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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:

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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

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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

1 LIST OF COMMENTERS

2

3 Terrestrial Resources

4 CHRIS MARTIN, Audubon Society, New Hampshire

5 NICOLE CORMEN, Lebanon City Council

6 KATIE KENNEDY, Nature Conservancy's Connecticut River
7 program

8

9 Threatened and Endangered Species

10 JOHN WARNER, U.S. Fish & Wildlife Service

11 Recreation, Land Use and Aesthetics

12 JOHN WARNER, U.S. Fish & Wildlife Service

13 ANDREW GAST-BRAY, City of Lebanon

14 GABE GRIES, New Hampshire Fish & Game

15 ROBERT NASDOR, American Whitewater

16 TOM CHRISTOPHER, New England FLOW and American Whitewater

17 NICOLE CORMEN, Lebanon City Council

18 NORMAN SIMS, Appalachian Mountain Club

19 BRIAN FITZGERALD, ANR

20 Socioeconomic Resources

21 JAMES THAXTON, Upper Valley Land Trust

22 NICOLE CORMEN, Lebanon City Council

23 DAVID DEEN, Connecticut River Watershed Council

24 KEVIN MENDIK, National Park Service.

25 TOM CHRISTOPHER, New England FLOW and American Whitewater

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1 P R O C E E D I N G S

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

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

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

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

17 Anybody not have a clue what I just said?

18 (Laughter)

19 SPEAKER: It's hard to hear you.

20 MR. HOGAN: Is it hard to hear me?

21 SPEAKER: Yes.

22 MR. HOGAN: Is this better?

23 SPEAKER: Yes.

24 MR. HOGAN: Okay, I apologize.

25 So is everybody familiar with FERC's information
26

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

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

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

22 Sound like a plan?

23 Okay. TransCanada?

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

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

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

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

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

23 All the stations on the Connecticut River are
24 remote controlled; they're all controlled from the Wilder
25 control center, which is located in the Wilder hydro office,
26

1 and that's staffed 24 hours a day.

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

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

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

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

18 Total project discharge capacity is 157,600 cfs,
19 and the total generator discharge is 10,000. And the flood
20 of record was 91,000 cfs, and that was March of 1936. And
21 19.7 flood of record was downstream, so that didn't really
22 affect the project.

23 Major projects that have been completed since
24 1979, the fish ladder was installed in 1987. The third
25 generating unit was installed in 1987 as well; and that's

26

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

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

6 MR. NASON: So for operations, we'll start out
7 with the reservoir. The reservoir has a drainage area of
8 3,375 square miles, and the reservoir is 45 miles long; it
9 goes all the way back to Haverhill, New Hampshire and Barre,
10 Vermont. The usable storage in our five feet of usable
11 range is 13, 350 acre-feet.

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

15 An example of that would be if the inflow is
16 3,000 cfs greater than the discharge for one hour, then the
17 elevation of the reservoir would go up a tenth of a foot.

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

24 Upstream, through the fish ladder, those dates,
25 May 15 to July 15 and September 15 to November 15, but those
26

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

3 The operating range for the Wilder reservoir is
4 five feet operating range from 380 feet above sea level to
5 385 feet. We have a downward draw limit of .3 per hour; we
6 don't draw the pond more than .3 per hour in any one hour.
7 And we have the weekend rec limits that we maintain in the
8 summer on weekends and summer holidays. We just adjust our
9 global pond limit to 382.5.

10 Also because of the long reservoir, we have what
11 we call a high flow reservoir operation, profile operation.
12 Because the elevation of the reservoir at the upstream end
13 is always higher than the downstream end by the dam, and the
14 higher the flows are, the more that elevation difference is,
15 and so during high flows, which is above generation
16 capacity, 10,000 cfs, we start lowering our max elevation.
17 So between 10,000 cfs to 20,000 cfs, the inflow, when it's
18 20,000 then our max elevation is 380, which is the same as
19 our min; so anything 20,000 cfs or greater, we just hold
20 that elevation.

21 So for operating, when we schedule the megawatts
22 for the next day, every morning the operators schedule the
23 megawatts for the next day, their first consideration is
24 always the license compliance, the min_flows and the
25 elevation constraints; and then their second priority would
26

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

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

9 I guess we'll move on now to Bellows.

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

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

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

26

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

5 Major projects that have been completed since the
6 1979 license: The fish ladder was installed and completed
7 in May of 1984. Along with that was the visitor's center.
8 Downstream fish diversion barrier was completed in 1996;
9 that's the device you see in the forebay, just in front of
10 the plant; and the station was also automated, remote
11 control out of Wilder in 1998.

12 MR. NASON: So for the Bellows reservoir, it has
13 a drainage area of 5,414 square miles, and that reservoir is
14 26 miles long, goes all the way up to Cornish, New Hampshire
15 or Windsor, Vermont. The usable storage volume in the three
16 feet of draw that we have at that reservoir is 7,476 acre-
17 feet. And like Wilder, that reservoir has about 3,000 cfs
18 per tenth of elevation.

19 So for constraints, Wilder has an min_flow of
20 1,383 cfs for inflow, that's year round, and that's done
21 through generation, so it doesn't -- it goes down the canal
22 and out the dam; there is no min_flow in the bypass.

23 The downstream fish passage is the same as
24 Wilder; April 1st through June 15th, and in the fall as
25 needed. That's 255 cfs there. The upstream fish ladder,
26

1 May 15th through July 15th and September 15, to November is
2 80 cfs, that's including a traction water. And that's done
3 on an as-needed basis, same as Wilder is

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

9 So because of the long length of the reservoir,
10 not as long as Wilder, we still have high flow profile
11 operation which starts at about 11,000 cfs and goes up to
12 50,000 cfs. So at 50,000 and above, we maintain 289.1 feet
13 above sea level or less.

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

20 I guess that's it unless there are questions.

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

26

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

4 MR. SIMS: Just goes up and up.

5 MR. HOGAN: Name for the record.

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

8 MR. HOGAN: Yes, sir.

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

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

16 MR. RAGONESE: Except leakage.

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

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

22 MR. SIMS: How long is the bypass?

23 MR. BRISSETTE: .7.

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

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1 MR. SIMS: .7 of a mile.

2 CARL SCHMIDT: Carl Schmidt, Upper Valley River
3 Subcommittee.

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

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

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

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

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

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

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

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

25 MS. McCANN: Mary McCann, I've been working on
26

1 endangered species and macroinvertebrates; mussels.

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

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

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

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

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

13 MR. WAMSER: Mark Wamser with Gomez and Sullivan.

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

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

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

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

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

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

23 MR. NASON: Edwin Nason from TransCanada.

24 MR. CAMPANY: Chris Company, Director of Windham
25 Regional Commission and Vice President of Connecticut River
26

1 Joint Commissions.

2 MS. GRIFFIN: Jennifer Griffin, Normandeau
3 Associates.

4 MR. YORK: Doug York, Louis Berger Group.

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

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

8 MR. KULBREKI: Peter Kulbreki, Town of Hanover.

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

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

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

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

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

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

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

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

25 MR. COATS: Paul Coats, City of Lebanon,
26

1 Recreation.

2 MS. HATFIELD: Shelley Hatfield, City of Lebanon.

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

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

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

9 MR. NASDOR: Robert Nasdor, American Whitewater.

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

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

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

16 MR. MENDIK: Kevin Mendik, National Park Service.

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

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

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

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

25 MR. THAXTON: James Thaxton, Upper Valley Land
26

1 Trust.

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

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

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

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

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

17 Geology and Soils

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

19 MR. HOGAN: Would you speak up.

20 MR. NELSON: Sure.

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

26

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

5 SPEAKER: Going right through --

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

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

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

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

25 So with respect to the two projects, Bellows and
26

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

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

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

23 With respect to downstream of Wilder, we
24 conducted a survey and a study on the impacts of discharges
25 from Wilder on jessup's milk vetch. We not only identified
26

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

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

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

19 In terms of plan studies, one of the aspects that
20 was talked about here in terms of structural integrity of
21 the facility and et cetera, we have done a number of dam
22 break analyses, and for Wilder it's designed to the
23 potential maximum flood; could potentially breach Wilder Dam
24 at the very high level -- now, this is a flood in the 200-
25 plus thousand cfs, 280,00, 27 -- it's not something that
26

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

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

7 SPEAKER: Could you give the Bellows Falls?

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

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

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

21 MR. COATS: The City of Lebanon is interested in
22 studying the fluvial geomorphology of the areas up and
23 downstream from the dam. In particular, what are the
24 effects of the dam and what happens to the riverbank as a
25 result of the presence of the dam, especially desiccation of
26

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

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

16 MS. HATFIELD: We own the north end.

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

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

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

26

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

3 MR. COATS: We have not done all the Phase 1 and
4 Phase 2, so I don't think we have a complete list, but we do
5 --

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

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

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

26

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

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

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

11 MS. HATFIELD: I'm Shelley Hatfield.

12 MR. HOGAN: Other -- Yes, sir?

13 MR. KULBREKI: Peter Kulbreki, Town of Hanover.

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

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

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

26

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

6 MR. HOGAN: Other comments on soils and erosion?

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

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

17 MR. HOGAN: David?

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

25 And as we said, I don't know if that will come up
26

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

3 David Deen, Connecticut River Watershed Council.

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

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

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

12 Thank you very much.

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

16 If you'd like to give that to --

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

20 MR. HOGAN: That would be great.

21 Nothing else on erosion or geology and soils?

22 Okay, let's move on to water resources.

23 @ Water Resources - Water Quantity and Quality

24 MS. SCANGAS: Angie Scangas, FERC.

25 So as identified in the scoping document, the

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

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

8 MR. KULBREKI: Pete Kulbreki, Town of Hanover.

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

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

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

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

26

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

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

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

21 We also, just to -- we did propose in the PAD or
22 identified in the PAD, particularly on water quality and the
23 impact of project operations on water quantity, We have a
24 Connecticut River comprehensive optimization model. This
25 model will basically use hourly natural inflows into the
26

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

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

13 MR. HOGAN: It's Pete?

14 MR. KULBREKI: Yes.

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

17 MR. KULBREKI: Correct.

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

20 MR. KULBREKI: There are three things we're
21 concerned about; lower flows change the dilution factor;
22 requires higher level treatment. The other two issues are
23 nitrogen and phosphorus. Nitrogen and phosphorus are found
24 in the environment, but they're also -- phosphorus in
25 particular is released when soils are eroded. It is a
26

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

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

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

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

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

17 MR. KULBREKI: Yes.

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

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

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

24 MR. KULBREKI: That's the one thing with the low
25 flows, the dilution, but the other factor is the erosion
26

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

4 MR. HOGAN: Other water quality concerns?

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

17 I don't know where that belongs in terms of
18 understanding or how the study or a study would need to be
19 done or whether it's just simply a matter of tweaking
20 process -- I don't know, but it has been expressed in city -
21 -

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

26

1 MR. COATS: Yes.

2 MR. HOGAN: And flooding issues.

3 MR. COATS: Yes.

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

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

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

19 MR. HOGAN: So there is no coordination --

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

24 I'm not aware of the Mascoma operating for flood
25 control to any great extent. There's just not a lot of
26

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

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

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

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

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

22 MR. HOGAN: No, I recognize that --

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

25 We've got no capability of Wilder doing anything
26

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

3 MR. HOGAN: Other water quality or water
4 quantity?

5 John.

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

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

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

15 MR. WARNER: I got that part.

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

19 MR. WARNER: So I guess going from there, the way
20 it's phrased, and I'm pretty sure you're going to cover all
21 this; but it's phrased -- effects of current and proposed
22 operations and the proposed operations are the current
23 operations right now. And I would anticipate that there
24 will be recommended changes to those operations, so clearly
25 any of those need to be assessed as well. But this is a
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1 complicated system, and anything that happens at Wilder and
2 Bellows affects Vernon and downstream; so John mentioned in
3 his operations model, but just try and understand how we'll
4 all be able to keep track of when things are identified for
5 aquatic resources or whatever, that that gets put into a
6 model and then gets returned back to us during the licensing
7 proceedings so we don't recommend things in one place that
8 are not achievable because of recommendations in another
9 place.

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

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

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

26

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

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

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

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

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

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1 MR. HOGAN: Does that get at your question?

2 MR. WARNER: Thanks.

3 MR. HOGAN: John mentioned actually establishing
4 a working group on model development. Is there a show of
5 hands of folks who would be interested in that?

6 (Laughter)

7 MR. HOGAN: Let's get your hands for the record
8 so that John doesn't have to write them all down.

9 John Warner?

10 MR. WARNER: I'm not interested in developing a
11 model. I have no idea of that.

12 MR. HOGAN: That's like reviewing --

13 (Simultaneous discussion)

14 MR. WARNER: No, just in the output side.

15 MR. SIMS: Norman Sims from the Appalachian
16 Mountain Club.

17 MR. CHRISTOPHER: Tom Christopher from FLOW.

18 MR. HOGAN: Anybody else?

19 MS. KENNEDY: Katie Kennedy of the Nature
20 Conservancy.

21 MR. CROCKER: Jeff Crocker with the Vermont ANR.

22 MR. HOGAN: Trapped you.

23 MR. RAGONESE: What's that?

24 MR. HOGAN: I trapped you.

25 MR. RAGONESE: No, no, that's good. I was trying

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

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

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

9 SPEAKER: Could you speak up, please?

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

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

16 MR. GRIES: Okay.

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

22 Did everybody hear the question?

23 SPEAKER: No.

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

26

1 And the answer is yes.

2 Yes.

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

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

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

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

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

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

25 SPEAKER: How the project will live with the --

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

5 MR. HOGAN: Thank you.

6 Other --

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

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

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

26

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

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

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

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

26

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

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

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

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

11 MR. HOGAN: Okay. Okay. Thank you.

12 Yes, sir.

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

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

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

25 MR. HOGAN: The answer to Part B is yes, it's
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1 possible. Our NEPA analysis will determine what's
2 appropriate; so we're not there right now, we're still
3 trying to identify the issues,¹ and we will do our analysis.

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

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

7 MR. HOGAN: He was asking --

8 MR. RAGONESE: Just so I can understand.

9 Was the question about extending our flowage
10 rights to --

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

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

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

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

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

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

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

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

12 MR. HOGAN: Other -- Yes, sir?

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

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

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1 MR. HOGAN: Okay.

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

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

12 MR. HOGAN: Other -- David?

13 MR. DEEN: David Deen, Watershed Council.

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

20 MR. HOGAN: You're jumping ahead.

21 MR. DEEN: Okay.

22 (Laughter)

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

26

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

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

6 Do it. Okay.

7 MR. HOGAN: Aquatic Resources.

8 Aquatic Resources

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

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

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

22 And the effects of entrainment on fish
23 populations.

24 MR. HOGAN: John, any --?

25 MR. RAGONESE: In our PAD, we did not propose any
26

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

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

15 Historically, there have been a number of
16 different studies relative to, assessments of migration,¹
17 use of fish ladders and there our reservoirs; but those are
18 primarily focused on when those ladders went in, when those
19 devices went in; and then studies about effectiveness; and
20 those are also on the website under public information at
21 the library.

22 MR. HOGAN: I have a question for State of New
23 Hampshire, State of Vermont and Fish & Wildlife Service
24 regarding, are the species that we're interested in
25 different, migratory species different between Bellows Falls
26

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

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

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

12 MR. FITZGERALD: We are now.

13 (Laughter)

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

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

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

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

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

25 MR. FITZGERALD: You can count on that.

26

1 (Laughter)

2 MR. HOGAN: Pete?

3 MR. KULBREKI: Peter Kulbreki, Town of Hanover.

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

9 MR. HOGAN: This is at Mink Brook?

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

16 MR. HOGAN: So drawdown effects on aquatic
17 habitats.

18 MR. KULBREKI: Yes.

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

22 I will give you a little more on the fish
23 species, at least, from the American eel standpoint. We'll
24 be looking at American eel passage and current distribution
25 questions throughout, in all the project areas. Sea lamprey
26

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

3 AUDIENCE: Would you speak up a little bit?

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

7 MR. HOGAN: Okay.

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

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

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

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

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

23 SPEAKER: Right.

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

26

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

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

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

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

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

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

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

20 (Laughter)

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

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

25 (Laughter)

26

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

3 MR. HOGAN: Okay.

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

6 Yes, sir.

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

15 Matt Carpenter, New Hampshire Fish & Game.

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

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

22 MR. HOGAN: Okay. Thank you.

23 Other comments on fish and aquatic resources?

24 MS. KENNEDY: Kate Kennedy, Nature Conservancy.

25 This may be a question for Thursday's meeting, but I just
26

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

2 MR. HOGAN: What is 'this'?

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

6 SPEAKER: Could you repeat the question?

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

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

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

14 MR. HOGAN: No?

15 MS. KENNEDY: Okay.

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

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

26

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

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

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

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

16 MR. HOGAN: Thank you.

17 David?

18 MR. DEEN: David Deen, Watershed Council.

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

25 So I think the seasonal nature of happenings is
26

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

5 MR. HOGAN: Other aquatic resource issues or
6 concerns?

7 Okay. Terrestrial Resources.

8 @ Terrestrial Resources

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

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

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

25 And the effects of project operation and
26

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

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

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

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

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

26

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

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

13 MR. HOGAN: Okay. Yes, sir?

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

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

19 MR. RAGONESE: Sure.

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

22 MR. RAGONESE: Plant species. Sorry.

23 MR. MARTIN: Plant species, okay.

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

26

1 MR. RAGONESE: State and federal.

2 MR. MARTIN: Okay. All right.

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

5 MR. MARTIN: With both states?

6 MR. RAGONESE: Yes.

7 MS. CORMEN: I'm Nicole Corman, Lebanon City
8 Council.

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

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

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

25 MR. HOGAN: L e b?
26

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

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

9 Other comments regarding terrestrial resources?

10 John?

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

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

21 Chris Martin from New Hampshire Audubon.

22 We are involved in a two state effort in New
23 Hampshire and Vermont to fully understand the distribution
24 and the breeding locations of bald eagles up and down the
25 entire watershed from the Massachusetts state line north, in
26

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

6 MR. HOGAN: That would be fantastic.

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

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

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

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

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

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

21 Katie?

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

26

1 MR. HOGAN: For surveys?

2 MS. KENNEDY: For the vegetation, yes.

3 MR. HOGAN: Vegetation surveys.

4 SPEAKER: Would you repeat the question?

5 MS. KENNEDY: I was asking about the extent of
6 the vegetation community types; so particularly flood plains
7 are looked up until the 100 year flood plain, then you get
8 the full complement of the transition from the bottom lands
9 to the upland flood plain communities.

10 MR. HOGAN: So if vegetation surveys are
11 conducted --

12 MS. KENNEDY: Yes.

13 MR. HOGAN: -- it's your recommendation that the
14 do it with an 100 year flood plain/

15 MS. KENNEDY: Right, so that this vegetation
16 community type should include the full flood plain.

17 MR. SIMS: Can I ask a question of the resource
18 agencies. Norman Sims --

19 MR. HOGAN: Can't promise you you're going to get
20 an answer.

21 MR. SIMS: From watching the news this morning, I
22 learned that Northeastern Australia had an 100 year flood
23 three years ago and they had another one yesterday. My
24 question is, is anybody revising that terminology of the 100
25 year flood?

26

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

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

8 SPEAKER: Higher probability.

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

10 MR. RAGONESE: No.

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

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

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

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

20 Literally days after Irene, FEMA was out mapping
21 the water's edge along the Connecticut River. There are
22 flags everywhere that mark -- and they wouldn't necessarily
23 say that this is an 100 year flood; they were just marking
24 it, they were revising it. I think they were focusing on a
25 500 year flood adjustment, as opposed to maybe an 100 year,
26

1 perhaps because that exceeded it in a lot of places.

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

4 SPEAKER: Or USGS.

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

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

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

19 MR. HOGAN: Other concerns associated with
20 terrestrial resources?

21 Anybody need a break?

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

23 (Laughter)

24 Threatened and Endangered Species

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

26

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

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

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

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

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

15 MR. RAGONESE: Haven't done that.

16 MR. MARTIN: That's a correct statement.

17 MR. RAGONESE: That is a correct statement.

18 MR. MARTIN: Okay.

19 SPEAKER: Well, we did the walkway --

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

21 SPEAKER: But terrestrial species.

22 MR. RAGONESE: Terrestrials, no. Thank you.

23 SPEAKER: State-listed bird species, but --

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

26

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

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

5 MR. HOGAN: Give us the background.

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

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

16 MR. HOGAN: John?

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

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

25 MR. RAGONESE: Do what.

26

1 MR. WARNER: Have already looked at that?

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

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

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

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

22 MR. HOGAN: Okay.

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

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

26

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

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

6 Maybe we have a better survey from what they
7 have.

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

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

12 MR. WARNER: And found?

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

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

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

19 Recreation, Land Use and Aesthetics

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

24 The adequacy of existing recreation and public
25 use facilities in meeting existing and future regional
26

1 public use and river access needs.

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

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

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

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

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

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

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

18 We are interested in -- I don't have this neatly
19 tied up into a direct study. We have a number of resources,
20 we've talked about them already, as a potential resource for
21 access to the river. There are few access points to the
22 river in a meaningful recreational, aesthetic or public
23 access sort of sense. We are looking at our facilities as
24 becoming a part of that, but we are also cognizant of a
25 coordination between many of such things all along the river
26

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

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

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

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

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

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

26

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

7 MR. HOGAN: Other?

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

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

12 MR. RAGONESE: Is it --

13 (Laughter)

14 MR. HOGAN: Is that the one downstream?

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

17 MR. GRIES: Yes.

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

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

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

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

25 MR. RAGONESE: Yes.

26

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

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

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

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

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

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

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

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

19 MR. RAGONESE: That was from the scoping
20 document?

21 MR. GRIES: Yes.

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

25 (Laughter)

26

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

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

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

10 MR. HOGAN: Car top.

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

14 MR. GRIES: Correct.

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

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

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

24 MR. RAGONESE: I think it is, too.

25 MR. HOGAN: -- and I believe it's a New
26

1 Hampshire Fish & Game ramp --

2 MR. RAGONESE: Correct.

3 MR. HOGAN: It's not a --

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

5 MR. RAGONESE: It's on project land.

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

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

9 SPEAKER: It's at the Westminster Station bridge.

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

11 SPEAKER: There's also the original bridge site.

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

14 Where do you need to get caught up to?

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

17 (Laughter)

18 I can only do one.

19 MR. HOGAN: So we'll back up a little bit. The
20 car top access that was discussed in the scoping document by
21 FERC staff I'm pretty sure is referring to a small boat
22 launch downstream from Bellows Falls in the riverine reach -
23 -

24 MR. RAGONESE: Out of project.

25 MR. HOGAN: -- out of project; between Vernon and
26

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

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

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

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

15 David, you had another conversation that was
16 going on?

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

21 MR. HOGAN: Which dam?

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

24 One of the things I wanted to bring up is
25 primitive river camping sites are not readily available
26

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

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

17 MR. HOGAN: Yes, sir.

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

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

25 This is an important resource for quality of life
26

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

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

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

21 Now talking about Bellows Falls in particular,
22 this is an extremely important area. We believe there's a
23 potential to create a whitewater park in this area; and a
24 whitewater park is a short stretch of river with intense
25 rapids that people can run over and over again and perform
26

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

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

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

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

22 MR. HOGAN: Thank you.

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

25 MR. NASDOR: At the drop?

26

1 SPEAKER: What was the question?

2 MR. BEECO: Feet per mile.

3 SPEAKER: What's the slope?

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

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

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

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

26

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

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

8 And the other point that I wanted to make
9 relative to the construction of whitewater parks, there have
10 been several parks that have been constructed whereby there
11 were also different types of structures that were put into
12 the parks that were there primarily for fish. Essentially I
13 think that there's no reason why fish can't find suitable
14 habitat within

15 these whitewater parks, and I don't know if there is any
16 viable fish habitat in this particular region at this time,
17 perhaps --

18 MR. RAGONESE: Request a study.

19 (Laughter) (Simultaneous discussion)

20 SPEAKER: No water, no fish.

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

24 But anyway, whitewater parks are compatible with
25 fish, and there's no reason that this could not be designed
26

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

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

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

12 Thank you.

13 MR. HOGAN: Thank you.

14 MS. CORMEN: Nicole Corman, Lebanon City Council.

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

19 Looking holistically at the recreation picture up
20 and down both sides of the river, in the reach that we're
21 discussing today, I hope that there is a study of the
22 existing as well as the proposed, because some of the
23 existing facilities, in my opinion -- I've used probably all
24 of them at one time or another -- many of them suffer from
25 erosion, many of them are heavily, heavily used, possibly
26

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

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

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

21 So that's something I really could see on both
22 sides of the river, and partnering with state agencies
23 operating some of these; some of them are municipal, and we
24 have one in Lebanon that's been as fully operated. I'd love
25 to see that all be coordinated and just spiffed up for what
26

1 we know now about storm water management.

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

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

9 MR. RAGONESE: Both existing and proposed.

10 MS. CORMEN: Existing and proposed, yes.

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

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

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

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

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

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

24 MR. CHRISTOPHER: Yes, that's what I meant -- my
25 comment about portages. It's the dams and things like
26

1 Sumner Falls.

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

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

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

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

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

25 One of the problems with dams is the need head,
26

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

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

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

23 We think that the existing portage routes,
24 basically all of the portage routes at these dams are
25 inadequate. the Bellows Falls portage is one and a half
26

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

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

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

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

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

26

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

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

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

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

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

25 MR. HOGAN: Other recreation. David?

26

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

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

6 MR. BEECO: Or land use or aesthetics.

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

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

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

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

26

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

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

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

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

15 MR. HOGAN: PDF would be great.

16 MR. THAXTON: Okay, sure.

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

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

21 Other land use concerns?

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

24 Do you folks look at, for example the Silvio
25 Conti, their plans for the -- do you look at existing plans
26

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

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

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

13 MS. CORMEN: Sure.

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

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

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

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

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

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

24 And it is in there.

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

26

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

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

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

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

12 (Laughter)

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

14 (Laughter)

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

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

20 MR. HOGAN: So no recreation plan?

21 MR. RAGONESE: It would be part of it.

22 MR. HOGAN: It would be included.

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

26

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

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

7 (Laughter)

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

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

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

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

22 SPEAKER: Keep it beautiful.

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

25 Brian.

26

1 MR. FITZGERALD: Brian Fitzgerald from ANR.

2 Ken, would that include aesthetics of flow?

3 MR. HOGAN: Sure.

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

6 (Laughter)

7 MR. HOGAN: Okay.

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

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

13 No? Okay.

14 Socioeconomic Resources

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

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

26

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

4 MR. THAXTON: Yes, right.

5 MR. HOGAN: Nicole.

6 MS. CORMEN: A suggestion. Nicole Corman,
7 Lebanon City Council.

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

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

24 MR. HOGAN: David.

25 MR. DEEN: David Deen, Watershed Council.

26

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

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

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

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

26

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

10 MR. HOGAN: Kevin?

11 MR. MENDIK: Kevin Mendik, National Park Service.

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

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

23 So there's a lot of groups in here and others in
24 the area which have a considerable amount of information and
25 access to various users; and that information needs to be
26

1 pulled in as well.

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

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

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

7 MR. CHRISTOPHER: Ken. Tom Christopher.

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

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

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

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

26

1 (Laughter)

2 MR. HOGAN: Cultural Resources.

3 Cultural Resources

4 MR. QUIGGLE: Rob Quiggle with FERC.

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

11 MR. HOGAN: John?

12 MR. RAGONESE: Yes, just a couple things.

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

19 We've already conducted Phase 1A surveys of
20 Bellows and Wilder's impoundments, and downstream -- well,
21 no, those are actually just -- I think within the project
22 boundaries. Those reports have not been finalized yet to go
23 to the State Historic Preservation Offices, but it will.
24 Oftentimes there's some follow up in some of those sites
25 that may require for a Phase 1B, and potentially recovery
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1 efforts in certain locations; those have not been identified
2 and those are things we work out with the SHPOs at this
3 time.

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

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

16 SPEAKER: Can I just ask a question?

17 MR. HOGAN: Yes.

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

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

23 MR. RAGONESE: I think they're eligible.

24 Basically it means the same thing to me.

25 There's an historic district in Bellows Falls;

26

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

3 SPEAKER: -- might extend to the mill.

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

5 MR. HOGAN: Other cultural resource concerns?

6 No? Okay.

7 Developmental Resources

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

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

18 Okay.

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

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

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1 affect project economics?

2 MR. RAGONESE: Flow regime, reservoir operations.

3 MR. HOGAN: Yes.

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

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

9 Okay. I'd like to make everybody aware of March
10 1st is the deadline for comments and study requests, so
11 comments on the PAD study requests, comments on the
12 Commission Scoping Document 1.

13 John's giving me cues.

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

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

26

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

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

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

20 John just happens to be the most vocal about it.

21 Any question about the FERC process? Nicole.

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

26

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

4 MR. HOGAN: That's a good question.

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

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

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

25 So yes, take a look at page 12, and it will give
26

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

3 MS. CORMEN: Thank you.

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

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

10 SPEAKER: TransCanada dash Relicensing.

11 MR. RAGONESE: Dot com.

12 SPEAKER: Dot com. Okay, Thank you.

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

14 SPEAKER: Anybody else need that?

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

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

22 MR. RAGONESE: Yes.

23 SPEAKER: Okay. Dash Relicensing.

24 MR. HOGAN: So the steps to come are on March
25 1st, comments and study requests are due, and the Commission
26

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

13 SPEAKER: It's easier said than done.

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

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

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

22 (Laughter)

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

25 MR. HOGAN: And what the study is.

26

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

3 (Laughter)

4 MR. HOGAN: Okay.

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

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

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

13 MR. HOGAN: Right. Right.

14 SPEAKER: Thanks.

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

18 Any other questions regarding the FERC process?

19 No. All right.

20 MR. RAGONESE: The other thing is, it didn't get
21 mentioned last night,¹ but what's the disposition of the
22 transcript from the meeting?

23 MR. HOGAN: The transcripts will be available, I
24 believe it's ten days from -- well, five. [To court
25 reporter] I think our contract says ten, so you might give
26

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

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

6 (Laughter)

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

11 Any other questions?

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

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

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