of the last one, we are a primary sponsor of bald eagle surveys in monitoring of the Connecticut River, but that's something we, we're just supporting the Audubon Society's efforts in that regard.

In terms of pre-scoping, I mentioned earlier that our shoreline survey, the survey also included identification of wetlands, riparian vegetation types including invasive species. As I said earlier, we conducted jessup's milk vetch assessments downstream of Wilder, and then we did conduct a full blown rare, threatened and endangered species survey of all the projects; this includes the impoundment and the downstream reaches between the impoundments below Wilder and Bellows Falls.

That survey, as well as the jessup's milk vetch survey, both those reports are just about ready to go to the agencies; and I think they will -- well, eventually they will be on the website, people will address the agency

comments first. But the rare and endangered species survey not only took the historic records and identified whether or not there were potential impacts to the project operations on those locations; we had to find the locations, but it's fair to say that we identified in some cases up to 40 percent additional sites through the survey. So that information will be out there.

There may not be specific locational information on this stuff that's available in the public versions of these; but you'd have to request the state, go to the state agencies for further information other than what we might produce or publish publicly, public record. And that's it.

MR. HOGAN: Okay. Yes, sir?

MR. MARTIN: Chris Martin from the Audubon Society
of New Hampshire.

John, can I ask you a question about the last thing you just said.

MR. RAGONESE: Sure.

MR. MARTIN: Those threatened and endangered studies, were those --

MR. RAGONESE: Plant species. Sorry.

MR. MARTIN: Plant species, okay.

Were they on the federally-listed species or state-listed species?

MR. RAGONESE: State and federal.

MR. MARTIN: Okay. All right.

MR. RAGONESE: Yes, we really coordinated those through the state offices, actually.

MR. MARTIN: With both states?

MR. RAGONESE: Yes.

MS. CORMEN: I'm Nicole Cormen, Lebanon City Council.

Our City of Lebanon Natural Resource Inventory is one of the ten that was done by Rick Van Der Pol, some of you know, identified a very unusual community immediately below the Wilder Dam itself. I mean, just on the rocks to which the dam is attached. And I thought to bring it -- I didn't bring the list today, but I would just encourage you to look at the City of Lebanon Natural Resource Inventory and/or contact Dr. Van der Pol. There are state and possibly many rare species in that. It has to do with the misting community that happens there, immediately adjacent to where the flow is.

MR. HOGAN: Is that a list that's readily available?

MS. CORMEN: It's a public document and -- our planning and zoning director is here. It's on the City's website: LebanonNH.net.

MR. HOGAN: L e b?

MS. CORMEN: LEBNH.net. And there is a plant list in the appendix there, but in terms of where, the exact location of the exact species, I think Dr. Van der Pol would probably be a better resource.

MR. HOGAN: We'll certain take written comments. I don't know that we're going to actually give him a call; so if there's anything that you feel needs to be in our public record, we should try to get it there. Interesting.

Other comments regarding terrestrial resources?

John?

MR. WARNER: One bullet identifies the effects of operation and maintenance on bald eagles and their habitat, and it's specified that we want to see an inventory of riparian forest communities, you know, potential nesting trees, and that would probably integrate with Audubon's survey of where the birds have been; but also look at what's out there and whether or not protection of certain resources are necessary.

MR. MARTIN: I do want to add a clarification, or a clarification to your question.

Chris Martin from New Hampshire Audubon.

We are involved in a two state effort in New Hampshire and Vermont to fully understand the distribution and the breeding locations of bald eagles up and down the entire watershed from the Massachusetts state line north, in

both states. Not just the main stem of the Connecticut but the tributaries -- well, so essential watershed-based study. And to the extent that FERC is interested in that information as we have it currently, we'd be happy to provide that.

MR. HOGAN: That would be fantastic.

MR. MARTIN: What format that takes would be something you'd have to explain, what you're looking for specifically.

MR. HOGAN: Okay, well, why don't we get together after the meeting and we can --

MR. MARTIN: Yes. I'll make a point of that.

MR. HOGAN: Other terrestrial resource concerns associated with the projects?

SPEAKER: It may be wrapped into this, but the riparian areas also include agricultural lands, and maybe that would be something to look into, about impacts on agricultural use of the property.

MR. HOGAN: I think we'll discuss that a little bit more when we get to land use issues.

Katie?

MS. KENNEDY: I had a question about the vegetation community types. How far that's planning on extending, and I guess that would suggest that extended to the hundred year flood plain.

MR. HOGAN: For surveys?

MS. KENNEDY: For the vegetation, yes.

MR. HOGAN: Vegetation surveys.

SPEAKER: Would you repeat the question?

MS. KENNEDY: I was asking about the extent of the vegetation community types; so particularly flood plains are looked up until the 100 year flood plain, then you get the full complement of the transition from the bottom lands to the upland flood plain communities.

MR. HOGAN: So if vegetation surveys are conducted --

MS. KENNEDY: Yes.

MR. HOGAN: -- it's you recommendation that the do it with an 100 year flood plain/

MS. KENNEDY: Right, so that this vegetation community type should include the full flood plain.

MR. SIMS: Can I ask a question of the resource agencies. Norman Sims --

MR. HOGAN: Can't promise you you're going to get an answer.

MR. SIMS: From watching the news this morning, I learned that Northeastern Australia had an 100 year flood three years ago and they had another one yesterday. My question is, is anybody revising that terminology of the 100 year flood?

MR. RAGONESE: I think they're just revising the line.

SPEAKER: An 100 year flood refers to the probability of occurrence of, it's -- take 100 and divide it, 1 over 100, that will be the probability of it recurring in any one year. So you will change it; 100 year flood will exist, but it may be a higher number.

SPEAKER: Higher probability.

SPEAKER: Well, no; the number may be greater.

MR. RAGONESE: No.

SPEAKER: It may be a greater number but there will still be an 100 year flood.

MR. SIMS: Is there any way of finding out how that number is increasing?

SPEAKER: I don't -- there is some data --

MR. RAGONESE: I mean, I can note that -- your source for that is FEMA, probably; they are your primary source to go to for finding out whether or not they're adjusting.

Literally days after Irene, FEMA was out mapping the water's edge along the Connecticut River. There are flags everywhere that mark -- and they wouldn't necessarily say that this is an 100 year flood; they were just marking it, they were revising it. I think they were focusing on a 500 year flood adjustment, as opposed to maybe an 100 year,

perhaps because that exceeded it in a lot of places.

But FEMA is your agency that would be dealing with that.

SPEAKER: Or USGS.

MR. RAGONESE: Exactly, yes. They would be working with them.

SPEAKER: I think UNH's work with the lamprey river watersheds to re-delineate a lot of those flood boundaries, so that might be a place to look at, too. See how they did that.

MR. RAGONESE: Yes. That actually got mentioned last night after the meeting as well. The caller notes that we had. There is -- UNH has a study, and they're doing it on four or five different basins at a time, and I think the Connecticut River is the next basin that may be coming up for some information that's going to get released. I don't know when, but I think it's in the next five, six months; something like that.

MR. HOGAN: Other concerns associated with terrestrial resources?

Anybody need a break?

I'm seeing a lot more activity with the door.

(Laughter)

Threatened and Endangered Species

@ All right, we've kind of covered threatened and

endangered species through the other resource areas. Is there anything people would like to add specific to threatened and endangered species that they feel that hasn't been covered? I don't think we need to go into the bullets now.

We have a question that came up last night -- yes?

MR. MARTIN: General question on that regard, and I guess this goes back to -- Chris Martin, New Hampshire Audubon.

This goes back to the statement you made at the start about the T&E plant studies that were done.

Am I to infer from that there haven't been any T&E animal studies that were done along the watershed?

MR. RAGONESE: Haven't done that.

MR. MARTIN: That's a correct statement.

MR. RAGONESE: That is a correct statement.

MR. MARTIN: Okay.

SPEAKER: Well, we did the walkway --

MR. RAGONESE: Oh, yes. Aquatic species, but --

SPEAKER: But terrestrial species.

MR. RAGONESE: Terrestrials, no. Thank you.

SPEAKER: State-listed bird species, but --

MR. RAGONESE: The state-listed birds, state listed bugs.

MR. HOGAN: Last night we had a comment that one of those species that we identified was incorrect?

SPEAKER: No, actually it's listed in their PAD as a federally threatened species.

MR. HOGAN: Give us the background.

SPEAKER: For -- well, last night, the question in the preliminary issues; for example, the dwarf wedgemussel and the jessup's milk vetch which John has mentioned before, and the puritan tiger beetle, which was for Bellows Falls last night but not for Wilder.

I think the clarification I'm going to make and an estimate, too is that they had it listed in the PAD as a federally threatened species, but they also have a little qualifier that it's likely extirpating because it hasn't been found since 1932.

MR. HOGAN: John?

MR. WARNER: Maybe I can clarify. On the first bullet, the list is incomplete in one way.

So the dwarf wedgemussel is correct, that these three projects, the way this is characterized, and jessup's milk vetch is correct. What's missing is Northeastern bullrush, which should be in this, in the project area, for TransCanada's projects. And maybe that's part of their vegetation surveys.

MR. RAGONESE: Do what.

MR. WARNER: Have already looked at that?

MR. RAGONESE: Already RT&E. geology and soils

MR. WARNER: And then puritan tiger beetle does not occur in these project areas; however, it's appropriate that this review of these licenses continue to look at that. Puritan tiger beetles currently occur only in the Rainbow Beach area in Northampton below First Light's Turners Falls projects, and downstream in Connecticut, but their existence is predicated on water level, water levels above Holyoke. Water levels above Holyoke are dictated by Turners Falls discharges, as all these projects are interconnected. The review of these licenses don't have direct effect, but if flow changes can't be implemented, or operation changes cannot be implemented that help puritan tiger beetles below Turners Falls due to upstream operations, then they are affected. So it probably should be in there, but it's not a direct impact.

MR. HOGAN: So a cumulative effect on puritan tiger beetle.

MR. WARNER: Right, it will be more of a cumulative issue.

MR. HOGAN: Okay.

MR. WARNER: And otherwise, the list is fine.

MR. HOGAN: That's exactly the clarification I was looking for. Thank you, John.

SPEAKER: I just want to understand what he said. So the bullrush is within these three upper projects, you're saying?

MR. WARNER: Last we know. We don't have good survey data on bullrush, so.

Maybe we have a better survey from what they have.

SPEAKER: Which would have been in -- and we don't need to ask the question, then.

MR. RAGONESE: Yes. Honestly, I can't paraphrase the study, but it was clearly looked at.

MR. WARNER: And found?

MR. RAGONESE: I believe so. I'm not sure which project.

MR. HOGAN: Other thoughts regarding threatened and endangered species?

Okay, we'll move on to recreation, land use and aesthetics.

Recreation, Land Use and Aesthetics

@ MR. BEECO: So with Recreation, as opposed to last night, we're going to cover recreation, land use and aesthetics all together. So I'll just read off the bullet points. Starting with recreation:

The adequacy of existing recreation and public use facilities in meeting existing and future regional

public use and river access needs.

Effects of project operations on quality and availability of flow-dependent and water level-dependent recreation opportunities, including boating.

The adequacy of structural integrity, physical capacity, and/or management methods to support recreation use at existing facilities.

And under Land Use, the adequacy of existing shoreline management policies and programs to control non-project use of project lands.

Adequacy of shoreline buffers to achieve project purposes and compliance with local and state requirements.

And under Aesthetic Resources, at this time we have not identified any aesthetic resource issues.

MR. HOGAN: Do folks have any concerns associated with recreation access, facilities at the project.

MR. GAST-BRAY: Andy Gast-Bray, City of Lebanon.

We are interested in -- I don't have this neatly tied up into a direct study. We have a number of resources, we've talked about them already, as a potential resource for access to the river. There are few access points to the river in a meaningful recreational, aesthetic or public access sort of sense. We are looking at our facilities as becoming a part of that, but we are also cognizant of a coordination between many of such things all along the river

front. This is an opportunity, it's something that has not been done well in the past, coordinating say river access at strategic points all along the areas where you might want vegetated or pristine areas, and the points where you want more recreational public access.

So a coordination of that all along the river front including the City of Lebanon's potential resources, we would be an ally, a proponent of doing a good job with that, and would seem to maybe use resources that we currently have in a better, smarter manner for gaining access to the river and benefiting from the river.

In particular, the Westboro Yard that we had talked about, right now is a tremendous detriment but could be turned into a real asset for river management, river access.

MR. HOGAN: Did I hear there are plans to turn that into some type of park facility?

MR. GAST-BRAY: Yes, although again, we only own part of it at this time, and the state, via the former rail past, they own a large portion of it but have been in negotiations and talks with us on trying to fix all of that, so.

MR. BEECO: Is that particular railway linked to any of the Rails-to-Trails conversions that have happened in the area?

MR. GAST-BRAY: It is a part of the projected Rails-to-Trails work that's being proposed, although it does not currently have any official access formalized in its complete form, in their informal methods; and we are talking about including perhaps access across the river to Vermont going through this channel.

MR. HOGAN: Other?

MR. GRIES: Gabe Gries, New Hampshire Fish & Game.

John, there's reference to, for Bellows Falls, to one car top boat launch?

MR. RAGONESE: Is it --

(Laughter)

MR. HOGAN: Is that the one downstream?

MR. RAGONESE: Car top boat launch in Bellows Falls?

MR. GRIES: Yes.

MR. RAGONESE: I think it's below Bellows.

MR. GRIES: So that's just on the sand bar on the New Hampshire side, essentially?

MR. RAGONESE: Correct, it's on the New Hampshire side.

MR. GRIES: And then it talks about two boat ramps.

MR. RAGONESE: Yes.

MR. GRIES: That should be three, right? For Harrick's Pine Street and then River Road in Charlestown?

MR. RAGONESE: Yes, I don't -- I mean, there are three. There is one in Harrick's Cove, there is one in Walpole and one -- I'm not sure.

MR. GRIES: Are there any plans for the maintenance, upgrading to any of those as part of a relicensing?

MR. RAGONESE: There will be a recreation plan as part of relicense. Upgrading is likely to be a strong option.

MR. HOGAN: Tell me where you are; you're in our scoping document?

MR. GRIES: I was just looking on page 16.

MR. HOGAN: Well, 16, we needed a correction for. That's what I'm trying to get at.

MR. GRIES: Right. It just sounds like three boat ramps instead of two.

MR. RAGONESE: That was from the scoping document?

MR. GRIES: Yes.

MR. RAGONESE: The PAD's out there. There are three, though, however. We didn't close one between the PAD and the scoping document.

(Laughter)

MR. GRIES: Can I just make sure that, when I was talking about that river-coordinated thing, boat access was one of those points, because obviously you can't do that -- it's important that be coordinated along the river bank.

MR. HOGAN: When you specified boating; motorboats, kayaks, canoes or all of the above?

MR. GRIES: Well, as far as I'm concerned, that I'm aware of the only ones that we have been talking as a city about are car top.

MR. HOGAN: Car top.

MR. BEECO: So I can get some clarification; so these are the current license requirements for Bellows Falls that you were reading off of?

MR. GRIES: Correct.

MR. HOGAN: So what you're saying is the one car top boat launch is actually launching below Bellows Falls rather than into the reservoir; is that what you were saying?

MR. RAGONESE: It's on project land, but it is below. Again, this is your document, so I'm not sure what you read out of our document, but --

MR. HOGAN: Yes. I think it's the facility that we visited when we went downstream and looked at --

MR. RAGONESE: I think it is, too.

MR. HOGAN: -- and I believe it's a New

Hampshire Fish & Game ramp --

MR. RAGONESE: Correct.

MR. HOGAN: It's not a --

MR. BEECO: Oh, okay, that's --

MR. RAGONESE: It's on project land.

MR. BEECO: -- so that's quite a bit further below --

MR. HOGAN: Yes, it's a few miles downstream.

SPEAKER: It's at the Westminster Station bridge.

MR. HOGAN: Go through a field to get through it.

SPEAKER: There's also the original bridge site.

MR. HOGAN: Sorry, we're confusing the court reporter; and I apologize.

Where do you need to get caught up to?

THE REPORTER: Well, we had two separate conversations going --

(Laughter)

I can only do one.

MR. HOGAN: So we'll back up a little bit. The car top access that was discussed in the scoping document by FERC staff I'm pretty sure is referring to a small boat launch downstream from Bellows Falls in the riverine reach --

MR. RAGONESE: Out of project.

MR. HOGAN: -- out of project; between Vernon and

Bellows. I believe it's a New Hampshire Fish & Game facility; I don't know what road we access it off of.

MR. RAGONESE: But it is, as I think -- the one we stopped at was at Westminster Bridge. We did also stop and look at one right below Bellows Falls Dam, again on the New Hampshire bank. That is also a car top access point to the river reach, and that is on project land.

So you may have seen something on the site visit that we correlated to a statement in the PAD on a car top, but they may have been two different locations. That's my suspect.

MR. HOGAN: In any case, it's identified that we need to clarify, in Scoping Document 2, the rec facilities, and we will do that.

David, you had another conversation that was going on?

MR. DEEN: Well, I was just talking with John because there is the first bridge across the Connecticut River historic site,which is the one immediately below the dam on the New Hampshire shore.

MR. HOGAN: Which dam?

MR. DEEN: And then there's the Fish & Game site further down on the shore.

One of the things I wanted to bring up is primitive river camping sites are not readily available

below Wilder. Portage can be for non-motorized, through travelers could be improved at both sites. And once you get away from the dams, there is little access for non-motorized boating. It's 26 miles above Bellows, 45 miles above Wilder; that's a lot of river that people don't have access to.

And I'll mention this one other thing and then tie them both together, that there's no real non water-based recreational opportunities; hiking, biking, bird watching, et cetera. There aren't trails. And tying together the primitive camping, non motorized boating access and non water-based recreational opportunities the company could consider, where necessary, buying land and access in order to provide those recreational opportunities. And in addition working with the state and other local jurisdictions to improve those recreational opportunities.

MR. HOGAN: Yes, sir.

MR. NASDOR: Yes. Robert Nasdor, American Whitewater.

We represent the interest, the recreational interests of whitewater boaters through the United States; and in particular we have at least a thousand members within easy reach of these hydroelectric dams on the Connecticut River.

This is an important resource for quality of life

in New England and particularly the economy of New England. I certainly want to mention and credit TransCanada for the agreements that it reached on the Deerfield River and the important impact that that had on recreational boaters there as well as the economy in the Charlemont area. And we think it's possible that similar things could be done here at Bellows Falls.

With that said, we have a lot of concerns about the, having read the PAD, about its lack of any discussion whatsoever of whitewater boating opportunities at Bellows Falls. In particular, we're interested in this .7 mile bypass reach that's mostly dewatered, except in certain high water events.

The operation of this hydroelectric dam has eliminated all opportunities for recreational boating in this area, and we believe that the dam operator has an obligation to provide for meaningful opportunities for boating there; and if it's not possible, to look for appropriate compensation to mitigate the loss of those resources.

Now talking about Bellows Falls in particular, this is an extremely important area. We believe there's a potential to create a whitewater park in this area; and a whitewater park is a short stretch of river with intense rapids that people can run over and over again and perform

freestyle maneuvers; spinning, surfing, aerial tricks, and it can be really a cornerstone, an economy of a local town, as people come to that area both to participate in those activities and to watch and enjoy them.

We intend to follow up these remarks with formal comments and study requests. In particular, we're looking for a controlled flow study where TransCanada would release at different levels using standard protocols so it could be determined what is the appropriate level for recreational boating in that section. We also need to look at the safety issues, what are the obstacles that currently exist in this area, and how would they have to be managed.

We want a study done of access to the river. If we do get these studies, how can people safely get to those reaches of the river? And finally, to look at what the impact is of this activity on the economy, this economic valuation study that was talked about last night in the Wilder Dam. We believe the same should be done here.

So we are excited about the opportunity to participate in this process here, and are hopeful that this issue can be addressed. Thank you.

MR. HOGAN: Thank you.

MR. BEECO: I have a question. Do you know the feet per mile on that bypass reach? The dry section?

MR. NASDOR: At the drop?

SPEAKER: What was the question?

MR. BEECO: Feet per mile.

SPEAKER: What's the slope?

SPEAKER: We don't know the feet per mile.

MR. CHRISTOPHER: But I can tell you that an appropriate drop would be four feet per thousand feet, which would be adequate for a whitewater park. In this particular case you have .7 of a mile and even just a casual review of a photograph indicates that there would be enough drop to handle that.

My name is Tom Christopher, I am with American Whitewater and also New England FLOW. There's just a couple of comments I'd like to add to Bob. First of all, FERC has advocated and used the whitewater parks as mitigation in some other relicensings, and I would ask you to look at the whitewater park agreement that recently was constructed on the Lower Chattahoochie down in Alabama and Georgia, several parks; and throughout the United States, the creation of whitewater parks
has added a significant amount of revenue to the communities that have hosted these parks.

The other thing that I would ask you to look at: Bob spoke a little bit about access. It is, at the present time there is no access into that reach and there's no access out of that reach. There is a low head weir there

that probably should be removed, because even under moderate or low flows, through leakage, that does provide something that is extremely dangerous.

And if a park were to be created, we would expect something like that to be resolved. At the present time, there is such little flow in there during normal leakage events, that I can't imagine why they wouldn't remove it.

And the other point that I wanted to make relative to the construction of whitewater parks, there have been several parks that have been constructed whereby there were also different types of structures that were put into the parks that were there primarily for fish. Essentially I think that there's no reason why fish can't find suitable habitat within

these whitewater parks, and I don't know if there is any viable fish habitat in this particular region at this time, perhaps --

MR. RAGONESE: Request a study.

(Laughter) (Simultaneous discussion)

SPEAKER: No water, no fish.

MR. CHRISTOPHER: Because you know we won't have any conflicts with you, with John Warner sitting over there, who is kind of laughing at me now.

But anyway, whitewater parks are compatible with fish, and there's no reason that this could not be designed

such that both services could be provided to those separate interests.

MR. HOGAN: I have a question for you, Tom. You mentioned a low head weir. Are you referring to the fish barrier dam at the base of that reach?

MR. CHRISTOPHER: I believe they called it 'the salmon stopper.' And since we no longer have salmon as a priority, I think perhaps some consideration should be given for that removal. But again, the access and whitewater park, this is an ideal opportunity for the Town of Bellows Falls to really capitalize on a significant add-on.

Thank you.

MR. HOGAN: Thank you.

MS. CORMEN: Nicole Cormen, Lebanon City Council.

I heartily endorse that idea for Bellows Falls, I think it's a great idea. I wanted to piggyback onto what Mr. Gast-Bray, our City Planning Director said earlier, and also Mr. Deen.

Looking holistically at the recreation picture up and down both sides of the river, in the reach that we're discussing today, I hope that there is a study of the existing as well as the proposed, because some of the existing facilities, in my opinion -- I've used probably all of them at one time or another -- many of them suffer from erosion, many of them are heavily, heavily used, possibly

because as the river's gotten cleaner and population changes, an excitement about using the river all have to be increased.

I'm just going to give you one example, but I think it could speak for any of the facilities that are in existence under the current legacy arrangement. The Wilder Dam picnic area has a hard pack parking lot that is heavily, heavily, heavily eroded. It runs sediment into and across Route 10, into the drainage pond next to Route 10, actually quite trashing; and otherwise, a wetland that has cattails in it.

So I'd like to see some kind of study of, or at least to look at which facilities are being used. I think they are all being heavily used. How could these parking areas be redesigned? We know so much more about storm water management on site, designs where maybe we could have previous pavement or something that works with the grades in question, and with the types of access in question, to keep -- people able to access the river but also keep the river healthy.

So that's something I really could see on both sides of the river, and partnering with state agencies operating some of these; some of them are municipal, and we have one in Lebanon that's been as fully operated. I'd love to see that all be coordinated and just spiffed up for what

we know now about storm water management.

MR. HOGAN: So a quick summary; you'd be interested in a study that evaluates facility use and condition and potential environmental concerns?

MS. CORMEN: Yes, upgrades really that address both environmental and recreational needs, because it's pretty clear now that there are ways to do both. And I think that as we go forward, we should be doing that.

MR. RAGONESE: Both existing and proposed.

MS. CORMEN: Existing and proposed, yes.

MR. HOGAN: When you say existing and proposed, what do you mean by proposed?

MR. RAGONESE: The Westboro area, for instance, and other areas.

MR. HOGAN: Okay, not TransCanada's proposed, because I didn't think they had any.

MR. RAGONESE: No, there are a number of sites along the river that have been proposed for different activities.

MS. CORMEN: The portage at Sumner Falls is another one. That could be really good.

MR. RAGONESE: I don't have the complete list in my head.

MR. CHRISTOPHER: Yes, that's what I meant -- my comment about portages. It's the dams and things like

Sumner Falls.

MS. CORMEN: And actually if I may just follow up; the portage at Wilder is really tough for a lot of people. It's really high steps go down; a lot of people do travel the entire river now. And carrying loaded canoes down those steps, which I have done is really, you know, it's pretty tough. Thanks.

MR. SIMS: I'm Normal Sims from the Appalachian Mountain Club, which is headquartered in Boston and has been there since 1876. It's currently the largest recreation and conservation organization; we have about 90,000 members.

Our interest in the Connecticut River relicensings is mainly in the areas of conservation and recreation. I'd like to add just a couple comments to what's already been said.

The dewatered bypass reach at Bellows Falls, as has been mentioned, is a prime paddling opportunity. And beyond that it might become something that could be the heart of a community development in Bellows Falls, because it would generate a lot of economic activity, a lot of tourism activity.

I also endorse removing that low head weir at the bottom of the dam, which seems to serve no function at the moment.

One of the problems with dams is the need head,

and as a result they tend to be constructed on top of anything named 'falls.' Olcott Falls is where Wilder is located, Bellows Falls is where that dam is located, Turners Falls has a dam. And this eliminates whitewater opportunities. We think the dams are going to remain, except perhaps that low head weir; and what I would like to add to the idea of offsite mitigation that Bob and Tom both mentioned, is that there's now a National Blueway system and the Connecticut River has been proclaimed the first, the Connecticut River and Watershed has become the first National Blueway river.

I think that opens the opportunity for offsite mitigation and these Connecticut River dams. The National Park Service and U.S. Army Corps of Engineers are both involved in the National Blueway system. And we should look into the opportunities that are provided by that system.

In a broader sense, the Norman Sims, the Appalachian Mountain Club has an interest in multiple-day canoe trips and kayak trips on the river. I'm sorry, I'm repeating a little bit of what I said last night about the Wilder Dam, but it also applies to Bellows Falls and in perhaps a more important way.

We think that the existing portage routes, basically all of the portage routes at these dams are inadequate. the Bellows Falls portage is one and a half

miles long, and for much of that distance, it follows the breakdown lane for a high speed state highway. Paddlers are one gust of the wind away from a catastrophic event, if they portage that route.

The put in at the bottom is four, at best.

In general, and allow me to read this: We have an interest in the study and we will be proposing a study of the quantity, quality and adequacy of the land-based facilities associated with boating on the Bellows Falls region of the Connecticut River. This study should examine put in and take out facilities, especially for canoeing and kayaking, portage routes, campsites, parking, road access, seasons of operation, maintenance and sanitary facilities.

The Connecticut River Paddlers Trail exists in this area; they have already done a study of the primitive campsites in the area and found them to be not in great shape. I also think that the study should involve a 30-year projection of use. As you said, there are more and more people trying to do multiple day trips on the river; it's very difficult because of the dams, the lack of campsites, the portages; a number of issues.

I think also that put-ins, while there are a number that have boating ramps, these are designed for motorboats, and they're not particularly useful for canoes. So if you have a non-trailered boat, the access sites need

to provide some safer and more convenient use for you. Especially if you're padding something like a wooden canvas canoe that doesn't merge well with concrete.

The land has been mentioned; I think that should be studied in terms of the opportunity for the power company to put more effort into the conservation easement or into a parklike situation.

I mentioned last night the historical study and the educational benefits, and I won't repeat that today.

In terms of the economic study or a contingent valuation that would compare recreational uses of the water, say in the bypass reach with the power generation from that water. We think that a contingent valuation study should be done of those opportunities so that they can be compared; and also that should be done in terms of multiple day canoeing and kayaking.

And then lastly, as I mentioned last night, we have an interest in there being an escrowed decommissioning fund created by the power company to ensure that the public is not responsible for removing these facilities, in case we get a thousand year flood every three years and the facilities actually do fail, and the facilities maybe transferred to another owner that is not as stable as TransCanada. It could happen, as they say. Thank you.

MR. HOGAN: Other recreation. David?

MR. DEEN: When we were on our site visit, the captain of our vessel ran aground on a mid-river rock. How about some channel markers for obstructions?

MR. HOGAN: Other recreation-related comments? Okay.

MR. BEECO: Or land use or aesthetics.

MR. HOGAN: For land use we had an issue raised with agricultural land. Can you elaborate on that?

MR. THAXTON: These significant prime agricultural soils, other agricultural soils that TransCanada I understand, has been leasing to farmers; and we want to make sure that that is able to continue. Also could explore the possibility of conservation easement to ensure that they could remain open in the future. My understanding of these flowage prices, there's no permanent protection for the agricultural resources there or any of those natural resources.

And just to mention that back in 2006 the Upper Valley Land Trust, through a grant from the Connecticut River Joint Commissions did a study on conservation options for protecting agricultural land in Rockingham and Charlestown; and so this report is available if anyone's interested, it was given --

MR. RAGONESE: Can you just repeat that report name again?

MR. THAXTON: We call it the Riparian Meadows Preservation Feasibility Study, and this was I think given to Ken Alton at the time, so it may exist somewhere; but it's very limited printings so probably you would not have a copy of this. But if anyone was interested, we could share that.

And it just provides an overview of the agricultural use of these, about a thousand acres and offer some options for protecting it with a conservation easement.

MR. HOGAN: Would it be possible to get a copy of that report filed into the Commission's record, or do you have that one?

MR. THAXTON: I could give this to you today, or we have PDF --

MR. HOGAN: PDF would be great.

MR. THAXTON: Okay, sure.

MR. HOGAN: You get to keep your limited print edition.

And just file it with the Commission's Secretary under eFiling.

Other land use concerns?

MS. CORMEN: It's kind of an overall question, if I may. Nicole Cormen, Lebanon City Council.

Do you folks look at, for example the Silvio Conti, their plans for the -- do you look a existing plans

for, like the Connecticut River Joint Commission's Carter Management Plan. All these things, because I think that many of the things I've heard mentioned today are recommendations for example in the Connecticut River Carter Management Plan.

Is that something that you folks have looked at, or? Or will be looking at?

MR. HOGAN: We have a list of comprehensive plans that, if that plan was part of the FERC-approved comprehensive plan, it is something that we do take into consideration and look at. I don't have the list in my head, so I --

MS. CORMEN: Sure.

MR. HOGAN: -- so I don't know what all --.

MS. CORMEN: I guess where would one see the list of what you -- it's in the back here. So -- thanks.

MR. HOGAN: I think it's in the back here.

MR. RAGONESE: It's also on our website.

MR. HOGAN: Yes, and it is our website, too.

The FERC group comprehensive plans, they have to meet a certain criteria. You know, any plan can get filed with FERC and have it sought to be identified as a FERC comprehensive plan.

And it is in there.

MS. CORMEN: It is in there, yes. Thanks.

MR. SIMS: Norman Sims again. Could I ask John Ragonese for a little clarification on what was included in the recreation plan? Said to be a part of the application.

MR. RAGONESE: I don't have the scope of what the recreation plan included, so I can't really give you an answer that may meet your needs, but we would be doing a recreation plan as part of our Exhibit E in our application.

We're going to look at opportunities for providing adequate public recreation.

I really -- I'm here to listen, not so much to prepare and propose and agree to mitigation enhancements.

(Laughter)

MR. RAGONESE: Really, I'm not --

(Laughter)

MR. HOGAN: Just for clarification, though, John, your recreation plan, it's your intent to have that as part of your license application.

MR. RAGONESE: We intend, at this stage of the game, to file a draft EA as our Exhibit E.

MR. HOGAN: So no recreation plan?

MR. RAGONESE: It would be part of it.

MR. HOGAN: It would be included.

So that would be available for public comment and review, so if something wasn't included that was thought to be necessary it will be an opportunity to comment on it.

MR. SIMS: In the Fifteen Mile Falls, prior to the actual development of the plan you had a public engagement process. Would you plan to do that on this plan as well?

MR. RAGONESE: Only if somebody requests us to do it.

(Laughter)

MR. RAGONESE: I anticipate that we will be doing a lot of recreational use, adequacy, opportunity analysis, probably regardless of whether or not it gets specifically questioned, so that we can develop an adequate plan. There will be opportunities for public input in a lot of our analyses.

SPEAKER: Yes, because it worked well at Fifteen Mile Falls.

MR. HOGAN: Okay. Other land use issues associated with either Bellows or Wilder Falls? Bellows Falls or Wilder?

Okay. We didn't identify any aesthetic resource concerns; is that an error on our part that should be corrected?

SPEAKER: Keep it beautiful.

MR. HOGAN: So it's already beautiful and don't harm it. Okay. Got it.

Brian.

MR. FITZGERALD: Brian Fitzgerald from ANR.

Ken, would that include aesthetics of flow?

MR. HOGAN: Sure.

MR. FITZGERALD: Okay. We will be commenting on that.

(Laughter)

MR. HOGAN: Okay.

MR. SIMS: Ken, Norman Sims again. Just as a comment, I find a dewatered bypass reach that was the natural route out of Connecticut to be ugly.

MR. HOGAN: Okay. Any other comments regarding aesthetics?

No? Okay.

Socioeconomic Resources

MR. HOGAN: Socioeconomic resources, what we've heard so far have been tied to recreation concerns. If you provide this, it will have these various economic benefits. Is there another scope of socioeconomics that we should be looking at as well, or is it strictly, socio with recreation? Any issues with socioeconomics?

MR. THAXTON: I hadn't really thought through it, but agricultural use definitely provides economic benefits, so that would be along with land use; but there is the economic benefit of continued agricultural use of project land, land associated with the project.

MR. HOGAN: Just to clarify, you're specifically talking about the applicant's making available lands in their flowage rights for agricultural purposes?

MR. THAXTON: Yes, right.

MR. HOGAN: Nicole.

MS. CORMEN: A suggestion. Nicole Cormen, Lebanon City Council.

The existing interpretive signage, such as it still remains from the previous licensing is a great example of something that we can do more of and better; so I would ask that as the dam, the recreational facilities, any other associated facilities, access ways -- wherever the public is interfacing with your facilities, interpretive signage is something that we all love and learn from; whether it's describing the operation of the dam or of the flowage or what the watershed looks like, or you know, where Lake Hitchcock was -- whatever. I think that that type of opportunity to educate and engage the public is really important.

We've seen examples of that at Adams State Falls, for example, in Manchester. It's just any way that we can I think further engage people with their river is a welcome addition.

MR. HOGAN: David.

MR. DEEN: David Deen, Watershed Council.

Environmental programs, in terms of education about the river, about the history of the river, about the ecology of the river, about the uses of the river, and I harken back to it is also an American Heritage river. And a lot of that background analysis has been done, but it's never actually been brought to the public.

The Connecticut River is a designated byway, and I think that recreational, educational and environmental programming activities should be coordinated with the byway; there are centers all the way up the river, both sides of the river, that they probably ought to be actively participating with. And just something that I know from a place that I go when I vacation, we should have a birding trail along the Connecticut River. And there is a mapping effort to designate that, but that is something that the project ought to be actively supporting.

And I do know, even though my comments earlier were that there's little in the way of river, primitive camping available below Wilder, I do know that the applicant has been participating with the Vermont River Conservancy in order to extend that paddler's trail, and they should continue doing that.

MR. HOGAN: Question for you, David: A birding trail. Is that different than a hiking trail, or could it be multi-use?

MR. DEEN: Well, a birding trail would extend from Canada say down to the mid-Massachusetts area where there are hot spots designated like Harrick's Cove, which is one of the recreation facilities that the applicant maintains right now, is an area of -- an important bird area designated by Audubon. And those areas that are known should be mapped and offered to people who visit our valley, because it is an activity that has economic spin-off, having those people in the valley.

MR. HOGAN: Kevin?

MR. MENDIK: Kevin Mendik, National Park Service.

I guess in order to develop a complete picture of recreational use, user needs and goals, TransCanada needs to identify the user groups, both in the federal, state and regional level through their mailing and membership lists, website info.

And also they need to identify user preferences. One of the limitations of an onsite survey, what's typically done in the formation, doesn't capture people who do not use certain facilities, which may be due to overcrowding, lack of desired facilities, or the conditions at the existing facilities.

So there's a lot of groups in here and others in the area which have a considerable amount of information and access to various users; and that information needs to be

pulled in as well.

MR. HOGAN: Is the Park Service planning to have -- a study request?

MR. MENDIK: Yes, we'll be filing.

MR. HOGAN: Other comments on recreational land use, aesthetics, or educational opportunities?

MR. CHRISTOPHER: Ken. Tom Christopher.

I don't often get philosophical about FERC proceedings. However, it is rather serendipitous that the relicensing of these facilities is occurring at the same time we have the first National Heritage River and the first National Blueway coming together collectively. It's an opportunity to do some really, really good things between user groups and state agencies, federal agencies, and the licensee.

And I don't think a group people like this gets together very often to do a good thing. This is an opportunity to do a good thing. Yes, some of it is very optimistic, some of it is going to be very hard to accomplish, but a lot of good can come out of a concerted effort if everybody cooperates.

I'd like to see that happen. That's my statement.

MR. HOGAN: Sounds like a pitch for a settlement agreement.

(Laughter)

MR. HOGAN: Cultural Resources.

Cultural Resources

MR. QUIGGLE: Rob Quiggle with FERC.

Section 4.2.10 of the scoping document describes issues we've identified related to cultural resources, and those are primarily project effects on archaeological and historic resources, including properties of traditional, religious or cultural significance, listed in or eligible for inclusion in the National Register of Historic Places.

MR. HOGAN: John?

MR. RAGONESE: Yes, just a couple things.

We identify in the PAD that our intent is to continue working with the State Historic Preservation Offices; develop programmatic agreements on dealing with effects and cultural resources. Primarily one of the outcomes of that programmatic agreement would be to develop a cultural resources management plan.

We've already conducted Phase 1A surveys of Bellows and Wilder's impoundments, and downstream -- well, no, those are actually just -- I think within the project boundaries. Those reports have not been finalized yet to go to the State Historic Preservation Offices, but it will. Oftentimes there's some follow up in some of those sites that may require for a Phase 1B, and potentially recovery

efforts in certain locations; those have not been identified and those are things we work out with the SHPOs at this time.

We also -- I don't think I mentioned this last night, but we've done a comprehensive system-wide facilities assessment for historic properties throughout all of our projects; and that includes Wilder and Bellows, so we have you know large scale photography, large format black and white photograph that serves as a historic record of all of our facilities, and whatever the forms are the National Park Service requires for archaeological resource assessment documentation. So that's all been done for our project; has been done for many years. That's it.

MR. HOGAN: Anybody have concerns with project effects on cultural or historic properties?

SPEAKER: Can I just ask a question?

MR. HOGAN: Yes.

SPEAKER: Are the Bellows Falls petroglyphs National Register, on the National Register?

SPEAKER: I just looked at the PAD; I don't know off the top of my head if they are. I believe they were determined eligible, but I don't know for sure.

MR. RAGONESE: I think they're eligible.

Basically it means the same thing to me.

There's an historic district in Bellows Falls;

I'm not sure that it's been for petroglyphs. I think it's more for the--

SPEAKER: -- might extend to the mill.

MR. RAGONESE: There's an old mill complex.

MR. HOGAN: Other cultural resource concerns? No? Okay.

Developmental Resources

@ MR. HOGAN: So under Developmental Resources, this is where FERC will take a look at any proposed mitigation enhancements, changes in flow modifications and the effect on the value of the project and the power generation; basically what we do internally and how we do our balancing. If there's any questions associated with that, I didn't bring an engineer with me; I'm sorry.

But typically it's just all internally, and it's not so much a resource issue that's part of scoping; but if anybody has any comments on that, I'd be happy to hear them.

Okay.

MR. RAGONESE: Ken, I just want to also mention, this is where we think the river model that we would be using to evaluate opportunities, this is where we're going to be coming up with what we feel is our position on the --

MR. HOGAN: Right. And then typically we would heavily use any operations model to help us evaluate, if we're looking at a change in flow regime, how does that

affect project economics?

MR. RAGONESE: Flow regime, reservoir operations.

MR. HOGAN: Yes.

At the beginning of the meeting there were a handful of folks who had prepared statements that they wanted to read into the record. Is that still the case?

Anybody? Everybody feels like they got their comments out already?

Okay. I'd like to make everybody aware of March 1st is the deadline for comments and study requests, so comments on the PAD study requests, comments on the Commission Scoping Document 1.

John's giving me cues.

We have, study requests have to meet the Commission's study criteria. For convenience, I appended them to this handout that I had up front. It's our Integrated Licensing Process. I included the licensing schedule, the process plan for all the Connecticut River projects just for your convenience, and the last page I have the Commission's study criteria; there's seven of them, Criterias 2 and 3 are mutually exclusive depending on whether you're a member of the public or a resource agency, so you actually have six study criteria to address.

I highly suggest that you address the study criteria; it's a litmus test the Commission uses to evaluate

whether a study is appropriate or not. I can't stress that enough. So if you're serious about supplying study requests, please address the criteria.

We do have a new guidance document that we produced in March of last year; it's a Guide to Understanding the Study Criteria. It's got examples -- tells us what our expectations are for each criteria and then it has examples of study requests and how to write or address each criteria. I think this is a pretty useful tool. So something that's available, like I said new to folks now; we've had the ILP now for about eight or nine years. This is new, so take advantage of it. It's your cheat sheet.

Does anybody have any questions about the licensing process. I asked the room early about, how familiar are you? But I'm going to give you an opportunity now to ask it. I didn't want everybody to have to sit down and do my entire spiel, try to expedite it for John, particularly.

John just happens to be the most vocal about it.

Any question about the FERC process? Nicole.

MS. CORMEN: Yes. Forgive my newness to this process. So in the process plan, over here it says stakeholders; when reports, other documents, draft plans are released, are stakeholders automatically -- are they

noticed? Are the stakeholders that are in the document, are they automatically notified? We may be keeping an eye on that calendar ourselves, and how does that?

MR. HOGAN: That's a good question.

If it's an issuance by the Commission, it will typically go to that list in the back of the scoping document.

If it's filed by any other entity, it's unlikely you're going to get notified. however, in our brochure here, on page 12 I think it is, there's a guide to how to get -- page 12 and 13, how to get information from FERC -- because we like to hold onto it very tightly -- there are electronic services that we provide; one is eLibrary, where you can search eLibrary on a regular basis and see everything that's been filed with or issued by the Commission, and actually download the documents.

We also have a service called eSubscription, where if you eSubscribe you put in your e-mail address, you identify the projects that you're interested in. Anytime the Commission makes an issuance or an entity files a document with the Commission, you will receive an e-mail, and in that e-mail we'll have a link embedded in it that will take you straight to the document so you can read the document. And that's in our eLibrary system.

So yes, take a look at page 12, and it will give

you the information on how to utilize those systems, and exploit them.

MS. CORMEN: Thank you.

SPEAKER: Could I ask John Ragonese to repeat one more time the location on your website that studies that you referred to earlier will be posted. You talked about several studies, reports; and I got the TransCanada part, but I --

MR. RAGONESE: It's just TransCanada-Relicensing.

SPEAKER: TransCanada dash Relicensing.

MR. RAGONESE: Dot com.

SPEAKER: Dot com. Okay, Thank you.

MR. RAGONESE: And then there's a --

SPEAKER: Anybody else need that?

MR. RAGONESE: And then on the site there are some tabs -- an overview tab, and then under the overview tab there are documents, and then there's a public information library. And they will probably reside in the public information library.

SPEAKER: And some of that is still to come, is that correct?

MR. RAGONESE: Yes.

SPEAKER: Okay. Dash Relicensing.

MR. HOGAN: So the steps to come are on March 1st, comments and study requests are due, and the Commission

will be issuing its comments and study requests. Following comments and study requests, TransCanada will provide a proposed study plan; and then there's an opportunity for discussion of that proposed study plan. Within that 90 day period there is at least one required meeting to discuss concerns with the proposed study plan. And then at the end of that 90-day period, TransCanada will produce its revised study plan, which is then available for comment; and following that the Commission will provide a study plan determination based on the requested studies, ongoing disputes to determine what studies are appropriate for the relicensing of the TransCanada facilities. In a nutshell.

SPEAKER: It's easier said than done.

SPEAKER: Is there going to be a single study plan for the three projects, or three study plans?

MR. HOGAN: How TransCanada structures it, I don't know. FERC's intent is to do a single study plan determination for TransCanada and a single study plan determination for First Light.

I don't know how -- did you want to answer the question out loud, John?

(Laughter)

MR. RAGONESE: It depends a little bit on what we get.

MR. HOGAN: And what the study is.

MR. RAGONESE: I have a pretty good feel for what we'll get.

(Laughter)

MR. HOGAN: Okay.

SPEAKER: Regarding study requests, we have to file them project by project, so.

MR. HOGAN: Well, if it's a single study request that's going to apply for all projects; just make sure you put all three project numbers, and you clearly identify that this study request applies to Wilder, Bellows and Vernon.

SPEAKER: But for example, the whitewater park at Bellows Falls will only apply to that project.

MR. HOGAN: Right. Right.

SPEAKER: Thanks.

MR. HOGAN: You don't need to file three duplicates; if you say that it's the river from here to here, that's --.

Any other questions regarding the FERC process?

No. All right.

MR. RAGONESE: The other thing is, it didn't get mentioned last night,l but what's the disposition of the transcript from the meeting?

MR. HOGAN: The transcripts will be available, I believe it's ten days from -- well, five. [To court reporter] I think our contract says ten, so you might give

it to us in five, and we'll release it to the public in ten.

Anytime prior to, between that five days and the ten days they are available for purchase from Ace Reporting -- and he doesn't talk because he doesn't want to have to get recorded.

(Laughter)

But following the ten days, they will be put into eLibrary; anybody who is eSubscribed will get notification of their availability; and they're available to the public at no charge.

Any other questions?

All right. Thank everybody. I really appreciate it; I think this is very helpful for us.

(Whereupon, at 11:47 a.m., the scoping meeting concluded.)

Document Content(s)