1	UNITED STATES OF AMERICA
2	FEDERAL ENERGY REGULATORY COMMISSION
3	Office of Energy Projects
4	x
5	TransCanada Hydro Northeast, Inc.
6	Wilder Project No. 1892-026 -
7	Bellows Falls Project No. 1855-045
8	Vernon Project No. 1904-073
9	New Hampshire/Vermont
10	x
11	VERNON PROJECT - Evening Meeting
12	Marlboro College Graduate School
13	28 Vernon Street
14	Brattleboro, Vermont 05301
15	Wednesday, January 30, 2013
16	The evening scoping meeting, pursuant to notice,
17	convened at 7:12 p.m., before a Staff Panel:
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1		PANEL	
2		KEN HOGAN, Pro	ject Coordinator, FERC
3		MARY GREEN, Geo	ology and soils, FERC
4		RALPH NELSON,	Geology and soils, FERC
5		MARY McCANN, E	ndangered species and
6	macroinvert	cebrates, FERC	
7		MICHAEL SEARS,	Fisheries and aquatic resources,
8	FERC		
9		BRETT BATTAGLI	A, Terrestrial resources, FERC
10		ADAM BEECO, Re	creation, land use and aesthetics,
11	FERC		
12		ANGIE SCANGAS,	Water resources, FERC
13		ROBERT QUIGGLE	, Archaeological and cultural
14	resources,	FERC.	
14 15	resources, With:	FERC.	
			FERC License Manager,
15			FERC License Manager, US Northeast Hydro Region,
15 16		JOHN RAGONESE,	-
15 16 17	With:	JOHN RAGONESE,	US Northeast Hydro Region,
15 16 17 18	With: TransCanada	JOHN RAGONESE,	US Northeast Hydro Region,
15 16 17 18 19	With: TransCanada	JOHN RAGONESE,	US Northeast Hydro Region,
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15 16 17 18 19 20 21 22 23	With: TransCanada	JOHN RAGONESE,	US Northeast Hydro Region,

PROCEEDINGS 1 2 MR. HOGAN: Why don't we start to get started. 3 Well, good evening. My name is Ken Hogan, with 4 the Federal Energy Regulatory Commission. Do we have any new faces; folks who haven't been 5 6 to one of our meetings yet this week? 7 Three? Three. 8 What do you want to know? 9 (Laughter) 10 So the process for the meeting, what we'll do is, 11 I'm going to talk a little bit about the FERC licensing 12 process. 13 Do you have any questions about who the 14 Commission is or why we're here? 15 MS. FRYE: I'm up on it. Okay. So we're here for the Vernon 16 MR. HOGAN: 17 licensing process. TransCanada has chosen to use the 18 Integrated Licensing Process to pursue its relicensing. We are here today to get input from you folks about what are 19 20 your concerns or issues associated with the hydro project, 21 or compliments, for that matter. 2.2 That input is how we would design our analysis; 23 what issues do we need to be looking at in the Commission's 24 environmental document when we review the proposals and 25 recommendations for the relicensing process, and any 26

1 recommendations we may make to the Commission regarding what 2 a new license should look and what conditions should be 3 included in that license.

So the public involvement here is we want to hear your concerns, and like it said, it crafts what our analysis is centered on. So really thank you guys for making the trip out to night, and I really appreciate it.

8 We are in the middle of our scoping process; we 9 issued our scoping document on December 21st; we're here for 10 scoping meetings now. Our scoping document identified the 11 issues that we preliminary have identified just based on 12 review of the Applicant's pre application document.

13 Now we're here to seek public comment; and on 14 March 1st, we'd be seeking written comment and study 15 requests, if you wanted to provide any written responses to either our Scoping Document 1, the Applicant's pre 16 17 application document, or study requests where you feel that 18 there's an issue that there is not enough information to support analysis of. You can ask TransCanada to conduct a 19 20 study to provide that information that will support analysis 21 pertaining to any specific issue that you may have.

22 So that's all due on March 1st. After March 1st, 23 TransCanada will then prepare a proposed study plan that 24 will basically take all the input from the scoping process 25 and study request and determine what studies they feel are

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1 appropriate they should be doing, and they'll put forward a 2 proposal.

3 After that proposal comes in, there will be at 4 least one public meeting to discuss their proposal, and it's inside of a 90-day public discussion period. We like to 5 6 term it the 'informal dispute resolution process on 7 studies.' So there will be opportunity for comment both formal and informal on the study plan that is proposed. 8 TransCanada then will take that information and then develop 9 10 what's called a revised study plan. So it's basically a 11 draft and then a final. And they'll submit the revised 12 study plan to FERC for Commission approval.

13 After the revised study plan comes in, there's 14 another comment period for folks to -- you know, if they 15 still have some issues with the study plan, of studies not 16 being conducted that you've asked for or a study plan is, 17 through the 90 day period where we are discussing things 18 with TransCanada, you thought you had agreement, but to do 19 it one way or can get certain information and we don't get that information, and it's not reflected in the revised 20 21 study plan; you have an opportunity to tell FERC: "Hey, we 22 thought we had an agreement here, it's not here, but we still want this." So there's a little check-in with us. 23

After we get the revised study plan and the comments from the public, the Commission will then review

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any outstanding issues; make sure that the study plan will meet our needs and issue what is what we call the study plan determination, which is an order from the Commission to TransCanada to implement their study plan as is or as modified, or if we feel that there is need for additional studies, we would instruct them to go out and develop those additional studies.

8 The next two years or so, TransCanada will be 9 implementing their study plan. And I don't want to go 10 beyond that because now we're three years out. Is that 11 okay?

12 So. because we have such a small group tonight, 13 what I would like to do is just go through quickly our --14 quickly, first I am going to have TransCanada present their 15 proposed project, what the total project is, give an 16 overview of the project. Then we'll go through the resource 17 issues that we've identified in our Scoping Document 1, then 18 I'll have TransCanada give an overview of studies that 19 they've already conducted or intend to conduct as of right 20 now; and then we're going to turn to you to seek your input 21 on any concerns regarding the project. 22 Does that sound fair?

23 MS. FRYE: Uh-huh.

24 MR. HOGAN: If you want to skip any of that, let 25 me know.

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1 MR. BATTAGLIA: Ken, do you think it's worth, or 2 have you mentioned, sir, as far as how they can get information through eLibrary, have things sent to them? 3 MR. HOGAN: Yes, I think that's worth it. 4 5 You know what, I should also introduce the rest 6 of the team. 7 MS. FRYE: Can I just ask, is this it? Are we 8 that community? The four of us here? MR. HOGAN: 9 Yes. 10 MS. FRYE: Wow. Really? 11 MR. HOGAN: Yes. 12 MS. FRYE: No, I don't recognize anyone else. 13 Okay. 14 MR. HOGAN: Everybody else is --15 MS. FRYE: All for us --16 (Laughter) 17 MR. RAGONESE: We brought couches in specially. 18 MS. FRYE: It's great. 19 It's just kind of disappointing that there are so 20 many of you and this is all there is of us. You must feel 21 disappointed that there's only the four? 22 MR. HOGAN: No. 23 MS. FRYE: No? Okay. 24 MR. HOGAN: Like I said, this gives me a good 25 opportunity to be -- I mean, I'm getting paid. 26

1 MS. FRYE: Okay. I'd just like to say like in 2 the town of -- I live in Gilford, he lives in Gilford, Brattleboro, Bellows Falls. But tonight, for instance, is a 3 4 big meeting in Brattleboro with the planning, with their 5 town plan and everything. So people who would maybe come to 6 something like this, they're probably there. 7 MR. HOGAN: That's making a little more sense 8 now. MS. FRYE: And the fog could keep people away, 9 10 too. It's pretty foggy. 11 MS. SCANGAS: And we did have some public this 12 morning, in this morning's meeting. 13 MR. HOGAN: Yes, we had a meeting earlier today 14 that covered Vernon, Northfield Mountain and Turners Falls; 15 and those were attended by about 80 folks. MS. FRYE: Oh. Then I don't feel bad. Great. 16 17 MR. HOGAN: And there was comment, discussion about the Vernon project. 18 19 MS. FRYE: Okay. MR. HOGAN: So Brett -- let's go ahead and do 20 21 introductions. Mary? 22 MS. GREEN: I'm Mary Green, I'm doing geology and 23 soils, and I'm from FERC. 24 MR. BEECO: I'm Adam, I'm from FERC also, and I'm 25 doing recreation, land use and aesthetics. 26

1 MR. HOGAN: And what's your last name, Adam? 2 MR. BEECO: Beeco. 3 MR. HOGAN: Thank you. 4 MR. NELSON: I'm Ralph Nelson, I'm doing geology 5 and soils, and I'm with FERC. 6 MR. BATTAGLIA: I'm Brett Battaglia, also with 7 FERC, and I'll be talking about terrestrial resources. 8 MR. QUIGGLE: Rob Quiggle with FERC, talking about archaeological and cultural resources. 9 10 MS. McCANN: Mary McCann with FERC, and I'm going 11 to be talking about the endangered species and 12 macroinvertebrates. 13 MR. SEARS: Mike Sears with FERC. I'm going to 14 be talking about fisheries and aquatic resources. 15 MS. SCANGAS: Angle Scangas with FERC. Water 16 resources. 17 MR. HOGAN: Brett made a good point; our process 18 is a very public and transparent process, and we have a 19 court reporter here today. So regarding that, anytime you -20 - well, at least the first time. I don't think he's going 21 to get lost -- lose too much track of names after the first 22 time, are you? 23 (Laughter) 24 MR. HOGAN: State your name, affiliation; if you're a member of the public, just member of the public; if 25 26

1 you're here with a group, just let us know that. And then 2 that being a very open and public process, we have a couple of electronic services. There's eLibrary, eSubscription. 3 4 eLibrary is an electronic library that we maintain that any 5 document that's either filed by FERC or issued by FERC is 6 cataloged by project in chronology, and is available with a 7 click on the catalog item and then actually open the 8 document and read it. So it's a very public process; there's nothing that's submitted to FERC that doesn't go 9 10 into eLibrary and then made available, unless it's sensitive 11 regarding location of a cultural resource -- a historic 12 property and cultural resources. Archaeological resources, 13 specific sites of endangered species and critical energy 14 infrastructure which could be used to disrupt America.

15 But other than that, anything is readily 16 available. Any comments that you file, you will be able to 17 find that; and it's available to everybody else to read, so 18 we really try to keep the public involved and engaged. Our 19 goal here is to really hear your issues tonight, so we can 20 do a better job with our environmental analysis and make 21 sure that we're addressing the issues that are pertinent to the community within where the project is. I could do it 22 23 without your input, but I'm not going to do nearly as good a 24 job.

So the Guide to Information, the blue pamphlet on

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1 page 12, it says Get Information. And there are 2 instructions there and links to -- the first page, opened it 3 right up. Information basically, how to eSubscribe. 4 eSubscription is a service that we provide where once you subscribe and open an account, you identify the dockets that 5 6 you may be interested in -- and the docket is the project 7 number; it's P- and four digits of each project. 8 John, what is Vernon's project number? MR. RAGONESE: 1907 --4. 9 MR. HOGAN: 10 1904. 11 MR. RAGONESE: 1907 is when it was built, sorry. 12 MR. HOGAN: Okay, which one is it? 13 (Laughter) 14 MR. HOGAN: 1904, okay. So when you subscribe, 15 you put in P-1904, and anything that's filed regarding the Vernon project from here on out, you'll receive an e-mail 16 with a link to that document. So you click on the link, and 17 18 you'll actually be able to download it, read it on your 19 screen or whatever you want to do with it; but it will take 20 you right to that document, and that's the way to utilize 21 that. So any questions so far? 22 23 No. Am I getting too detailed? No. 24 Okay. I'm now going to turn it over to 25 TransCanada. Edwin will give a presentation on, an overview 26

of the project, and their proposal. And after that, we'll go through the FERC-identified resource areas and concerns, and then we'll get a brief description of studies that TransCanada has already implemented in support of their relicensing process; then we're going to turn to you for comments.

7 MR. NASON: I'm Edwin Nason and this is Earl 8 Brissette. We work for TransCanada. I'll go over a brief 9 hydro overview, and then Earl will cover the facility facts; 10 and then I'll go over some operations about Vernon.

11 So TransCanada has hydro plants on the 12 Connecticut River and the Deerfield River, and on the 13 Connecticut River they have six plants, and starting all the 14 way upstream. First one is Moore Station and the next one 15 downstream from that is Comerford, and downstream from that 16 is the McIndoes Falls station. And those three stations 17 together are known as Fifteen Mile Falls.

And downstream from there, the Wilder station; and downstream from there is Bellows Falls, and then Vernon. And those are the three stations that are up for relicensing renewal.

22 So in operation we talk about river timing, and 23 what that means is when there's a change and discharge from 24 one plant, how long does that take before the changes are 25 seen at the next plant; and from Moore down to Comerford

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1 it's about an hour; and from Comerford down to McIndoes
2 Falls, it's about an hour. So those three plants are really
3 very close together. But from McIndoes Falls down to Wilder
4 is about eight hours; and then from Wilder down to Bellows
5 Falls is eight hours; and Bellows Falls down to Vernon is
6 only four hours.

All the stations on the Connecticut River are remote controlled; they're controlled by the hydro operators in the Connecticut River control center, and that's in the Wilder hydro office in Wilder, Vermont.

11 Earl, it's your turn.

MR. BRISSETTE: Yes. Okay, I'll go through theVernon facility.

14 Vernon Station was put into service in 1909. Ιt 15 has a normal, average head of 35 feet, so it's a low head. 16 It has ten units with a total main capacity of 32.4 17 megawatts. For gates, we have one skimmer gate; it's 13x13 18 feet wide, and that's the first one adjacent to the plant. 19 There are eight flood gates, 7x9 feet wide, and those are 20 the original gates that are underneath the dam. There are 21 four tainter gates, 10x50, 50 foot wide each, and there's 22 also two 20x50 foot tainter gates. Those two are on the 23 Hinsdale side. We use those for regulation.

We have two stanchion bays which are 10x50 feet wide -- one is 10x42.5 feet wide. Those are the boards;

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those are the ones we manually pull, or trip. And there are ten hydraulic flashboard panels; those are 10x10 high each, and they're actually kind of ganged together and we run them as two different gays.

The total project discharge capacity is 127,600 5 6 cfs. Total generator discharge is 17,000 cfs. Flood of 7 record is 176,000 cfs, and that was March of '36. Edwin remembers that one, I don't. (Laughter) 8 9 Major projects that have been completed since 10 1979. Fish ladder was completed in 1981. Reconstruction of 11 the spillway and crest control, that was completed in 1987 12 and that included the addition of a trash sluice skimmer 13 The six tainter gates that I mentioned, the two 50 gate. 14 foot bay hydraulic panels on the spillway, and the three 15 stanchion bays, they just replaced with a different 16 mechanism, but those are basically boards. And the new rack 17 raking system which is constructed along the powerhouse 18 forebay.

Also in the forebay is the downstream diversion area; that was completed in '95, and the station was automated, remote control from Wilder in 1998. And then Units 5 through 8 were replaced and operational in the spring of 2008.

24 MR. NASON: So back to operations, I'll start out 25 with some reservoir information. Vernon's reservoir has a 26

drainage area of 6,266 square miles, and the reservoir is 26 miles long. The usable storage volume in our five feet of operation is 18,300 acre-feet. And there is approximately 2,200 cfs each per tenth of elevation. That's a tenth of a foot of elevation in the reservoir, and cfsh is cubic feet per second-hours.

7 An example of that is if the inflow into the 8 reservoir was 2,700 cubic feet per second more than at 9 discharge for one hour, then the elevation of the reservoir 10 would raise one tenth of a foot.

11 For the constraints at Vernon, Vernon has a min-12 flow, a year round min-flow of 1250 cfs. That's done 13 through generation. There is a downstream fish passage 14 through a fish pipe and a fish tube. Together they're 390 15 cfs. That's from April 1st to December 31st. And there's an upstream fish passage, that's the fish ladder, That's 16 17 from approximately April 15 through July 15. That's kind of 18 on an as-needed basis, and that's 250 cfs.

19 The reservoir has an operation limit for 20 elevation of 212.6 feet above sea level to 220.1 feet above 21 sea level. It has a drawdown limit -- this is a rule that 22 we impose on ourselves of .3 per hour; although it's usually 23 more line .1 to .2 an hour.

24 We maintain what we call summer rec limits, 25 summer recreation limits. So on the weekends in the summer,

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on the holidays in the summer, our low pond elevation limit
 is raised up for boat launching.

Also during high flows, because of the reservoir, 3 4 there is long, and elevation of the reservoir at the 5 upstream end is higher than the downstream end. During high 6 flows, that difference in elevation is greater; and so we go 7 into what we call a high flow reservoir profile operation; and that starts at around 15,000 cfs inflow, and it goes all 8 45,000 cubic feet per second inflow; 9 the way up to 10 and at 45,000 we're going to hold the pond elevation at around 218.6 maximum. 11

12 For scheduling the station, the operators in the 13 morning, they'll schedule the megawatts for the next day; 14 and their priorities for scheduling on a normal day is first 15 the license compliance, which is the min-flows, and the elevation constraints. And then their second consideration 16 17 is putting the megawatts in the best hours, which we 18 consider the high priced hours to be the best hours. That's 19 during normal day, normal flows.

During high flows, the generators are wide open all the time and we're in profile operation, and that's how it's scheduled for that.

And that's all we have. Do you have questions? MR. SCUDDER: Is that document available to the public or is that --

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1 MR. BRISSETTE: Well, this was just our 2 presentation for here. I don't know if this one is going to be available, but all this information is on the PAD. 3 4 MR. SCUDDER: Okay. Thank you. 5 AUDIENCE: It's in the what? MR. NASON: It's in the preliminary application 6 7 document. 8 In the preliminary application. MR. RAGONESE: 9 If folks don't have a copy of the Preliminary 10 Application Document, you can download a copy off of our 11 website, which is: www.TransCanada-Relicensing.com. 12 MR. HOGAN: It's also available on FERC's 13 eLibrary. 14 MR. RAGONESE: Also on the FERC website. 15 MR. NASON: On page 5 of the scoping document, which you picked up out front? 16 17 MS. FRYE: Uh-huh. 18 MS. NASON: On page 5 it gives that URL, that 19 website, and also the contact information for Ken. 20 MS. FRYE: Thank you. 21 MR. HOGAN: And it's the first page 5. There's 22 two pages --23 (Laughter) 24 MR. NASON: It's literally the first page. 25 MR. HOGAN: At this point, I'm going to have the 26

FERC team go through the resource areas that we've identified. These are -- if you want to follow along, starting on page 24 of the Scoping Document 1 -- that's this document here. We'll start with Geology and Soil Resources. MR. NELSON: Sure. On page 24, and that's under -- we're going to

talk about bullet 4.2.1. These are the initial listing of 8 issues identified for the project. And for geology and 9 10 soils, it's the effects of project operation and maintenance 11 on river bank erosion, including the potential effects on 12 protected species, cultural resources or the structural 13 integrity of adjacent facilities. And in this case, such as 14 the Vernon Neck to the east of the powerhouse or spillway, 15 as an example.

16 MR. HOGAN: Water resources?

MS. SCANGAS: For Water Resources, the next section, the preliminary issues identified were the effects of current and proposed project operations on water quantity and quality, and in particular dissolved oxygen and temperature.

22 MR. HOGAN: Aquatic Resources.

23 MR. SEARS: Effects of project operations and 24 maintenance, including fluctuations in water levels and flow 25 releases on aquatic habit and resources in the project

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vicinity. For example, resident and migratory fish
 populations, fish spawning, rearing, feeding and
 overwintering habitats, mussels and macroinvertebrate
 populations and habitats.

5 The next one is effects of project facilities and 6 operations, including reservoir fluctuations and generation 7 releases on fish migration through and within project 8 fishways, reservoirs, and the downstream riverine corridor.

9 And the last issue we identified was effects of 10 entrainment on fish populations.

11MR. BATTAGLIA: Terrestrial Resources. on page1225.

13 The effects of project fluctuations and water 14 levels and flow releases from the projects on riparian, 15 wetland and littoral vegetation community types, and the spread of invasive species as a result of project operations 16 17 along the shoreline of the project. Effects of project 18 operation and maintenance activities, for example, road and 19 facility maintenance, and project-related recreation on wildlife habitat and wildlife. 20

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

25 Effects of the frequency, timing, amplitude and

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1 duration of reservoir fluctuations on waterfowl and on 2 riparian and wetland habitats. And lastly, the effects of project operation and 3 4 maintenance on project-related recreation, on bald eagles and their habitat. 5 6 MR. HOGAN: Threatened and Endangered Species. 7 MS. McCANN: For threatened and endangered species at Section 4.2.5. And I've kind of summarized 8 9 these, all three bullets in one. 10 The effects of project operations or maintenance 11 activities, including reservoir and downstream flow 12 fluctuations on aquatic, wildlife and plant species listed 13 as threatened or endangered under the Endangered Species 14 Act. 15 MR. HOGAN: Recreation. 16 MR. BEECO: Recreation. The adequacy of existing 17 recreation and public use facilities in meeting existing and 18 future regional public use and river access needs. 19 Effects of project operations on quality and 20 availability of flow=-dependent and water level-dependent 21 recreation opportunities, including boating. 2.2 The adequacy of structural integrity, physical 23 capacity, and/or management methods to support recreation 24 use at existing facilities. 25 And under Land Use, the adequacy of existing 26

1 shoreline management policies and programs to control the 2 non-project use on project lands.

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

6 And under Aesthetic Resources, we have not 7 identified any current aesthetic resource issues.

8 MR. HOGAN: Regarding Socioeconomic Issues, when 9 we developed SD1, clearly we didn't identify any. Based on 10 the meetings that we've attended so far this week, we have 11 had requests to address socioeconomics as it's associated 12 with recreational opportunities at the facility, so.

13 Cultural Resources.

MR. QUIGGLE: Section 4.2.10 of Scoping Document 15 1 describes the issues we've identified in association with 16 cultural resources, and those are project's effects on 17 archaeological and historic properties listed in or eligible 18 for inclusion in the National Register of Historic Places, 19 including properties of traditional, religious or cultural 20 significance.

21 MR. HOGAN: Regarding Developmental Resource 22 areas, developmental resources is an analysis that the 23 Commission will undertake that evaluates potential 24 protection, mitigation and enhancement measures that are 25 being recommended by stakeholders; whether it be the public,

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1 NGOs, or resource agencies; the Applicant's proposal and any 2 FERC Staff recommendations, and we evaluate the cost of implementing those measures and that effect on the project 3 4 economics. So we're not really seeking any input on that; 5 it's just an analysis that we do internally, and that 6 analysis will be public and part of our environmental 7 document; but there's really no input there, so. I just want you to be aware of what that is. 8

9 With that, I'm going to turn to John Ragonese to 10 give us an overview of the studies that TransCanada has 11 undertaken or intends to undertake associated with these 12 resource areas.

13 MR. RAGONESE: Let me just generally start out, 14 that we spent quite a bit of an effort trying to assemble 15 all kinds of resource information that's in the preliminary 16 application documents. There is an opportunity for the 17 Applicant's to propose studies in the preliminary 18 application document, and while there may be a few that are 19 identified that I'll try to identify in this list of various studies, in general we did not spend a lot of effort and/or 20 21 desire to try to run a pre-scope the public or the agencies 22 on some of the issues and how they'd like to see some of the 23 resources or things to study. So there are not a lot of 24 proposed studies or even proposed mitigation in the PAD. Ιt 25 was really an assemblage of information about the projects

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or resources that surround the project, particularly for example the recreation opportunities within the corridor or within the adjacent areas around the project have been identified in the PAD. Doesn't necessarily mean there's no need for a recreation study to assess the adequacy or the quantity or whatever it might be associated with those things.

8 So with that, let me also just remind you that 9 all of these studies, while they are not -- some of them, 10 the final reports have not been completed. At one point or 11 another they will be posted on our website. Most of them 12 will probably be filed with the FERC going forward. Some of 13 these are previous studies that have not been filed; and quite frankly, it would be extremely difficult to file say 14 15 GIS information on eLibrary; they just don't accept them. MR. HOGAN: We can figure it out. 16 17 MR. RAGONESE: Go right ahead, because it's been 18 very challenging. So some of these things may not find 19 their way in the right format, but we'll definitely try to 20 get them on our website. So please visit the site and go 21 from there. 22 Starting off, to some extent, there's a general

22 order but it may not seem like it because many of these 24 studies or surveys try to identify different resources at 25 the same time. One of the earlier, what I call 'pre-

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1 scoping' before we've had some of the meetings, before we 2 developed the PAD, we initiated a number of these studies. One of them is what I would characterize as a 3 4 shoreline survey. We basically had a number of teams that were on the water, going up and down the different 5 6 components or different projects; and they're primarily 7 trying to identify erosion, locations, recreation 8 facilities, wetlands, riparian vegetation types, and invasive species. Just some baseline information. 9 Most of that information is characterized in GIS 10 mapping layers. A lot of photography makes it very 11 12 difficult to essentially give them out. I think the entire 13 dataset is 50 gigabytes. Yes, it's big. So it's a little hard to manage in a distribution. What we're trying to do 14 15 is post on the website a reader version of this. You know, you're not going to be able to necessarily download the 16 17 layers, but you will be able to download a system of being 18 able to move all through the project, look at the aerial 19 photography, look at all the resources, turn some on, turn some off and it will give you a sense of what we found out 20 at the survey. 21

We conducted a fresh water mussel survey of our impoundment, in this case Vernon, extended that up into some of the tributaries where we have project effects, like the West River here. We are primarily focusing where the

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federally-endangered dwarf wedgemussel, and them some of the state-listed species of concern in Vermont in particular. Don't ask me to name all the mussels, but there are essentially somewhere in the vicinity of about eight mussels we were really trying to focus on, around and identified.

6 That survey has been posted, and the results of 7 that report are on the website. So you could find that. We also conducted a very extensive survey and identification of 8 9 the rare and endangered species that were again, not just 10 federally-listed species but state-listed species as well, 11 in both the project impoundments and the reaches downstream 12 of our project impoundments. In the case of Vernon, we're 13 really talking about that riverine reach between Vernon and 14 down below Bellows Falls as opposed to below Vernon.

15 That study has not been released to the agencies 16 yet; there's probably some sensitive information as to the 17 location of these things; I'm not sure how we're going to 18 create a sort of restricted and public version of it, but 19 there will be something on the website shortly on that. If 20 you wanted more information, you could approach the state 21 agencies that deal with natural heritage information.

22 We have conducted for many years, every other 23 year we do a survey of the erosion scar that's on the east 24 bank below Vernon Dam; it's a fairly large, apparent, active 25 erosion bank. And I say active from a visual perspective;

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it's actually not very active of late; I think in the last four cycles there has been very little change in the bank itself or the hydrography that's below Vernon as well. So we do a hydrographic and a topographic survey. It's e-filed so it's on the web, and there was probably something if you searched in eLibrary, you'd find something in the last two weeks filed on the latest 2012 survey.

There are some other -- I can't remember how it 8 9 was described in the scoping document, but basically, you 10 know, some concern about stability, analytical stability analyses of dams. One in particular that is probably of 11 12 concern, again because of the unique characteristic of 13 Vernon, it lies as an extension of a natural dike that 14 extends out into the river, goes around, it's called Vernon 15 neck. So we'll be conducting a survey, a monitoring survey, 16 just basically topographic; and a baseline survey of Vernon 17 neck as well as a geotechnical evaluation; and the primary 18 reason for the geotechnical evaluation is not because we're 19 concerned about the connectivity between the dam and the bedrock or the abutments, and it has nothing really to do 20 21 with that erosion that occurs on the east bank. It's really 22 farther to the east, I quess, where the neck is actually 23 pretty narrow.

And the concern is, under some abnormal higher, 500 year, 800 year flood level that might be in Vernon,

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we're trying to evaluate whether or not this is a potential for piping through whatever soils that may be above the bedrock base that's there. You get piping through, potentially you get some slip and slope failure, and then you might lose the neck under certain conditions.

Quite frankly, we're not really convinced the study has a lot of merit, because under those conditions you pretty much have the same tailwater at Vernon as you do on the head pond, and Vernon is basically a ripple. So if it failed, it would not change anything downstream, but we're conducting an evaluation, as requested by the Dam Safety component of FERC versus the Licensing part.

13 And then lastly, out of the Dam Safety Group, we 14 continually look at conditions that might change or the 15 hazard classification. Hazard classifications of dams 16 drive whether or not you develop just an EAP from a 17 notification standpoint, or an EAP that includes an 18 inundation mapping and provides public and downstream 19 communities with the opportunity to evaluate what areas they 20 need to evacuate from versus not.

21 Currently, Vernon does not, is not required to 22 have an EAP, but we're aware of some houses that were not 23 quite convinced of the elevation; and FERC is not quite 24 convinced of the precise elevation versus the impact if the 25 dam were to breach; and so we're doing an evaluation again

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1 to see if there's a change in that. And that's a major driver for the clarification, so we're evaluating that. 2 Along the lines of assessing impacts on our 3 4 project, in general, relative to potential new operating 5 scenarios or potential new constraints that get proposed, 6 potentially different water regimes that might occur going 7 forward under what may be a changing hydrology or precipitation pattern, we have a river operations model that 8 is an analytical tool. So out of that tool we'll be able to 9 evaluate the differences between our baseline conditions 10 11 which are today, how we operate, all the minimum flows, our 12 gate capacities. We're using historic inflows that are 13 natural into the system; we'll run them through the entire Connecticut River and look at, sort of establish a baseline 14 15 to evaluate alternatives that are getting proposed to us 16 from -- we anticipate alternatives proposed to us from area 17 stakeholders to consider this or that, and what not.

18 So the model has, as I said, hourly inputs on 19 inflow; it's an hourly dispatch model. It has a long term 20 scheduling component of it, so it looks many, many months in 21 advance so that we're not depleting a water resource we need 22 and plan for, and typically operate around, that would be 23 such that as a reservoir rule curve or anticipation of the 24 need for water later on in the year, provide minimum flows. 25 It has a planning tool to make sure that water is available

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to meet those constraints; and at the same time, once it allocates the water on a weekly basis, it has a very, very dynamic scheduling component that takes into account not only just the inflow but what the best operating scenarios might be to utilize head and power capacity, but also reflects what energy prices might be during that weekly time period.

8 So it's meant to dynamically respond to the kinds 9 of conditions we respond to under normal conditions.

10 Then out of that, as we do have a couple of 11 downstream projects that are also up for relicensing, we'll 12 provide some of the output based on various scenarios of the 13 discharge that comes out of Vernon as a result of those 14 operational changes; and they also have a model that will 15 evaluate the continued impacts on their project downstream.

16 In terms of water quality assessments, we've 17 conducted several, especially with Vernon, over the past 18 several years. Most recently, for example, since our Vernon 19 amendment where we replaced five units, they were 1907 units, vintage units with modern, efficient water wheels. 20 21 We have requirements to monitor the impact of those new 22 units on water quality parameters. So we've had a 23 monitoring program that basically takes some sampling and 24 some profile and some basically monthly sampling when those 25 units are running, during sort of low-flow conditions.

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We've been, as many of you are familiar with the river, we really had this requirement for almost five years, and it really hasn't been since the last two years since we've had the low flows that might have constrained water resources so that you had high temperatures and we've had such high water during the summer months, except for the last two years.

So we've been doing that. We've also, as part of developing baseline information for the PAD and this further evaluation during study discussions, that will follow the scoping period, we did some baseline water quality and monitoring where we did do some continuous monitoring since probably when? About June we got those in, mid-June, late June, something along those lines.

14 So we've had some continuous monitoring, and 15 we're able to correlate the information and the water 16 quality changes with our operations, but then to have done 17 some profile samples as well in the reservoirs, to try to 18 look at parameters such as primarily DO and temperature, and 19 then some other nutrient-related parameters that were 20 specified by the state water quality folks.

This past few years, we've been cooperatively working with the Conti Lab to evaluate the movement and tracking of American shad. Actually, we've been doing it jointly with the downstream project, but they've also been involved in this project. So the idea behind this is that

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1 we're tracking shad, working through the various projects on 2 the Connecticut River and up through Vernon. And this past year we had a very wired fish ladder and a series of reach 3 4 below Vernon to the Turners Falls and then those folks had a 5 lot of different monitoring systems going on to try to 6 assess the effectiveness of your ladder, timing and delays 7 that might be occurring in the upstream, and even downstream in our sake, downstream migration of adult shad in the 8 9 spring and early summer.

10 Then lastly we have of late conducted a number of 11 cultural resources evaluations, but in the case of Vernon, 12 as part of our amendment application and then post-amendment 13 requirements, we had done all of the what we feel are the 14 necessary cultural resource investigations for historic and 15 archaeological resources. In that amendment proceeding, and 16 then subsequent to, so a lot of that has already been done 17 in the case of Vernon.

18 So we have a broad, and we've had a system-wide 19 historic evaluation of our facilities for over 15 years now; 20 but we updated that. In the case of Vernon, we've conducted 21 what are called Phase 1 Archaeological Surveys where we send crews out there and they look at potential areas that may or 22 23 may not be directly caused by operations, but that clearly 24 in your project boundary you have erosion going on and you 25 might have some sort of a trail or something that might be

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1 going on along shoreline areas where they're exposed or 2 potential for exposing historic or prehistoric resources. 3 That was all completed; we signed, and as a side 4 component of that you develop a programmatic agreement which 5 basically is an agreement with the states, and FERC is a 6 signatory, and the licensee, and it basically says these are 7 the kinds of things we want you to -- you're agreeing to 8 treat your historic resources in this manner. One of the 9 primary things that we've always had out of those 10 programmatic agreements is to develop a plan. Essentially it's a management plan, how you basically identify, monitor 11 12 and manage your historic and cultural resources throughout 13 the life of your project. So that is actually all in place for Vernon. 14 15 And that's it. Any questions? 16 MR. HOGAN: Thank you,. 17 MR. RAGONESE: Go ahead. 18 MR. SCUDDER: Where does the power go from 19 Vernon? MR. RAGONESE: Primarily, Vernon transmits its 20 21 power through the high voltage grid in New England, so it's 22 primarily marketed -- well, it's marked through the New 23 England power pool or the New England region. ISO New 24 England manages that system; and other than that, I don't 25 know if there's any that might get transferred to another 26

power pool theoretically; but generally speaking, it's a New England power resource.

3 MR. SCUDDER: My understanding is it doesn't come 4 into Vermont.

5 MR. RAGONESE: It doesn't come into the Vermont -6 - well, it originates in Vermont, so it has to. And it's an 7 integrated system. So for example if a transmission line 8 that goes to Bennington or let's just say -- say Bennington, there's a particular connectivity that meeting to Bennington 9 10 and might be coming from some other plant or hydro station Cavendish, Vermont or something like that, and that trips 11 12 Well, Bennington needs power from somewhere, and it off. 13 could theoretically come from a different route. And that's 14 really how it works; it's not to say that we map and know where electrons move along the outside of the conductor, but 15 it's all connected, and it's essentially a pressurized 16 17 system. I always feel like, you know, you cut your arm, you 18 know, more generation, your heart starts pumping more; it's 19 kind of the same way. It has to be a pressurized system. 20 You need more blood, you generate more blood, or move more 21 blood. 22 MR. HOGAN: That's an interesting analogy.

23 (Laughter)

24 MR. RAGONESE: You want my pumped storage one? 25 (Laughter)

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1 MR. FAIRCHILD: Quickly, one question on the 2 water quality. 3 MR. RAGONESE: Oh, yes. 4 MR. FAIRCHILD: What are the parameters you're dealing on that? 5 6 MR. RAGONESE: I knew I'd get passed that, and I 7 know that we have nitrogen, phosphorus --8 MS. SCANGAS: Nitrates. 9 MR. RAGONESE: Nitrates, yes. 10 MS. SCANGAS: E.coli. 11 MR. RAGONESE: E.Coli might have been one. I'm 12 not sure what they all were. I can look it up for you if 13 you want. 14 MR. JEWELL: I can go somewhere and find out. 15 MR. RAGONESE: You can as soon as we publish it. 16 It hasn't gone out yet, but it will be very shortly. 17 AUDIENCE: Well, it's also in the PAD. It 18 describes it in the PAD. 19 MR. RAGONESE: Oh, yes, you're right. There is 20 summary information about that in the PAD, because we did 21 try to summarize the results before we published sort of the 22 study report. 23 MR. HOGAN: Are you monitoring for basically all 24 state water quality standards? 25 MR. JEWELL: Not all. 26

1 MR. RAGONESE: Not all. We responded to what the 2 state asked us to do, is really what I would say is a better 3 word. Our original study scope probably had some, was more limited for some of them, and we -- I think we got feedback 4 5 from both states and we adjusted it and accommodated 6 whatever they would want. 7 I'm not sure what -- I won't say anything about 8 the Vermont standards, because there's a lot of different 9 things that might have required --. 10 MR. HOGAN: But there is a summary in the PAD. 11 MR. RAGONESE: There is, correct. 12 Any other questions? 13 MR. HOGAN: All right. One item I neglected to cover is if you intend to 14 15 follow comments or study requests with FERC, do you plan to -- include in the study? 16 17 [Interruption.] 18 MR. HOGAN: If you think you might be filing a 19 study request, I'll address our study criteria -- I'll 20 probably do that anyway, just in case. 21 On the color flow chart that I gave you, on the 22 last page there are the Commission's study criteria, study 23 plan criteria; and we ask that any study requests address 24 these criteria. There are seven criteria, but 2 and 3 are 25 mutually exclusive, so you only have to address six of them. 26

This is the litmus test that the Commission uses to evaluate study requests. So these study criteria are very important when addressing or requesting a study. We have a -- the guides.

5 We have a guide book or a handbook on addressing 6 the Commission's study criteria. This is a new document, 7 made available last March, and it's got basically examples 8 and descriptions of what we're kind of looking for when you 9 address the criteria; it should really help you prepare 10 study requests that will meet our needs to say, this is a 11 valid study or not a valid study.

I really suggest that you take a look at this if you do want to put forward a study request; this should help you a lot with crafting those requests.

15 That's the end of our spiel. I want to hear 16 what you have to say that concerns the local project, if you 17 have any -- or this gentleman in the back. You're so far 18 back there, I keep forgetting you're back there.

MR. FAIRCHILD: Not really. I'm Michael
Fairchild, I live in Brattleboro. I actually grew up here.
I guess a little bit of history; I can remember when raw
sewage used to come out, just 100 yards from this building;
kids would change the lock, and since then -MR. HOGAN: From this building?

25 MR. FAIRCHILD: 100 yards.

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But I have a basic question. I'm actually on the town conservation commission, part of the Quinatucquet Division, sort of keeping track of this.

My basic question is, the dams are up for relicensing; there's three of them. And when was the last time they got their license? How much of a gap of time has there been until today? And how long will this next permit last, before it starts all over again?

9 MR. HOGAN: I'll answer the second question 10 first. We are, under the Federal Power Act, the Commission 11 can issue licenses for a term of 30 to 50 years. To tell 12 you exactly what that term will be at this point in time, I 13 can't tell you; but I can tell you it will be between 30 and 14 50 years if the Commission chooses to issue a license.

15 The way we evaluate the time frame within that 30 16 to 50 years is we look at, what are the requirements that we 17 are putting on the new license; how much new construction is 18 involved, what kind of -- what are the new protection 19 mitigation or enhancement measures that are being required by the license; and we take that added concern into -- or 20 21 those added requirements into consideration when we 22 determine the appropriate license term.

An original, unconstructed project that's going to be built tomorrow that we license is going to get a 50year term, for example. It's brand new construction,

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everything is new, and that's pretty standard it will get a
50-year license. A project that's up for relicensing that
gets no additional new requirements is going to get a 30year license, from my experience. If there's something in
the middle, it could be 35, 40, 45. It really depends on
what the license looks like when it's issued.

Now regarding the last license term, John, do you
know when the license is issued --?

9 MR. RAGONESE: It's interesting, because -- you 10 illustrated a good point by your description of the sewage, 11 because these were relicensed in the mid-, the second half 12 of 1970. It was just post-Clean Water Act. And so there is 13 a significant change of public use as well as water quality.

MR. FAIRCHILD: Well, I bring up this point, because last night I spoke -- I'd actually spent time on the Connecticut River from basically March to December, probably 100-plus days a year with a certain kind of activity I'm involved in, and I've been doing it for 20 years. So I have a lot of experience to sort of see the flow and change.

So my concern would be -- my primary concern is recreation, and I think people -- I'd be concerned about things being sort of locked in and not being flexible, because I think in the last 10, 20 years we've seen a marked involvement of people that are recreating on the Connecticut River. I mean, it's just growing by leaps and bounds.

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1 So I'd be concerned about parameters or a 2 contract that's sort of locked in but then not have any 3 flexibility, and we can't sort of wait until say 30 to 50 years before we have to amend it or try to get some 4 5 flexibility there. So I quess I'm -- you know, 10 years we 6 could see; right now it's growing by leaps and bounds and I 7 think 10 years you could be at a different place and 8 different needs and more needs; then if we're kind of locked 9 in here, they can't really be addressed. 10 MR. HOGAN: That's a fair statement, and we deal with that regularly in relicensing now, in licensing. 11 12 We'll take, at the time that we do our 13 environmental analysis, we'll take our best estimate of 14 looking forward to recreation demand over the term of that 15 license. And oftentimes, when appropriate in a license 16 recommendation that comes out, it will have built in 17 requirements for recreation management plans that are 18 flexible to address future recreation needs or demands, or 19 evaluate that throughout the term of the license. 20 So we do have -- it's not uncommon to see kind of 21 an adaptive management approach to various resource needs 22 throughout the term of the license. 23 MR. RAGONESE: Yes, that's a good point, I think, 24 because there are oftentimes license requirements that 25 really are saying, 'You, the Licensee, has to develop a plan

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1 to address this.' And once a plan gets adopted, the plan is 2 part of the license, but really is more of the operational 3 driver as to how you deal with things, as opposed to it 4 being written up in the language. 5 MR. HOGAN: Right. So if the plan says we're going to revisit this issue every 5, 10, 15, 20 years, that 6 7 becomes a requirement of the license. 8 Does that address your question? MR. FAIRCHILD: Yes. Thank you. 9 10 MR. HOGAN: Other questions or comments? 11 MR. SCUDDER: When you had the tours on the 12 river, my recollection is there's a different team, and you 13 were the key guy but -- are they going to work together, or 14 is there a transition period? MR. HOGAN: Many of us were here on the tours. 15 16 MR. SCUDDER: Okay, sorry. 17 MR. HOGAN: Show of hands? 18 MR. SCUDDER: My memory isn't that good. Thank 19 you. All right. 20 MR. HOGAN: And just for the record, state your 21 name, please. 22 MR. SCUDDER: Hervey Scudder. 23 MR. FAIRCHILD: Thank you. 24 MR. FOX: Gary Fox, from Bellows Falls. And I'm 25 wondering, if with the Vernon plans there had been any 26

1 pumped storage as part of that facility plan? 2 MR. HOGAN: Currently there's none proposed that 3 I'm aware of. Has there been in the past? 4 MR. RAGONESE: There are none that you're aware 5 of. 6 (Laughter) 7 There was a time, a long time ago MR. RAGONESE: 8 during the development of nuclear power plants in particular, there were a number of studies. You might have 9 10 been involved in New England Power as well. But there were 11 sites along the Connecticut River. 12 One that was preliminarily looked at was of 13 course the Quinatucquet Mountain is pretty high, but it was never seriously even proposed beyond that, that early 14 15 assessment. MR. FOX: Are those studies available anywhere? 16 17 MR. RAGONESE: No. There weren't studies. 18 MR. FOX: Was Fall Mountain ever part of that 19 exploration? 20 MR. RAGONESE: Fall Mountain was a site that was 21 explored, and there were some original sort of impoundment 22 designs, not powerhouse and engineering; but that's no 23 longer -- first of all, it's not project land, it's not 24 owned by TransCanada; I think it's owned by the Nature 25 Conservancy now, I'm not totally sure what the disposition

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1 of that location is. But it was a potential site, for lack 2 of a better word. MR. HOGAN: And just for clarity, there the 3 4 relicensing at this point in time there's no intention to 5 look at that? MR. RAGONESE: No. We are not planning to build 6 7 pumped storage associated with Vernon. 8 MR. HOGAN: How about any others? 9 (Laughter) 10 MR. RAGONESE: None that I'm aware of. 11 MR. HOGAN: Other questions or comments? 12 Any resource areas of concern? 13 MR. JEWELL: Actually, I should maybe -- I'm 14 wearing several hats tonight. I'm the Zoning Administrator 15 in Westminster, I'm an environmental consultant. I kayaked the river from Littleton to -- well, I tried to get all the 16 17 way to the Sound, but I haven't done that yet. 18 MR. HOGAN: And your name? 19 MR. JEWELL: I'm Bill Jewell. 20 MR. HOGAN: And will you tell us before each 21 comment which hat you're wearing? 22 MR. JEWELL: Yes, I will do that. 23 Zoning Administrator hat first. There seems to 24 be a communication problem with releases. Around the time 25 of the big flood, there was a call to the firehouse and left 26

a message, but nobody else got that message that there was
 going to be a release.

And I was wondering if there's some thought about 3 how those communications can be more effective. We have 4 5 mutual aid from Kean (ph) that actually sends out little 6 notices that everybody ought to know about, whatever is 7 going on. So I was thinking that might be a better place to 8 start with the communication instead of calling the firehouse answering machine where nobody's going to be there 9 10 maybe more than once or twice a month. 11 MR. HOGAN: Okay. 12 Let me you push you for a little more 13 information. 14 Is this an emergency type release? 15 MR. JEWELL: I think it was. Yes, I think that's 16 why everybody got pretty upset about it. 17 MR. HOGAN: And the current protocol is to notify 18 the local fire department? 19 MR. RAGONESE: Let me try and understand. 20 Which is the community again? 21 MR. JEWELL: Westminster. 2.2 MR. RAGONESE: Westminster. So we have EAP 23 plans, notification charts, those are drilled annually. 24 Most recently, in 2010, we had probably one of the largest 25 conducted drills in the country. We try to have the right 26

plan in place, but the protocol is to work through the state procedures to notify the communities, and we really do try to make sure that we understand, so we're thinking beyond what the -- our requirement is to notify the emergency management official, and they have requirements beyond that, but we like to try to push them to make sure they're not missing a town anywhere.

8 So I can't directly speak to what the situation 9 is that you are talking about, even though I am the 10 emergency action plan coordinator. I do know there is a 11 protocol that we typically go through in New Hampshire, the 12 state police barracks, and they do the notifications to the 13 communities. I don't know exactly which barracks covers your 14 area. I'm not sure what the situation --.

15 MR. JEWELL: Well, I think we do the mutual aid 16 thing, which covers most of the towns in this stretch of the 17 river.

18 MR. RAGONESE: Right. King Mutual Aid, I think19 is the name.

20 MR. JEWELL: Yes, King Mutual Aid. And my guess 21 is that would be the best place to --

22 MR. RAGONESE: That is what we do. 23 MR. JEWELL: Okay, but somehow or other that 24 didn't happen.

25 MR. RAGONESE: I'm not sure of the situation.
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1 MR. JEWELL: That's all right. I'm just --2 MR. RAGONESE: That is our procedure. 3 MR. JEWELL: One of the things that we're 4 concerned about is somehow or other that works -- at least, 5 whatever happened for that emergency release doesn't happen. 6 The other part of the probable was, all right so 7 we're going to do an emergency release, and you give it in cubic feet per whatever, the thousands, roughly. And the 8 9 guy in the firehouse is not going to know what that means. 10 So it would be nice to have some kind of 11 parameter about how much percentage of the flow that's out 12 there now is going to be an increase. 13 MR. HOGAN: Okay, or a stage elevation. 14 MR. JEWELL: I'm not sure that would even help. 15 Part of the problem is that the flood management maps by 16 NFIP are not very accurate. So we have a 500-year flood, 17 and on the map with 500-year whatever didn't get flooded. 18 And some of the places that were even located as hundred 19 year floods got flooded. So there's a real problem with kind of 20 21 understanding where that river is going to go with these 22 releases. It's something that needs to be sorted out, and I 23 don't know if it's this licensing program that needs to do 24 that or a similar place else; but really, that seems to be 25 an important component that's kind of missing; is that

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1 accurate maps about how a flood is going to actually work. 2 And whatever the release is, how much fluctuation that's 3 going to be, however way the guy in the firehouse can 4 understand, or the emergency management group, whatever. 5 MR. HOGAN: John, you review your emergency 6 action plan --7 MR. RAGONESE: Annually. MR. HOGAN: -- annually. Is that done with --? 8 MR. RAGONESE: First of all, in the case of 9 10 Westminster, it would be affected by the upstream dams, not 11 Vernon. 12 MR. JEWELL: Right. 13 MR. RAGONESE: Just to make that clear. 14 And the upstream dams that are immediate, which I 15 think is what, the release that he's speaking of is a low 16 hazard dam, which is not going to incrementally increase; 17 but what we did is we proactively tried to communicate that 18 we could no longer hold back the high flows and we were tripping portions of the dam that typically are not tripped; 19 20 and so we initiated what's called a nonemergency event, 21 categorization, in our EAP. 2.2 Westminster actually gets a copy of our EAP even 23 though we're not required to send -- every community gets a 24 copy of our EAP, and there's a procedure as to how they are going to be notified in that document. 25 26

1 MR. HOGAN: My question was, when you review it 2 or revise it each year, is that done in consultation with 3 the communities?

MR. RAGONESE: We don't -- what we do each year is make sure that the notification numbers and charts that we have are accurate. So it's really a -- it's a number thing. We do a testing and training program internally, and we externally operate the notification chart to make sure that there aren't numbers that have changed and what not.

10 What is done on a five year basis is a functional exercise where we try and go beyond that and expose the 11 12 states and to the extent that the communities wish to be 13 involved, or any emergency management, dispatch centers or 14 whatever it might be, they get more, they become educated 15 and we run through the suitability of our notification 16 program for -- and then we adjust, so there's a rewrite of 17 the entire emergency action plan that occurs on a five year 18 basis, to make sure it adequately responds to what the 19 state's programs are. And quite frankly, since the --20 between the last one and the one before we had the 9/1121 incident and the whole procedure in both states was very 22 different; and so there was a very, very significant rewrite 23 and drill procedure associated with it.

24 So it's very, very serious to TransCanada; it is 25 one of the most serious aspects of it. What I'd like to do 26

1 is just give you my card and we'll make sure that -- you can 2 address it through here, but I'm not going to wait five years for this, for your issue to be resolved. 3 4 MR. JEWELL: Sure. 5 MR. RAGONESE: I'd be glad to make sure that 6 whatever misunderstandings or clarifications or 7 modifications that need to be done, we'll make sure it 8 happens. 9 MR. HOGAN: I'm glad we could bring you together 10 tonight. 11 MR. JEWELL: Agree. 12 That's not a problem at all. MR. RAGONESE: 13 MR. JEWELL: All right. So there's two parts to 14 the communication problem. One is getting notified in the 15 right way, and the other is understanding how that's going to affect the towns or places that might be flooded. 16 17 So somehow or other I think that needs to be part 18 of the process. And of course the other part of the process 19 is, we do have all these flood elevation maps that don't 20 seem to be very useful. In Westminster, I get something 21 like eight or nine LOMAs a year, which changed the map, 22 because the people run the numbers themselves and find out 23 that they're either in the flood plain more than they 24 thought or they're not in it. 25 So somehow we need better information for that; 26

1 and again, I don't know if this is the place to do it, but 2 it needs to be done somewhere. MR. HOGAN: Can I ask you, you said eight or nine 3 4 It's revisions of the map, 5 MR. JEWELL: LOMAs. 6 and you do it -- you provide NFIP with a bunch of 7 information. 8 MR. SEARS: It's through FEMA. MR. JEWELL: Through FEMA, right. And they check 9 10 it out, and then if they agree, then they issue a thing 11 saying "your building is not in the flood plain, or it's 12 above the flood plain, or it's only 8 inches or whatever it 13 is. 14 MR. HOGAN: Okay. 15 MR. SEARS: And then FEMA may or may not issue 16 corrections to the flood insurance rate maps. 17 MR. JEWELL: Right. That's the other part of the 18 Which probably isn't your fault, but somehow or problem. 19 other we need to deal with that. Okay, one of my hats is I'm an environmental 20 21 consultant; I deal with almost all the stuff that you're 22 talking about. And I kayak on the river and I dive in the 23 river. And I've been noticing stream bank erosion; it seems 24 to be related a little bit to the rise and fall of the 25 things, but recently -- we were just hearing, there's more

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power boats on there, so I'm wondering if maybe this no wake thing, or the making a wake with these power boats is making this rise and fall fluctuation greater. I mean, I see sand bars moving in a weekend. I mean, they'll be there one day, and I ground myself out with the kayak on the next day.

6 There's a certain dynamic that you would expect, 7 but I'm beginning to think this may be a little more than maybe should be. There should be some kind of way to at 8 least address that, that stream bank erosion which seems to 9 10 be partially related to the rise and fall and partially 11 related to the increased recreation use. Because I notice 12 this happens more on weekends than if I go out on a Monday, 13 or something like that.

What else. Well, the other thing I was worrying 14 15 about, the migratory species. We heard about shad, but I 16 keep wondering about the salmon and the various species of 17 trout spawn at different times of the year, and I wonder if 18 that's part of the thought. I think, is it rainbows do it 19 like late in the summer or something like that, and salmon 20 do it early in the spring; that kind of thing. I was 21 wondering if anybody's been thinking about how all those 22 migratory fish things work.

23 MR. SEARS: That was one of our --24 MR. JEWELL: I saw that in the thing there, but 25 it didn't really spell out the various species that you were 26

1 looking at.

2 MR. SEARS: Yes, we do that by design; we're 3 never wrong that way. 4 (Laughter) 5 MR. JEWELL: I think those are my major concerns so far. 6 7 MR. HOGAN: Primarily SALMODs? 8 MR. JEWELL: Yes, I think so. 9 And that has to do with suspended solids, which 10 looks like -- and the temperature of the water. Those are 11 the two problems that concern us. 12 MR. FOX: Gary Fox again. I don't know if this 13 is the right place for this, but just what Bill Jewell was 14 asking about the dam. During Irene, I think the dam totally 15 blew out. MR. RAGONESE: 16 No. 17 MR. FOX: It didn't? MR. RAGONESE: --18 19 MR. FOX: Well, no, but the gates. 20 MR. RAGONESE: I'll give you an explanation, a 21 little bit. So again, we're talking about Bellows, which is 22 upstream of Vernon, or are you talking about Vernon. Or are 23 we talking about both? But essentially --24 MR. FOX: Bellows and then the flooding in 25 Westminster. 26

MR. RAGONESE: And Earl and Edwin can correct me if I'm wrong, but basically the area that would -- primarily the effects of Westminster. And during Irene were unregulated flows that came primarily into Bellows below the Wilder Dam. We had some spill at Wilder Dam, but we didn't have nearly the precip from that event upstream of Wilder.

So what happens is -- I'm going to give you an analogy about CFS. And you can use it when you're trying to teach your kids or grandchildren or whoever, but a cfs is essentially a basketball; that's a cubic foot. So when you hear me say 10,000 cfs, that's like looking across the river, and you're seeing 10,000 basketballs go past you in a second. That's just to give you a sense.

So Bellows Falls is about 9,000 cfs is what our station capacity is, along those lines. And that is a canal-driven station into the station. And then there's a dam that feeds water into that canal, and the dam is what is designed to pass all the extra flow that you can't put through your station; we certainly don't want to put water through the windows, we just want it to go the dam.

So we have gates, primarily, and those gates -dams typically have gates or conveyance structures that are controlled; and then they have structures that you would fail if you need to. And at Belllows there are two large what we call roller gates -- they're massive, massive gates.

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What are we talking about, 40,000 CFS? 29 each to a maximum
 of 60,000 cfs.

That typically handles most seasonal flows and high water events at Bellows Falls. So we gate them, and as the flows start to recede, we shut the gates off, and it's very sort of smooth.

7 The rest of the dam has, we can think of is like 8 I beams that sit in a little pocket, boards behind them. 9 And we can trip those beams, and the beams all go down, and 10 then all this water goes down the river when we need to; and 11 those would typically be activated when the flows are above 12 the gate capacity.

We have at Bellows our systems of being able to pull the boards out incrementally, before the whole beams have to be tripped. So during say an event like Irene where the flows were almost to 100,000 cfs at Bellows I believe, and typically at 90,000 cfs you have to trip the stanchion bays; you're going to overtop them. So you've got to trip them before you gotta get your men off the dam.

And that's what we're talking about, is we open all the gates, we removed all the boards we could without having to trip them, and we were at like 98,000 cfs, and I was there that night; and we decided we've got to trip them, we can't hold and we can't pass any more water without dropping these.

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We don't like to drop them because the crest is much lower than the crest of the gates. This is a large section of the dam that we take out. So I believe, and I don't know, nobody's said it to me; but I believe this concept of the dam failing is because nobody ever rarely sees the stanchion bays get tripped.

7 So you don't even see the dam at that point, because the crest of that is so low. And we literally have 8 to wait until the river recedes to a point lower than 9 10 typical. So if you were upstream you probably didn't see 11 the river ever that way, probably for the last 40 years 12 either, or whatever the number of years is. The river was 13 very narrow, and we spent one day and put it all back 14 together to get the river back up. We don't like to trip 15 the stanchion bays; it exposes a lot of -- you know, typical areas of the project that we don't -- but you have to in 16 17 certain flows, and I think that's what occurs. And that's 18 what triggered us to decide. You've got to let people know 19 that they're going to see things, and they're going to see 20 something we're doing at the dam that they rarely ever see. 21 Even though there's no failure, there's no dam safety 22 emergency and there's no evacuation emergency, it's more 23 like "warn people." And you don't see it and hear it for 34 24 years, people are not quite clear what you're talking about, 25 and you're trying to get this message out very, very

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1 emergency-ridden situation.

2 MR. FOX: So that's why, it explains why it 3 looked to people like the dam blew out --4 MR. RAGONESE: Correct. MR. FOX: -- because the --5 6 MR. RAGONESE: Because there was nothing there. 7 MR. FOX: But is there something -- if the dam had a capability of handling higher flows, would that have 8 stopped the water from going a mile across Westminster and 9 10 flooding up like five feet across Route 5? 11 MR. RAGONESE: It's fair to say if -- I don't 12 know exactly what the alternative might have been. We did, 13 when we tripped the stanchions -- and for example, there's 14 150 feet, we have a procedure that says we trip them 20 feet 15 sections at a time to try to minimize. We also -- there's 16 no physical way to trip everything at once; what we also try 17 to do is to the extent that we can, we start closing the 18 gates because it's sort of the counter -- we let these go 19 but we shut this off to try to not have -- we try to 20 minimize the downstream way. I can't tell you to the extent 21 that it could have been somehow prevented differently. 22 One of the ways it could be modified would be if 23 you had full gate capacity you'd have much more control; but 24 typically that's an extremely large investment and it's for 25 an occurrence that happens once every 30, 40, whatever it 26

1 might be that we have to trip stanchion bays, where we
2 couldn't pull the boards.

MR. FOX: There's just the question that, are these events more frequent with climate change? Will they continue to -- I guess with Sandy it didn't flood that area, but I guess that's the only --.

7 MR. RAGONESE: It's a good question; will these 8 happen more frequently. I can't answer that for you. We do 9 see extreme events, but the dams are capable of passing 10 those flows. And if they weren't, you wouldn't see any 11 downstream effect, because that's why we characterize it as 12 a low hazard. If it fails, it's not going to have any 13 incremental rise more than a foot downstream.

14 MR. FOX: Thank you. Helpful.

MR. HOGAN: Other comments or concerns regarding the projects?

17 MS. FRYE: My name is Betty Frye, I live in the 18 Town of Guilford, and I'm interested in the relationship to 19 recreation along the Connecticut River. What is the 20 responsibility of TransCanada to recreation in terms of even 21 siting or developing more, or marketing and promoting them? 22 Are there brochures, are there maps? Is there something in 23 the pipeline of encouraging more access to the river, or? 24 MR. HOGAN: What should the relationship be?

25 What would you like to see?

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1 MS. FRYE: Well, one of the statements that has 2 been forever in this community is that 'we turn our backs to the river.' And it's unfortunate, because it's so 3 4 fantastic. So there should be more access to the river. 5 You own at Harriman Reservoir, that way? That's 6 7 MR. RAGONESE: That's TransCanada. And the 8 difference is primarily the projects on the Connecticut River that we're talking about for relicensing; Vernon, 9 Bellows and Wilder. Bellows has a certain amount that's 10 11 inherently greater; but most of the land is not owned by 12 TransCanada, it's private land. Whereas our other projects 13 typically have thousands and thousands of acres that 14 surround them. They were built at a different time; they 15 were purchased and developed at a different time. But these 16 are typically, the project lands that we do own are 17 generally speaking around the dams and the facilities that 18 were created at the time of development. 19 Vernon was private land, and they built a dam; 20 they didn't buy all the land going upstream. Probably 21 predated the Federal Power Commission. I can't remember 22 when that happened.

23 MR. HOGAN: I can't, either.

24 MR. RAGONESE: So who knows.

25 So there are some distinct differences.

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And you can answer the exhibit for recreation and
 planning.

MR. HOGAN: Well, regarding how the Commission 3 sees licenses and recreation, we recognize that our licenses 4 5 are using a public resource for hydropower generation, 6 things of that nature. And one of the ways that we often 7 will address that, if you look at what are the recreation needs for the area, the community -- and that will be part 8 of our analysis, and take into consideration what the needs 9 10 are. It doesn't mean that we're going to go out and build all kinds of recreation facilities, but it does mean that we 11 12 will address that there is some responsibility for providing for recreation, typically in our hydropower licensees. 13

MS. FRYE: But that is the difference. Only because, like I do go to the land, and where they do have access to the land that's yours, you do a wonderful job.

MR. RAGONESE: In each project we have a recreation plan and a requirement. We have boat launches and picnic areas that are associated with each one, and we identify other public access points as part of the recreation exhibit. But again a lot of it is private land, a lot of people don't want to give access to the others.

23 What we've done in the PAD, and some of the 24 resource information in the PAD is we have identified, which 25 is a more recent phenomena, is conservation easements where

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people have private land but they have restrictions, and some of those restrictions have opportunities for the public to access, often by foot.

4 So we try to identify just, even in the PAD where 5 there are those other opportunities that go beyond 6 TransCanada's ability to then access the resource or provide 7 for camping and other recreational opportunities. So that's a preliminary assessment that you find in the PAD. 8 It's 9 likely we're going to have to do a more a thorough 10 assessment to identify whether or not, what's the demand, 11 essentially, for that going forward over the term of a life; 12 you know, is it adequate, are those needs being met by not 13 just TransCanada but just are they available in your project 14 area.

So that's the kind of stuff that we report on.
MS. FRYE: And I don't think that analysis has
ever been done in a thorough way.

18 Maybe you know, Mr. Fairbank, more.

19 MR. FAIRCHILD: Fairchild.

20 MS. FRYE: I'm sorry, yes. About in this 21 community.

22 MR. FAIRCHILD: Some of the boat launches, 23 they're not TransCanada, they're Vermont Fish & Game. And 24 so there's one in Hutney, for sure. And actually up on Old 25 Ferry Road; you may be familiar with that, that's another

1 one.

2 MS. FRYE: Uh-huh. 3 MR. FAIRCHILD: And as part of the diversion 4 program, that they get to actually taken care of by people that are in the diversion programs; you know, for 5 6 maintenance and the cleanup. And if you spend any time, 7 like I do, going to boat launches, you can see the trouble areas, combined with people that are just there to recreate, 8 They're often dead end roads and they're -- I find 9 too. 10 myself going around with a trash bag picking up, you know, 11 McDonald's stuff and beer cans. And there are also -- like 12 safe places. That's a problem, too; they're not lighted. 13 Police don't necessarily go through there often. 14 Especially Harret Cove. I mean, I feel for 15 TransCanada because it's sort of out of the way and it's 16 dead end and -- it troubles me when people, they call 17 themselves sportsmen -- you know, they're fishermen, but 18 they're the kind of people that buy worm containers and just 19 leave them right there. So they can be pretty troubled 20 areas, too. 21 But I think you're familiar with like right at 22 the West River, if you're a kayaker, the one thing that 23 brought more people to the river is the cheap kind of 24

plastic kayaks, because they can bring with them.

people aren't covering any great distances, but they're out

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A lot of

1 on the water.

2 The other thing that limits this area is the fact 3 that the railroad runs parallel to the river for great 4 stretches. So everything on the Vermont side is pretty well 5 limited, in access and points to get in. 6 MR. RAGONESE: It's interesting, when we were on 7 our site tour, we were amazed at how going north, how beautiful the corridors. And then we realized a lot of it 8 9 is driven by the railroad. 10 MS. FRYE: Yes, absolutely. 11 MR. RAGONESE: There's positives and negatives to 12 that. 13 MR. FAIRCHILD: The Town of Brattleboro, right 14 over your house, a new park. I actually race canoes, 15 marathon canoes. And so people talk about maybe we can get 16 access to the water off the new park; but I quickly inform 17 people that's a very unsafe kind of place to try to get into 18 the river, because of the shape of the river that's along 19 this side there's a pretty heavy current, a steady, hard 20 kind of current. But if you're on the opposite side, it's a 21 lot quieter over there as an entry point. 22 And this would be, you know, generally most of 23 the time would be not a safe place to try to enter the 24 river. So there's those kinds of considerations, too; 25 there's easy places to get in and not so easy places, or not 26

1 so safe places.

2	MR. HOGAN: To address your comment about there
3	needs to be some type of assessment of recreation resources,
4	demands of that nature. That is part of our plan. We will
5	be looking at the recreational needs in the area and through
6	our environmental review of the relicensings, any
7	recommendations that we may have; we will do that analysis
8	that you're commenting on.
9	MS. FRYE: Great. And then how do locals
10	participate in that?
11	MR. HOGAN: You're here tonight.
12	MS. FRYE: Well, better than this?
13	Because on that, there's plenty of people out
14	there that it's all how you do it, you know.
15	MR. HOGAN: If we see a need for a survey of
16	recreational use facilities or things of that nature, we
17	will order that to be done. I don't know that that's going
18	to be the case right now, we don't know the existing
19	information as fully yet. But if the existing information
20	is sufficient or there is a survey necessary, the Commission
21	Staff will take that information and we will evaluate the
22	recreation land, the facilities that are available, what
23	types of recreation and Adam, if I miss anything, chime
24	right in.
25	And just look at the quality of the facilities
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1 that are available; and we'll do that analysis, and we will 2 -- you know, 30 to 50 years out, for potential future recreation there. Out of that, we may find that the 3 4 facilities are sufficient or not sufficient; you may have 5 different recommendations from stakeholders such as 6 yourself; and once the license application is filed, you 7 will have an opportunity to say 'Hey, we think, based no the 8 information that's been provided, these are the types of things we would like to see to address our recreational-9 related concerns.' 10

11 We will analyze all that, and determine, are your 12 recommendations supported by the data? Are they not 13 supported by the data? And we'll make a decision. That 14 decision will be put out in draft form, in a draft 15 environmental impact statement. You'll have an opportunity to comment on our analysis; how did we screw it up? And 16 17 then we'll take the comments back. Every comment that we 18 receive on a draft environmental document is addressed. 19 We'll explain -- you may convince us that we had it wrong; 20 we'll explain why we think we got it right. So every 21 comment that we receive is addressed. 2.2 MS. FRYE: Or we could bring examples where they 23 get it real right on other rivers?

24 MR. HOGAN: Again, every project is unique, and 25 we look at the specific environment where the project was

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1 You want to bring examples of what has worked at located. 2 other places--

3 MS. FRYE: Like how do two states work together? 4 MR. HOGAN: Right. Well, if you want to say, in 5 this community they built this gazebo and this was great, we 6 want a gazebo?

MS. FRYE: Yes, that kind of thing. 8 MR. HOGAN: You know, that helps us to understand exactly what you're looking for. And that's a way to 9 10 provide your recommendation to us; we'll evaluate is a 11 gazebo appropriate for this site? And then we will provide 12 our recommendation and our analysis in our environmental document, which is available for comment, and we'll move 13 14 forward from there.

15 So it is a very public process. And that 16 analysis that you were asking about will be conducted, so. 17 MS. FRYE: And then that will be known that at 18 one point it was a designated river byway, the Connecticut 19 River Byway; and at one point Lake Erie, it was running full steam with a real executive director, and all the 20 21 communities were put -- and there were maps and everything 22 like that. We have no idea what happened to that whole 23 program or the designation of this river, and we are just 24 told 'that the feds pulled back' and there's no money or 25 anything -- that's what the local person on the street is

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1 told.

2 I don't know, is that something that we as a community look into more? Or do you help us figure out how 3 4 that fits in or anything? Because it's like tours and detours and byways that help tie in following the river. 5 MR. HOGAN: I think --6 7 MS. FRYE: Are you familiar with this? 8 MR. HOGAN: Not at all. 9 MS. FRYE: Okay. 10 (Laughter) 11 All right. 12 MR. JEWELL: It's part of a recreation plan for 13 people to use the river more. 14 MR. HOGAN: Okay, and if you have a recreation 15 plan --It crosses over this. 16 MS. FRYE: 17 MR. HOGAN: -- that you would like to see or put 18 forward as a recommendation for us to analyze, you're 19 welcome to do that. 20 MS. FRYE: Okay. 21 MR. HOGAN: And that will become part of our 22 analysis of implementing this recreation plan. Why you 23 think it's appropriate or not appropriate, and we will do 24 that. But you have to do that with, this is what we think 25 TransCanada should be responsible for, and -- you know, I 26

wouldn't suggest that you take the entire plan and say "TransCanada, we want you to do this." But if there are components that you think are reasonable, you're welcome to make those recommendations; it's a public process. We seek input from the communities and it gives Adam something to do.

7 MS. FRYE: Well, I get it. I have more of an 8 understanding. Because again, I do go to their facility up 9 at Hirmin (ph) and I read their sign. I know the picnic 10 tables and the fire things and the port-a-potties and the 11 fish -- I mean it's just fabulous, and you realize that they 12 take a really good responsibility, but I guess I never 13 realized that they don't own the land itself. So maybe they 14 can help us work on partnerships where it is private. You 15 know, it can be a public-private -- you know, we can all 16 work together, because we sure could use it. 17 MR. HOGAN: Hint, hint.

18 (Laughter)

MR. JEWELL: I'd like to expand on that just a little bit. This is Bill Jewell in my hat as a recreation person interested in wetlands. There's a Silvio Conti wetland park that goes along the whole river, and I was wondering if there's some way we can identify, as part of this process, identify areas that ought to be included in that Silvio Conti wetland thing.

1 MR. HOGAN: Is it a --? 2 MR. JEWELL: It's a national park. MR. RAGONESE: It's a wildlife refuge. 3 MR. JEWELL: Wildlife refuge, yes. 4 5 MR. HOGAN: That will be difficult. There is an 6 opportunity that you can recommend that areas be protected 7 under the license. But to say, and we're going to lump it 8 in with the U.S. Fish & Wildlife Service - National Wildlife 9 Refuge --10 MR. JEWELL: And those guys aren't here to talk 11 about integrating the licensing process with their process. 12 That's interesting. MR. HOGAN: Well, I can't tell Fish & Wildlife 13 14 Service to adopt these areas. 15 MR. JEWELL: I understand. MR. HOGAN: FERC can make a recommendation or 16 17 require, if appropriate -- and I'm not going to say where 18 it's going --19 MR. JEWELL: I understand, yes. 20 MR. HOGAN: If we found that areas should be 21 protected for various reasons, we could instruct TransCanada 22 to protect those areas. 23 MR. JEWELL: And whether or not they get part of 24 the wildlife refuge is something else. 25 The other thing I was wondering, though, is 26

you're looking at invasive species, and as a person who goes on the river, you sometimes can't get off the shore because of all the invasive plants on the shoreline. And I was wondering what kind of things you were thinking about doing there; because that's just an amazing problem.

6 MR. HOGAN: Right now we're not thinking about 7 doing anything, but we are learning about potential issues, 8 and you've just said these species are an issue, so we may 9 be looking at what are opportunities to address invasive 10 species.

11 MR. JEWELL: It really limits access to the river 12 or from the river to the land. It's just, the Asian 13 bittersweet and honeysuckle along that is just really hard 14 to get through.

MS. FRYE: And didn't with Irene, the whole
Knotwood thing -- we just go crazy?

MR. JEWELL: Yes, that's another problem with native species that would use the plants that normally grow on the shoreline. The only thing that I can figure it's good for is bees. And bees are the alien species in this part of the world, anyway, honeybees.

22 So the invasive species thing is the real 23 problem.

24 MS. FRYE: Real problem.

25 MR. BATTAGLIA: I have a question, if I may.

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1 Brett Battaglia from FERC. From your experience traveling 2 up and down the river, it sounds like you have a lot of knowledge of normal project operations, the normal project 3 4 operations where the pond may fluctuate. Do you see many 5 invasive species in that zone? Or do you see most of the 6 invasive species above that zone, maybe on adjacent 7 properties. Or is it a mix of both? MR. JEWELL: It's a little bit of a mix. 8 Т 9 haven't seen much Knotweed on the river, but certainly the 10 Asian bittersweet and the honeysuckle, some Barberry, is 11 right down on the sand bar that's kind of created by that up 12 and down fluctuation. 13 MR. BATTAGLIA: Thank you. 14 MR. JEWELL: I mean, the bittersweet stuff hangs 15 out over the river, even. 16 MR. HOGAN: Okay. 17 MR. FAIRCHILD: On the recreation, Planning 18 Commission out of Brattleboro has explored 19 bicycle/pedestrian path from Northfield, Massachusetts up 20 through Brattleboro and along the river from downtown 21 Brattleboro up through, by Exit 3. So I guess it would make

21 Brattlebolo up through, by Exit 5. So I guess it would make 22 sense to explore that as a recreation path along the river, 23 and connecting to the one -- the plans. There is a study 24 that was done, I think the agency is the Transportation and 25 Regional Commission. So just connecting to the paths that I

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1 spoke to last night for Bellows Falls. 2 MR. HOGAN: That starts at Northfield, 3 Massachusetts? MR. FOX: I believe so. 4 MR. HOGAN: Identify yourself. 5 MS. BOUBOLIS: Dora Boubolis. Sorry I walked in 6 7 late; we just finished the Select Board meeting. 8 MR. HOGAN: We didn't finish soon enough. 9 (Laughter) 10 MR. FOX: And then I guess I had a question on 11 the eSubscriptions. So I tried subscribing to the numbers 12 that are on the front here, and they come up but they list 13 them under a different name. Like the Bellows Falls one is listed under 1976, created on 6-23-69, amount of kilowatt 14 15 hours. And then the one for Vernon is listed as generated during 1987, created on 1-30-78. 16 17 So is that just -- because everything related --18 MR. HOGAN: Are you going right through the 19 subdocket? 20 MR. FOX: Yes. This is the eSubscription. 21 Just going through what you described at the 22 beginning of the meetings. 23 So all of those came up; the project numbers in 24 here, they're just listed as something else, and really old. 25 MR. HOGAN: Right now you have subscribed, and 26

1 you are subscribed to all subdockets, so you will get 2 everything. MR. FAIRCHILD: Okay, thank you. 3 4 MR. HOGAN: And I mean everything. 5 (Laughter) 6 MR. FOX: On the scoping docket, is the subdocket 7 number for relicensing in there? 8 MR. HOGAN: Yes. You can narrow it. Myself, working at FERC, I do 9 10 not narrow it because some folks, when they make a filing, 11 they may not include a subdocket or they may include a wrong 12 subdocket. So if I did narrow it using the subdocket, I may 13 miss something. Now you may choose 'Well, I'm going to take 14 that chance and I'm going to narrow it down by subdocket.' 15 I subscribe to all, so that in the event that something gets misfiled, I'm still going to be notified of it. 16 17 MR. FOX: Is that the last three numbers? 18 MR. HOGAN: Yes. 19 MR. FOX: Okay, thank you. 20 MR. SCUDDER: I had a guestion about water 21 quality, and I understand that the mercury deposition behind 22 the dams is higher than where the water is flowing. I just heard that; I don't know whether that's accurate. And I'm 23 24 curious, is that a consequence of acid rain? 25 MR. HOGAN: Any known information on mercury 26

1 deposition behind the dams?

2 MR. RAGONESE: No. I mean there is mercury, 3 metholated mercury that finds its way into the river, I'll 4 grant you that. The only thing I can tell you is that after 5 Irene, we actually did have to remove some sediment behind 6 the dam. That sediment was all tested, and there was no 7 toxic material in any of the sediment; I can tell you that. MR. HOGAN: Other comments or questions about 8 potential resources affected by the dams? 9 10 We have a new face. 11 MS. BOUBOLIS: I'm Chair of the Energy Commission 12 at the Regional Commission, and so I'm definitely interested 13 in increasing the energy; but I also have concerns about just the effect on the fish and other species that are in 14 15 there; and I know that there's been some concern about 16 tweaking the fish ladders and trying to do some sort of 17 thing that allows them to flow more freely; and I think the 18 technology is out there to do that, and we should be 19 thinking about that to be able to restore the rivers. 20 The issue is that there are species above the 21 dam, but between the dam -- you know, where it's flowing, 2.2 there doesn't seem to be a lot of wildlife activity. 23 MR. HOGAN: In the riverine reach above --? 24 MS. BOUBOLIS: Yes, where it's flowing. 25 MR. HOGAN: Okay. 26

Other comments or concerns? Well, any questions about the process or what to expect next? I'll talk with you off-line if you're interested. Well, I really appreciate your coming out tonight. This has been very informative for us; it will help us produce a better product, really appreciate the input and look forward to working with you over the next five years. Thank you very much, everybody. AUDIENCE: Thank you. (Whereupon, at 9 p.m., the Vernon evening scoping meeting adjourned.)