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UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

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FirstLight Hydro : Project Nos. P-1889-081 and  
 Generating Company : P-2485-063

- - - - -x                   Massachusetts

TURNERS FALLS HYDROELECTRIC PROJECT

NORTHFIELD MOUNTAIN PUMPED STORAGE PROJECT

Great Falls Discovery Center  
 2 Avenue A  
 Turners Falls, MA 01376  
 Thursday, January 31, 2013

The evening scoping meeting, pursuant to notice,  
 convened at 6:15 p.m., before a Staff Panel:

1 KEN HOGAN, Project Coordinator, FERC

2 MARY GREEN, Geology and soils, FERC

3 RALPH NELSON, Geology and soils, FERC

4 MARY McCANN, Endangered species and

5 macroinvertebrates, FERC

6 BRETT BATTAGLIA, Terrestrial resources, FERC

7 ADAM BEECO, Recreation, land use and aesthetics,

8 FERC

9 ANGIE SCANGAS, Water resources, FERC

10 ROBERT QUIGGLE, Archaeological and cultural

11 resources, FERC.

12 With: JOHN HOWARD, Director, FERC Hydro Compliance,

13 FirstLight Power Resources, Inc.

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

2 MR. HOGAN: Good evening. My name is Ken Hogan.  
3 I'm with the Federal Energy Regulatory Commission, and we're  
4 here tonight to conduct our National Environmental Policy  
5 Act Scoping Meeting for the Northfield Mountain and Turners  
6 Falls Hydroelectric Project relicensings.

7 I'd like to go over a couple of ground rules, if  
8 I may. We are recording the meeting for our public record;  
9 we have a court reporter here today. And so if I could, I'd  
10 like you, if you have comments that you want to have a  
11 discussion with or ask questions, if you could stand and  
12 face the podium, it really helps us maintain our record.

13 Also, if there are questions that are directed to  
14 other members in the audience, if you could stand when you  
15 verbalize your question or your response. Also please face  
16 the podium and the court reporter. He does a lot of lip  
17 reading. It just really helps us to maintain a better  
18 record.

19 AUDIENCE: Could we use your microphone?

20 MR. HOGAN: It's a short cord, and I'm going to -  
21 - we're going to have presentations from other folks, and I  
22 am going to expect -- 'use microphone when presenting.'  
23 It's on my list, yes. But yes. As we go through, and when  
24 FirstLight gives a presentation on the proposal, you may  
25 have some clarifying questions. That's what I'm talking

1 about.

2 But when it comes to the presentations from you  
3 folks, the stakeholders, I would like you to come up front,  
4 use the microphone and provide your presentation.

5 Did I cover everything?

6 THE REPORTER: Yes.

7 MR. HOGAN: Okay. I got very clear instructions.

8 So I'd like to see a show of hands  
9 of how many people are familiar with the Federal Energy  
10 Regulatory Commission.

11 (Show of hands.)

12 MR. HOGAN: Oh, a pretty well-informed room. How  
13 many people have been to our meetings already this week?

14 (Show of hands.)

15 MR. HOGAN: Quite a few of you, all right, and  
16 how many people are familiar with the licensing process?

17 (Show of hands.)

18 AUDIENCE: Sort of, learning.

19 MR. HOGAN: Learning. Okay, all right. So I  
20 didn't see every hand go up, so I'm going to go through my  
21 entire spiel, okay. The format of tonight's meeting is I'll  
22 go through the licensing process. Mary's going to give a  
23 brief background on the Federal Energy Regulatory  
24 Commission; who we are and why we're here, and we'll get a  
25 presentation by FirstLight for their proposal, description

1 of the projects, and then Commission staff will go through  
2 all the resource areas and the resources that we have  
3 identified that may be affected by the hydroelectric  
4 projects all together.

5 Then FirstLight will identify what studies  
6 they're proposing to address various resource concerns, and  
7 then we're going to open up to public statements by folks  
8 who signed on to speak. We'll call names and like I said,  
9 come up here, we'll talk and we'll go through the meeting.

10 Then after the folks who signed up, if there are  
11 others who have decided they want to speak, we'll ask for a  
12 show of hands and open it up.

13 Does that sound like a plan? Okay.

14 Mary. It's a little crowded up here.

15 MS. GREEN: Hello. So FERC, or the Federal  
16 Energy Regulatory Commission, is an independent agency that  
17 regulates the interstate transmission of electricity,  
18 natural gas and oil. We have five Commissioners appointed  
19 by the President, and we have various divisions. We are  
20 under the Office of Energy Projects, Division of Hydropower  
21 Licensing.

22 Our hydropower jurisdiction is from the Federal  
23 Power Act. Commission authorization is required for non-  
24 federal hydro projects located on navigable waters, located  
25 on public lands of the U.S., using surplus water from a

1 federal dam, and located on Commerce Clause waters  
2 constructed after 1935 and connected to the grid.

3 MR. HOGAN: Thank you. I neglected to introduce  
4 my team, so if I could, I'll start over here with Angie.

5 MS. SCANGAS: Angie Scangas, water resources.

6 MS. McCANN: Mary McCann. I'll be working with  
7 endangered species and macroinvertebrates, mussels, and  
8 tonight I'm filling in for Mike Sears, who is sick. He was  
9 here for the rest of the week.

10 MR. HOGAN: For aquatic resources?

11 MS. McCANN: For aquatic resources, right.

12 MR. BEECO: I'm Adam Beeco. I'm on recreation,  
13 land use and aesthetics.

14 MS. GREEN: Mary Green, Geology and soils.

15 MR. NELSON: Ralph Nelson, Soils and geology.

16 MALE PARTICIPANT:

17 MR. BATTAGLIA: Brett Battaglia, terrestrial  
18 resources.

19 MR. QUIGGLE: Rob Quiggle, archaeological and  
20 cultural resources.

21 MR. HOGAN: So regarding the licensing process,  
22 on our handouts, we have this colorful little flow chart.  
23 This is the integrated licensing process. The blue boxes  
24 are what we call the pre-filing phase of the integrated  
25 licensing process, and the green boxes are the post-filing.

1           The filing is the filing of the license  
2 application. So we are currently, each box is numbered; in  
3 the bottom right-hand corner of the boxes, there's a number.  
4 We are currently in Box 4, very early in the process.

5           It's the Commission's NEPA scoping meeting, and  
6 the reason we have a scoping meeting is to identify the  
7 issues and concerns of the local community that will craft  
8 what we analyze in our environmental document; which in this  
9 case will be an environmental impact statement under NEPA,  
10 which is the National Environmental Policy Act.

11           It's your input that's really critical to  
12 identifying what we need to look at and analyze in that  
13 document. It will give us a much better product. So I  
14 really hope you'll engage with us tonight, and I'm looking  
15 forward to some good comments.

16           So we have the scoping meeting tonight. On March  
17 1st is the deadline for written comments. That's your  
18 opportunity to comment on our Scoping Document 1, which is  
19 available and was passed out tonight; comments on the  
20 Applicant's pre-application document, which was the document  
21 that was filed on October 31st, providing a lot of the  
22 background and existing information regarding the projects.

23           You'll also have an opportunity to provide study  
24 requests, and I'm going to talk a little bit about study  
25 requests in a couple of minutes. So that deadline is March



1       1st, it's a very important deadline for all of you. Again,  
2       we want your input. We do a much better job with public  
3       input than, you know, just doing it from Washington, D.C. at  
4       my desk and in a vacuum.

5               So it's a harder job with public input, by the  
6       way, but it's a better job. So I encourage that.

7               Once we have the study request and the comments,  
8       FirstLight will take those study requests and the comments  
9       and evaluate what they believe are the appropriate issues  
10      that going to need to be studied and addressed. They'll  
11      prepare a proposed study plan. That document will be  
12      available, publicly available and when that document is  
13      filed, this is at Box 6.

14              Once that document is filed, there's a 90-day  
15      period for stakeholders such as yourselves to work with  
16      FirstLight to identify any concerns that you feel that  
17      weren't covered by the proposed study plan, work out issues  
18      on the studies. If a study wasn't included that you had  
19      requested, you get an opportunity to, you know, express to  
20      FirstLight why you feel that the studies were needed.

21              We call this 90 day period the informal dispute  
22      resolution process on studies. During that period, there is  
23      one required meeting that, you know, FERC will attend, and  
24      we'll have, for everybody to voice their opinions again  
25      formally at the meeting. It is a meeting held by or hosted

1 by FirstLight. We will not have a court reporter, but it's  
2 an opportunity that I, you know, will be present and  
3 listening.

4 At the end of that 90-day period, there's another  
5 opportunity for stakeholders to file written comments on  
6 that proposed study plan. This is your opportunity to say  
7 'Hey, it doesn't cut the mustard' or 'It looks great, okay.  
8 We're really happy with what they're doing.'

9 That's your telling the Commission your opinions,  
10 and like I said, we really value the opinions and they do  
11 carry weight. Once the comments on the proposed study plan  
12 -- and also those comments are also provided to FirstLight,  
13 and it allows them to further revise their proposed study  
14 plan into a revised study plan. So basically we have a  
15 draft and then a final.

16 FirstLight will prepare a revised study plan and  
17 submit that to the Commission for approval. Once that  
18 revised study plan has been submitted to the Commission for  
19 approval, there is another comment period from the public,  
20 to let us know, you know, and this is a comment period where  
21 if you've been working with FirstLight on specific studies,  
22 and you believe that, or your understanding is that there  
23 was agreement on a methodology or what was going to be done,  
24 and then when it came in, it wasn't there and you want to  
25 let us know 'Hey, we think there's a mistake.'

1           That's your opportunity to tell us 'This is still  
2 an issue for us, and we would like to see it incorporated  
3 into the study plan.'

4           Once we have all the comments on the revised  
5 study plan, the Commission will then review all of the  
6 issues, outstanding issues, and prepare what's called a  
7 study plan determination.

8           That study plan determination is an order to  
9 FirstLight to implement the revised study plan as or as  
10 modified; and when I say "as modified," there could be  
11 individual studies that we tweak, based on the comments, or  
12 we could say hey, you know, we also need this additional  
13 study, all right. And again, these are all informed based  
14 on your input.

15           Once that determination goes out, it's a one or  
16 two year process of implementing those studies. So now  
17 we're about three years out into the process, and I don't  
18 want to waste any more of your time tonight going beyond  
19 that, if that's okay with you.

20           Okay, all right. Study requests. This is key  
21 for you guys who are thinking about requesting studies in  
22 the FERC licensing process. There are seven criteria that  
23 the Commission uses as a litmus test on what is an  
24 appropriate study to conduct. On the last page of this  
25 packet, those criteria are listed out.

1                   We actually only have to address six of them,  
2                   because Criterias 2 and 3 are mutually exclusive, okay. So  
3                   they're listed here. Now we prepared a document last March,  
4                   and this is a guide to addressing the study criteria. This  
5                   is a new tool available to stakeholders, to help you prepare  
6                   study requests that will meet our needs and convince FERC  
7                   why a study's important.

8                   So I highly recommend you review this. This  
9                   document is the result of stakeholder input from folks all  
10                  over the country who have been implementing the ILP, the  
11                  Integrated Licensing Process for about the last nine years,  
12                  and they said "Hey, FERC, give us some instruction on how to  
13                  do this." So we did it.

14                 So I highly recommend that you take a look  
15                 through this. If you're planning to prepare a study  
16                 request, follow the instructions there. There are  
17                 descriptions of what we're looking for under each criteria,  
18                 and then there are also examples included in here, written  
19                 by FERC staff.

20                 So with that, I'd like to turn to FirstLight for  
21                 a presentation of the hydro projects and what their  
22                 proposals are.

23                   (Remark from Staff)

24                   MR. HOGAN: Oh, I'm sorry. I've got one other  
25                   thing to mention. Thank you, Mary. Sorry, I'm holding you

1 guys up again.

2 As I've indicated, this is a very public process.  
3 The Commission doesn't make any decisions behind closed  
4 doors. Everything's open. As you can tell here tonight, we  
5 have a court reporter, and it goes into our public record,  
6 and we maintain a very detailed public record.

7 That public record is available to anybody to  
8 review and look at. We have two services that we provide.  
9 One is e-Library, where it's a catalogue of all filings. So  
10 if you file your comment letters, it'll be catalogued and  
11 available in e-Library, and any issuance that the Commission  
12 makes will also appear in e-Library.

13 The other service that we provide is called e-  
14 Subscription, where you set up an account with FERC, excuse  
15 me, and when we -- you set up an account with FERC, and you  
16 enter in the docket numbers, which are the project numbers  
17 on the scoping docket, the one here, the P and the four  
18 digits, and you identify which projects you're interested  
19 in.

20 When we issue a document or a document is filed  
21 into that docket, you'll receive an email with a link to  
22 that document. So by following that link or by going to e-  
23 Library, you can actually open the document up and read it.  
24 It's not -- you know, so e-Library is not just the catalogue  
25 listing; you actually have access to the document.

1                   Okay. Any questions about that?

2                   Instructions on how to do, access e-Library or  
3 set up the e-Subscription account is in our handy-dandy  
4 guide to the public "Get Involved," on page 12, okay.

5                   MR. HOWARD: Good evening. My name is John  
6 Howard. I'm the FirstLight Project Manager for the  
7 licensing of both Northfield Mountain and Turners Falls  
8 projects. I have about a dozen and a half slides I'm going  
9 to go through, just to kind of introduce the projects to  
10 you, and we'll go through the study proposals.

11                   The first slide is just our website. Similar to  
12 FERC, we have a website set up at:  
13 [www.northfieldrelicensing.com](http://www.northfieldrelicensing.com). You can join our mailing  
14 list. If you go on that link, you'll see we circle it right  
15 there on the left-hand side "Join Our Mailing List." So  
16 every document that we file, we'll get -- you'll get an  
17 email notification, and you can go on the website and pick  
18 up the document.

19                   So the regional layout. The Connecticut River  
20 main stem and the gray area here are the three TransCanada  
21 projects upstream of us; Bells Falls, Wilder and Vernon  
22 Station, owned by TransCanada; and then located directly  
23 below those is the Northfield Mountain Project and the  
24 Turners Falls Project. All those FERC licenses expire at  
25 the same time, on April 30th of 2018.

1                   So a little bit about the project layout. You  
2                   can see Vernon in the Vermont section. You come downstream  
3                   into the Turners Falls impoundment, the Northfield Mountain  
4                   Upper Reservoir in the white block. We move on further down  
5                   to the Turners Falls Dam. At the end, the power canal  
6                   begins. We have Station No. 1. Station No. 1 was located  
7                   at end of the original canal when it was constructed in the  
8                   late 1800's. No. 1 Station went into service around 1905.

9                   The station or the canal then was further widened  
10                  and extended down to Cabot Station in 1916. Downstream of  
11                  Cabot, you see the Route 116 bridge, and then down at the  
12                  bottom of the page there, the riverine reach down below  
13                  Cabot down to the Holyoke Dam.

14                 So facility layout. That's the Northfield  
15                 Project layout, the Upper Reservoir over on the right hand  
16                 side, the intake channel to the left on the upper reservoir.  
17                 The dotted line is the pressure shaft. It's a 31-foot  
18                 diameter circular shaft, goes down to the underground  
19                 cavern. The cavern is located about 800 feet down below the  
20                 surface of the mountain, and then the dotted line out to the  
21                 Connecticut River is our tailrace tunnel.

22                 The tunnel is about 33 feet in diameter, and  
23                 that's where we discharge when we're generating and that's  
24                 where our intake is when we pump up to the mountain top  
25                 reservoir.

1                   So there's a little better shot of the Upper  
2 Reservoir, the main dam on the far side. So this picture is  
3 taken facing east, so Boston's in the upper portion of that.  
4 The intake channel down at the lower right-hand side, and  
5 then the dams and dikes that impound the Upper Reservoir.

6                   Tailrace area. Left to right, flow moving north  
7 to south, and that's our intake when we're pumping, our  
8 discharge when we're generating, and you see the bulb  
9 barrier and the log plume.

10                  AUDIENCE: Is that the area where you put all the  
11 silt?

12                  MR. HOWARD: Yes. Just to the right-hand side of  
13 the bulb barrier is where we were originally placing that  
14 material. Turners Falls Project layout, I went into it a  
15 little bit earlier. The Turners Falls Dam on the upper  
16 right-hand side, the gatehouse, the gatehouse fish ladder,  
17 the spillway fish ladder right here outside this facility.

18                  Move on down towards the canal to Station No. 1.  
19 Station No. 1 is about a six and a half megawatt station,  
20 five horizontal wheels, and then further on down to Cabot  
21 Station, Cabot Station is a 62 megawatt facility, six  
22 vertical units built in 1916, and then there's a fishway  
23 also associated with that facility.

24                  A little better shot of the Turners Falls Dam.  
25 We're sitting there right over the bridge, as you know, at



1 the Great Falls Discovery Center. Our gatehouse, the power  
2 canal, the four basket gates on the Montague side of the  
3 Turners Falls Dam, and then on the hillside we have three  
4 what are called tainter gates or radial arm gates.

5 Station No. 1, the head time coming off the main  
6 canal discharge and the flow from left to right is heading  
7 down towards Cabot Station. There's Cabot Station. Again,  
8 the Connecticut River flow moving from left to right, the  
9 discharge at Cabot, the power canal. A trash room up in the  
10 canal before the station, the spill gates and then the Cabot  
11 fish ladder, going up, a serpentine structure there on the  
12 north side of the building.

13 So a little bit on the background of the  
14 facilities. I'll start in the right-hand column first, the  
15 Turners Falls Project. The dam and canal was constructed in  
16 the late 1700's, Timber Trip Dam. Two facilities off the  
17 canal, the original No. 1 station, five horizontal units,  
18 and Cabot Station with its six vertical units.

19 The total generating capacity of the project is  
20 67.709 megawatts. Average annual generation out of those  
21 facilities, a little over 18,000 megawatt hours a year for  
22 the number one station, and 350,000 megawatt hours a year  
23 for Cabot. Hydraulic capacities of 2,200 cfs, cubic feet  
24 per second at Station 1, and 13,700 at Cabot.

25 We have a min\_flow requirement for the Turners

1 Falls Project to pass 1,433 cubic feet per second for inflow  
2 below Cabot. We also provide 400 cfs over our number one  
3 basket gate during the fish passage season, from April to  
4 June; and then 120 cfs up and through around the middle of  
5 November or when water temperatures get to about 70 degrees  
6 Centigrade.

7 Northfield Project on the left-hand column, Unit  
8 4 went into commercial operation in November of 1972. The  
9 other three units, 1, 2 and 3 went into service in 1973.  
10 They're reversible pump turbines; they rotate clockwise when  
11 they're generating and counterclockwise when they're  
12 pumping.

13 Station capacity is a little over 1,110  
14 megawatts. Average annual generation for those years was a  
15 little over a million megawatt hours, and hydraulic capacity  
16 when the station is at full output is 20,000 cubic feet per  
17 second, and when it's pumping, 15,200. And as you can see  
18 in the bottom row, both licenses expire on April 30th, 2018.

19 Yes ma'am?

20 MS. CHANG: So that doesn't include the upgraded  
21 turbine?

22 MR. HOWARD: Yes, it does. The 1,119.2, two  
23 units at 270 megawatts approximately, and then two units at  
24 292. Yes.

25 MR. McCOOL: So basically what you can do with

1 the mountain is ten times what you might see going to the  
2 Cabot area?

3 MR. HOGAN: If we could, because we are trying to  
4 maintain a good public record --

5 MR. McCOOL: It's just a huge project. I mean  
6 it's --

7 MR. HOGAN: Wait, wait, wait. We're trying to  
8 maintain a good public record. If you want to speak, I  
9 encourage questions and comments, and I'm not trying to  
10 discourage that in any way.

11 I'd like you to stand up. Our court reporter is  
12 having difficulty, and I'd also like you to state your name  
13 before speaking so we can attribute who the comment came  
14 from, okay? So there was a, the first question regarding  
15 the megawatt upgrade? Who asked that question? Name  
16 please?

17 MS. CHANG: Claire, C-L-A-I-R-E, Chang, C-H-A-N-  
18 G.

19 MR. HOGAN: Claire Chang, and sir?

20 MR. McCOOL: Donald McCool, M-c-C-O-O-L.

21 MR. HOGAN: Thank you.

22 MR. HOWARD: All right. Don, did you have  
23 another question that I didn't answer?

24 MS. McCOOL: I'm very impressed with the size of  
25 that project. It's huge, and you're not aware of its size;

1       you're aware of the mountain and the rest of the woods..

2                   MR. HOWARD:   So the Northfield Mountain and  
3       Turners Falls project operations, just a little more detail  
4       on them.

5                   The Upper Reservoir at Northfield can move 62-1/2  
6       feet from a maximum elevation of 1,025 feet above sea level  
7       down to 138 feet above sea level.   The Lower Reservoir's  
8       operating range, if those contents were moved down into the  
9       Lower Reservoir, we have a nine foot range at the Turners  
10      Falls Dam, from 176 feet above sea level to 185 feet above  
11      sea level.

12                  No. 1 Station generally operates as a baseload  
13      plant when river flows exceed the hydraulic capacity of  
14      Cabot Station, or when river flows are very low.   For a few  
15      weeks in the summer we'll run our inflow through No. 1  
16      Station.   Cabot Station generally operates as a peaking  
17      plant when the flows are above our minimum flow up to the  
18      hydraulic capacity of the facility.   Then as the flows  
19      exceed the hydraulic capacity of the facility, Cabot Station  
20      operates as the baseload facility.

21                  Yes, Peter.

22                  MR. CONWAY:   Peter Conway, Gill.   Just a  
23      clarification here, the Upper Reservoir is a reservoir up on  
24      top of Northfield Mountain.   Correct?

25                  MR. HOWARD:   That's correct.

1                   MR. CONWAY: The Lower Reservoir is all the water  
2 just above the dam; is that what you're saying?

3                   MR. HOWARD: Not all the water, but a good  
4 portion of it, yes.

5                   MR. CONWAY: Well, a big portion of it. We are  
6 confused about, there's two reservoirs involved in  
7 Northfield Mountain. The Upper Reservoir is where the water  
8 is stored, to come down through the channel, and you take  
9 the water out of the river, which is what you're calling the  
10 Lower Reservoir, correct?

11                  MR. HOWARD: Correct.

12                  MR. CONWAY: Okay, thank you.

13                  MR. HOWARD: Potential modifications that we're  
14 evaluating during the relicensing period, upgrading the No.  
15 1 Station with new or rehabilitated turbines; closing No. 1  
16 Station and adding a turbine generator at Cabot of similar  
17 hydraulic capacity as Station No. 1. Utilizing the full  
18 hydraulic capacity of the Cabot turbines that currently  
19 exist but are not being used.

20                  Utilizing more storage in the Northfield Mountain  
21 Project's Upper Reservoir. So the Upper Reservoir, when it  
22 was constructed back in the late 1960's, was built to hold  
23 additional water for transfer to the bottom reservoir, and  
24 that storage is there to be available for use if we were  
25 licensed to use that water; and increasing the unit and

1 station capacity at the Northfield Mountain Project.

2 MS. CHANG: Claire Chang again. How much does  
3 that reduce capacity?

4 MR. HOWARD: Could you go back one slide?  
5 Which bullet are you asking me about?

6 MS. CHANG: You're providing more storage in the  
7 Northfield Mountain Project's Upper Reservoir.

8 MR. HOWARD: It's approximately 2,000 megawatt  
9 hours of additional energy storage that could be made  
10 available.

11 MS. CHANG: Can you do feet?

12 MR. HOWARD: Feet?

13 MS. CHANG: Volume.

14 MR. HOWARD: Volume would be about 3,000 acre-  
15 feet.

16 MS. CHANG: So I know you said increasing the  
17 unit and station capacity. What does that mean, turbines?

18 MR. HOWARD: Right, above what we're licensed to  
19 do now.

20 MS. CHANG: Do you mean actually increasing the  
21 turbines, replacing the turbines that are actually there now  
22 or just --

23 MR. HOWARD: No. The turbines that are there now  
24 are capable of additional output.

25 MS. CHANG: So that would be an additional how

1 much?

2 MR. HOWARD: I don't know. That's what we'd like  
3 to study, to see if that's possible. It may not even be  
4 possible. Yes.

5 MS. KRUG: Stefanie Krug from Greenfield. In  
6 realizing more storage in the Northfield Mountain's Upper  
7 Reservoir, would that just be raising the water level? In  
8 the already -- the upper reservoir it is now? Or is there  
9 additional space that could be used that is currently not  
10 being used?

11 MR. HOWARD: The one you said, the second. Yes,  
12 there's space there that can be utilized that's not  
13 currently being used for water storage.

14 MS. KRUG: Could you explain like where, with  
15 respect to the reservoir --?

16 MR. HOWARD: Just, the water level could be  
17 raised up in the existing impoundment.

18 MS. KRUG: Okay.

19 Mr. CONWAY: Thank you. Peter Conway again.

20 So John, in terms of visualizing it for myself,  
21 we've got a water level abyss and a water level down to  
22 here, that's what we pull out, and for the modifications  
23 we're going to go up four feet higher, five feet higher, six  
24 feet higher? How much more?

25 MR. HOWARD: Four.

1                   MR. CONWAY: Four, and we're going to go down how  
2 much lower?

3                   MR. HOWARD: Eighteen.

4                   MR. CONWAY: So we're going to take that much  
5 more water to come down through. We're going to go -- we're  
6 going to add four feet more of pipe, and take out 18 feet  
7 below what we're taking out.

8                   MR. HOWARD: So we've rarely, I can't think of a  
9 time where we've ever used all that water. Typically, what  
10 happens is the water is held in reserve. So in periods of  
11 time like last week or in a period of time like in the  
12 middle of the summer, ISO New England will pull Northfield  
13 Mountain right out of the energy markets -- these  
14 unregulated markets that you've been hearing about -- and  
15 they'll reserve that water for security and stability of the  
16 New England electric system.

17                   So it's not that the water would be used, as  
18 you're suggesting, you know, up and down. But it would be  
19 there in the event that they needed it to stabilize New  
20 England.

21                   MR. CONWAY: But it could be used. It could be.

22                   MR. HOWARD: It could be. Yeah?

23                   MR. CONWAY: Thank you.

24                   MR. HOWARD: Yes?

25                   MR. SNEDEKER: Hi, Greg Snedeker, Gill resident.



1           What I've seen here are a lot of projections in  
2 terms of increases. So you must have done some studies in  
3 terms of projecting forward in terms of why you would need  
4 the increases.

5           I'm just wondering what the projections are, what  
6 determined why you would go down looking to increase  
7 capacity and increase draw? (ph/dh)

8           MR. HOWARD: Number One Station was built in  
9 1905. Northeast Utilities retired it in 1973, and then they  
10 reactivated it in 1983. It has most of the original  
11 equipment still there; the equipment is not that efficient.  
12 There may be an opportunity to replace that equipment with  
13 more efficient equipment today.

14           MR. SNEDEKER: But more efficiency doesn't  
15 necessarily mean more draw?

16           MR. HOWARD: It may not mean more draw. It may  
17 mean just getting more energy out of current design water  
18 widths.

19           Closing No. 1 station and adding a turbine  
20 generator to Cabot is just something that we wanted to run  
21 through, to see if it makes sense. And the same with the  
22 hydraulic capacity of the Cabot turbines; they were replaced  
23 about ten years ago with more efficient runners that are  
24 made with computation fluid dynamic modeling versus 1916  
25 vintage runners that were hammered out by blacksmiths and

1 guys with slide rules.

2 So with no increase in discharge but more  
3 efficient equipment, and we can get more output out of that  
4 more efficient equipment, and we just want to see if that  
5 makes sense and if it's even possible.

6 MR. SNEDEKER: Would that be with the same amount  
7 of input?

8 MR. HOWARD: At Cabot, it would be more input for  
9 more output at this point.

10 MR. SNEDEKER: Okay, so you're increasing the --.

11 MR. HOWARD: Yes. And Northfield -- same to go  
12 above once we've completed the upgrade of our units, kind of  
13 a life extension of those units; it would be more input for  
14 more output.

15 Yes?

16 MR. McCOOL: Don McCool here. You can raise and  
17 lower the Connecticut River 9 feet, roughly, right now. How  
18 much more of that would you be able to do in the extensive  
19 changes you're making to the mountain/

20 MR. HOWARD: So right now the minimum elevation  
21 at the Turners Falls impoundment is 176, the maximum  
22 operating elevation is 185, and the top of the dam is 185.5;  
23 so there's no more room there to move.

24 MR. HOWARD: Yes.

25 MS. CHANG: Claire Chang, Gill. So that means

1       you could take it down further, because you're sucking up  
2       more water.

3               MR. HOWARD: No, you can't go down any further.

4               MS. CHANG: So your minimum --. If you're  
5       increasing the capacity up at the top reservoir, how are you  
6       accounting for taking that volume of water from the  
7       Connecticut River? The river levels would have to go down.

8               MR. HOWARD: Well, again, that's something that  
9       we need to look at. I can't answer that question --

10              MS. CHANG: I'm sure you've looked at this.  
11       You're not proposing this just off the fly, you've got some  
12       numbers.

13              MR. HOWARD: Well, actually, I don't have the  
14       numbers on the top of my head.

15              MS. CHANG: Somebody has them somewhere, then?

16              MR. HOWARD: Not that I'm aware of.

17                        Yes?

18              MR. SNEDEKER: I just want to get back to that,  
19       one last time. So your EROIE, basically your energy return  
20       on inputted energy would be, you're looking for a more  
21       efficient return?

22                        I'm just trying to get, in terms of your  
23       projections forward, you would be replacing some of this in  
24       essence to get a more efficient return on your inputted  
25       energy.

1 MR. HOWARD: At which station? Any of them?

2 Yes.

3 MR. SNEDEKER: Okay.

4 MR. HOWARD: Yes, John?

5 MR. WHARTON: John Wharton, Gill.

6 On bullet points 3 and 4, utilizing one part of  
7 the Northfield Mountain project, the upper reservoir, and  
8 increasing the units to station's capacity, how much more  
9 energy would be gained by doing that?

10 MR. HOWARD: So Northfield runs on average about  
11 a million megawatt hours a year. Last year it was well  
12 under that number. Northfield, like everywhere else, is  
13 impacted by the markets from 2008 going forward. So there  
14 may not be any additional power output or capacity. There  
15 may not be any additional energy output; it may just be a  
16 capacity increase.

17 MR. WHARTON: Where I was actually going with  
18 that question is, there is no net energy gained from doing  
19 that, because that facility operates at a 68 to 70 percent -  
20 -

21 MR. HOWARD: Oh, okay. That's a completely  
22 different question. If you're asking me what the pump  
23 generator issue is at Northfield, for everyone here to  
24 understand that concept. So Northfield consumes more energy  
25 than it generates; it has a plant efficiency of about 75

1 percent; or the inverse of that is the pump generator ratio,  
2 runs around 1.37, 1.38.

3 Yes.

4 MR. McCOOL: You would be losing more energy.

5 MR. HOWARD: No; actually by putting in more  
6 efficient equipment, you're able to increase the plant's  
7 efficiency.

8 MR. McCOOL: I didn't think you were putting in  
9 more efficient turbines; you're just increasing the amount  
10 of water that was stored. You're pumping more water up and  
11 draining more water down; you're losing energy because  
12 you're pumping more water up.

13 MR. HOWARD: Those are some of the things that we  
14 need to evaluate to see whether this concept makes sense.  
15 The pumps are connected to a synchronous motor, centrifugal  
16 pumps; the generators are not. So there is some engineering  
17 that needs to go along with that concept.

18 MR. CONWAY: Peter Conway, Gill.

19 So first of all, I want to tell you that I do  
20 appreciate the flood control that we now have as far as how  
21 you control the water in severe storms. We have the  
22 rainfall above the dam; it's done very well, there's very  
23 little flooding that goes on or increase in water when we  
24 had that rain coming. But I need a little help on the dam  
25 itself and the two numbers you gave.

1                   And you talked about minimums and maximums that  
2                   you use to evaluate what you're doing. You mentioned a  
3                   number, 176, didn't you, as a --

4                   MR. HOWARD: Yes, the lower elevation.

5                   MR. CONWAY: -- and a maximum of 185. And what  
6                   goes on with those numbers, anyway? What do you do with  
7                   those numbers? How does that work?

8                   MR. HOWARD: So those are limits that are set in  
9                   our license.

10                  AUDIENCE: Could you repeat the question? I  
11                  don't think the whole room could hear it.

12                  MR. HOWARD: Sure. The question was, 176 and  
13                  185, what do we do with those numbers? Those are maximum  
14                  and minimum operating elevations for the Turners Falls  
15                  impoundment at the Turners Falls Dam.

16                  And just to correct one point, there is no flood  
17                  control at this facility. We have very little storage  
18                  capability.

19                  MR. CONWAY: Really?

20                  MR. HOWARD: All we do is once the hydraulic  
21                  capacity of our facilities are exceeded, we start to open up  
22                  the gates at our Turners Falls Dam.

23                  MR. CONWAY: Okay.

24                  MR. HOWARD: No flood control whatsoever.

25                  MR. CONWAY: Right. Well, I assume that's how it

1 worked.

2 So again going back to the 176 and 185, when you  
3 release the water, that 185 shouldn't go any higher than  
4 185?

5 MR. HOWARD: So as John Ragonese explained for  
6 the TransCanada projects, the profile, we try to do the same  
7 thing during high flow events. We start to drive the  
8 elevation at the dam down, so that we have as little impact  
9 upstream as possible until our gates, our gates on the  
10 Montague side are completely laid flat, and our tainter  
11 gates, our radial arm gates on the Gill side are completely  
12 open; and then we're just passing what's coming down.

13 MR. CONWAY: So when you draw water, basically it  
14 doesn't go below 176?

15 MR. HOWARD: Correct.

16 MR. CONWAY: Okay, thank you.

17 MR. HOWARD: All right. If there's no more  
18 questions. Some of the recreation facilities that we have,  
19 Bennett Meadow Wildlife Management Area up in Northfield,  
20 the Munns Ferry boat camping area, Boat Tour and Riverview  
21 picnic area, our visitor center, and also tour and trail  
22 center. We have an observation deck at our upper reservoir,  
23 with about 26 miles of trail on the side of Northfield  
24 Mountain. We've got a fish viewing area here, across the  
25 road at our Turners Falls facility. We have a branch canal

1 area by No. 1 Station and a fishing access area through the  
2 fence down to the Connecticut River. And then Unity Park  
3 over here across the road.

4 And then on the right hand column, just about on  
5 the west Barton Cove, many of you are familiar with that;  
6 and a canoe and kayak rental facility we have. The Gill  
7 State Boat Launch, just up Route 2 from that, our Barton  
8 Cove canoe and kayak rental. A Cabot camp right at the  
9 confluence of the Millers River. The Pachaug Wildlife  
10 Management Area, state boat launch at the north end of  
11 Northfield; and then the Cattle Woods fishing access area  
12 along Migratory Way, our canal side trail bike path, and  
13 then the kin portage.

14 And then there's just a pictorial of all of the  
15 recreation facilities I mentioned from the Pachaug Wildlife  
16 Management Area; it's on land that the company constructed  
17 the facilities donated to the Commonwealth; down through the  
18 wildlife management area at Bennett Meadow, and then a  
19 little more concentrated as you get into the Turners Falls  
20 area.

21 MR. HOWARD: Yes.

22 AUDIENCE: -- from Gill.

23 So these are all public access, so the only  
24 private one is the Franklin, the boat club on the Gill side?  
25 Is that true, or are there private facilities that you --



1                   MR. HOWARD: That's the only private boat club on  
2 the 22 miles of river that I'm aware of.

3                   AUDIENCE: But how long is that leased for?

4                   MR. HOWARD: It's not a lease. There's no  
5 interest in the land there; it's what called a license or a  
6 permit, and it is permitted on a five year frequency.

7                   AUDIENCE: So when is that up for you next?

8                   MR. HOWARD: I'm not sure exactly sure when the  
9 permit expires to be renewed.

10                  AUDIENCE: Is that a public process, that permit?

11                  MR. HOWARD: No, it's a permit between the  
12 Franklin County Boat Club and FirstLight.

13                  MS. VERVILLE: Sarah Verville from TRC.

14                  I do want to say with respect to something like  
15 the Boat Club, when there is a use of project land or  
16 something that is not strictly related to the project, such  
17 as a private boat club, it does need FERC approval.

18                  MR. HOWARD: Yes, the boat club and -- it's a  
19 non-private use that has been approved by the Federal Energy  
20 Regulatory Commission. And land -- it's in the private but  
21 are open to the public, so while you may not have a boat on  
22 a slip there, you cannot be prohibited from going on our  
23 property.

24                  MR. McCOOL: Do you take credit for all these  
25 recreational opportunities as FirstLight's?

1                   MR. HOWARD: No, I don't take credit for Unity  
2 Park, I don't take credit for the canal side rail trail. I  
3 just mention them because they are within our FERC project  
4 boundary; but they're not part of our --

5                   MR. McCOOL: You don't maintain them?

6                   MR. HOWARD: No.

7                   Yes?

8                   AUDIENCE: (inaudible) Turners Falls.

9                   I'm not sure how relevant this is, but I live  
10 near Unity Park --

11                  AUDIENCE: Could you --

12                  AUDIENCE: -- I'm sorry. My property abuts the  
13 grassy strip and backup to Unity Park, which you own, and I  
14 don't see it on there as a recreational spot in terms of  
15 maintenance and regulation of behavior on these spots. I  
16 have a big issue with what goes on in that area. I'm just  
17 throwing that out. It's your property.

18                  MR. HOWARD: I understand. Thank you.

19                  AUDIENCE: Is there anything you can do to --

20                  MR. HOWARD: Well, what we do, if you make a  
21 complaint --

22                  AUDIENCE: I can make a complaint, but --

23                  MR. HOWARD: To the Montague Police.

24                  AUDIENCE: Yes, many, many; and they know me  
25 well.

1                   MR. HOWARD: Before we leave tonight, I'll give  
2 you my business card.

3                   AUDIENCE: Thank you. I'm hoping maybe at least  
4 a sign saying 'no camping, no fires'?

5                   MR. HOWARD: No trespassing.

6                   AUDIENCE: I've got the no trespassing signs.

7                   MR. HOWARD: Got you. I'll give you my card.

8                   AUDIENCE: Thank you very much.

9                   MR. HOWARD: Yes?

10                  AUDIENCE: And the crime (inaudible) -- are any  
11 of these recreation facilities subject to be changed?

12                  MR. HOWARD: The ones that are licensed by  
13 FirstLight are all subject to change.

14                  AUDIENCE: Do you know what extent?

15                  MR. HOWARD: No. I mean, that's what this  
16 process is all about.

17                  MR. WAMSER: Hello, I'm Mark Wamser with Gomez  
18 and Sullivan, Engineers. We're assisting FirstLight in the  
19 relicensing of the projects.

20                         We're going to go through the various studies  
21 that we've proposed in the pre application document with  
22 folks. If you have questions, please let me know.

23                         As you know, there have been many studies done in  
24 the Turners Falls impoundment; we didn't list them all here.  
25 There's been full river reconnaissance surveys, there's been

1 erosion control plans, and there's been, as you know, on the  
2 ground stream bed stabilization.

3 So the next full river reconnaissance surveys,  
4 scheduled for November of this year; and although this is  
5 part of compliance with the existing license, FERC has asked  
6 us to wrap this into relicensing. So we've met -- not me  
7 personally, but we've met with the Streambank Erosion  
8 committee to work out what's called a QAPP, which stands for  
9 Quality Assurance Project Plan. And we're still in that  
10 phase of finalizing that. So this study will be part of the  
11 relicensing now.

12 Another one that was not listed in the pre  
13 application document that we're proposing to do is  
14 hydrologic, hydraulic and geomorphic analysis of erosion at  
15 Turners Falls impoundment. There's been a lot of past work  
16 done in the impoundment; we also have now a hydraulic model  
17 of the Turners Falls impoundment, which will enable us to  
18 look at depths, velocities, the profile of the river. So  
19 that will be another study we're doing.

20 And then there are two other studies that we  
21 filed with the FERC, and we placed these on our, the  
22 Northfield Relicensing.com website; and I can't emphasize  
23 enough, go to that website, join the mailing list; that way  
24 you're automatically notified when we post something, such  
25 as this presentation tonight is on there, right now.

1                   These are two other studies that were done; we  
2                   looked at the erosion that's occurring on the Route 10  
3                   bridge, and then there was a study done that looked at  
4                   riverbank erosion on not just impounded sections of the  
5                   Connecticut River but also free-flowing sections of the  
6                   river to look at with the erosion that's occurring naturally  
7                   in some of these sections.

8                   Yes?

9                   MS. CHANG: Claire Chang from Gill.

10                  So I think I missed this part, but what is the  
11                  technical boundary for the Turners Falls impoundment, when  
12                  you say those words?

13                  MR. WAMSER: In the next slide will define it a  
14                  little bit further, but generally what we're talking about  
15                  is from the Turners Falls Dam up to Vernon Dam.

16                  MS. CHANG: The whole stretch?

17                  MR. WAMSER: It's about 20 miles, roughly. But  
18                  I'll show you something a little later that, we -- it's a  
19                  little bit below Vernon Dam but not much.

20                  MS. CHANG: Okay, and then we're going to talk  
21                  about the riverbank erosion compared to the No. 4?

22                  MR. WAMSER: Yes.

23                  MS. CHANG: So that's the whole stretch, also?

24                  MR. WAMSER: Yes, and this is a compilation of  
25                  work of Dr. Bob Simons, who has done a lot of work on this

1       impoundment, but he's also done other work in free-flowing  
2       sections of the Connecticut River further upstream; so it's  
3       an analysis of looking at what's occurred naturally in free-  
4       flowing sections, in terms of erosion as well as what's  
5       occurring in the controlled sections.

6               MS. CHANG: So you're saying above the Vernon Dam  
7       you're comparing --

8               MR. WAMSER: It's even further up in New  
9       Hampshire and Vermont.

10              MS. CHANG: Because all the dams all along the  
11       Connecticut create an unnatural, so I don't know how you're  
12       going to find a natural part --

13              MR. WAMSER: No, further upstream there are  
14       natural, free-flowing sections of the Connecticut; they're  
15       not all impounded.

16              MS. NEWCOMB: Leena Newcomb, cottage owner on the  
17       Montague side of the river.

18              It says, No. 4, completed 2012. When was the  
19       river in the Turners Falls to Vernon, Vermont section of the  
20       river, when was that researched and looked at?

21              MR. WAMSER: This wasn't a field-based study; it  
22       relied on a previous work that he had done within the  
23       Turners Falls impoundment. So he --

24              MS. NEWCOMB: Previous work when? What year?

25              MR. WAMSER: Other full river reconnaissance

1 surveys have been done, I think 2005 -- I think there were  
2 three of them that were done.

3 MS. NEWCOMB: A date?

4 MR. WAMSER: I don't have the dates, but they are  
5 in the pre application document.

6 MR. BENNETT: Mark, John Bennett with the  
7 Franklin Conservation District.

8 You mentioned the hydrologic, hydraulic and  
9 geomorphic analysis is not in the PAD. How do we get a look  
10 at it, what you're proposing?

11 MR. WAMSER: Well, that's part of the study plan.  
12 So you guys send in what you're looking for for studies by  
13 March 1st. By April 15th, which only gives us 45 days to  
14 consume everything you've provided to us and develop a study  
15 plan. You'll see that by April 15th, what we are proposing.

16 And then you'll look at it, we'll have a meeting,  
17 and you guys will be able to comment on those proposed study  
18 plans. After that comment period, then we do revised study  
19 plans. So there will be another round.

20 MR. McCOOL: Don McCool, Montague.

21 Does your firm, or has FirstLight looked at the  
22 impact of what happens below the dams; water flows downhill?

23 MR. WAMSER: Yes, in fact we have looked at some  
24 of that; it's part of the pre application document. We had  
25 placed, it was called water level reporters at different

1 locations downstream and upstream of the dam to see how  
2 operations affect what we call stage -- stage means water  
3 elevation changes in the river; so that's actually been  
4 looked at, is in the ratification document for now.

5 MS. DONLON: Andrea Donlon, Connecticut River  
6 Watershed Council.

7 If there are parties that submit study requests  
8 related to erosion, what goes into -- potentially what goes  
9 into your study request? Or have minds have already been  
10 made up?

11 MR. WAMSER: No. I think we have to look at what  
12 the request is, and if we feel like there's this criteria  
13 that Ken mentioned, if it meets that criteria then we're not  
14 going to necessarily develop another study just for that;  
15 maybe lump what you're looking for with this study, or we  
16 need to break it out separately; but we have to see what  
17 your study request is.

18 MS. JANKE: Dotty Janke, Greenfield.

19 When the previous gentleman was presenting, the  
20 last question was about the recreational facilities,  
21 opportunities around Barton Cove particularly; and he said  
22 that they would be reviewed.

23 And so my question is, how can we as residents  
24 and citizens make sure that we are still going to have  
25 access to the river?



1                   MR. WAMSER: We are going to get into that a  
2 little later, on recreation. But you still have access;  
3 it's a question of maybe improvements at existing recreation  
4 facilities. There could be down the line maybe, other  
5 locations for recreation facilities. But the intent here is  
6 not to close the door and not let anybody into the  
7 recreation facilities.

8                   MS. JANKE: Because I think, isn't it true that  
9 the federal government allows these power companies to use  
10 rivers but they also had to provide recreation for the  
11 citizens?

12                   MR. WAMSER: It's a balance between both power  
13 and non-power resources.

14                   Ken, if you want to talk about it.

15                   MR. HOGAN: We recognize that the hydro  
16 facilities utilize a public resource. In return, one of  
17 these that we look at are what kind of opportunities can the  
18 licensed hydro facilities provide to the public for the use  
19 of that resource.

20                   We've heard throughout -- we've had several  
21 meetings this week, and throughout -- there's a large  
22 interest in identifying recreational access needs, usage  
23 needs and recreation facility conditions and assessment of  
24 the proposed conditions; and that information will be  
25 utilized by FERC to determine what the appropriate

1 recreation is or what those needs are, what those needs are  
2 projected to be in the future, and what types of facilities  
3 are appropriate to provide the demand for the area.

4 So as Mark said, I don't think we're looking at  
5 necessarily closing the access, unless there was a security  
6 or a safety issue or something like that; and I haven't  
7 heard that concern just yet; but it's more of, are the rec  
8 facilities meeting the needs that are out there today and  
9 will they continue to meet those needs into the future?  
10 That's what we're looking at.

11 Claire?

12 MS. CHANG: So the fishway and the canoeing area  
13 is open for a little bit of time during the year -- that  
14 wasn't listed on the recreation --?

15 MR. HOGAN: Actually, I think those were listed  
16 on the site.

17 MR. WAMSER: Well, Ken, how do you want to do  
18 this? Do you want to go --

19 MR. HOGAN: Are you done?

20 MR. WAMSER: Well, I'm done with geology and  
21 soils, I didn't know the way we were doing this, if you were  
22 going to open it up for --.

23 MR. HOGAN: Well, why don't you go through all of  
24 your slides and all the resources, and then we will cover  
25 and identify the issues that we have identified, and then

1 we're going to go right to the public and seek their input.

2 You can go by resource area or free-form.

3 So what we'll do is, we're just going to go  
4 through the names first of the folks who signed in -- no  
5 particular order, just whatever I pick up on the sheet, and  
6 then we'll open it up to any general comments out there.

7 MR. WAMSER: So the next section is about water  
8 quantity and quality. And we are going to develop what's  
9 called an operations model, and what this entails is a  
10 model of the river system; and the one we're using is going  
11 to be partnered with the Nature Conservancy. The actual  
12 name of the model is HACREZSEM (ph), and it is for a period  
13 of record where we looked from 1960 to 2003, it's on an  
14 hourly basis.

15 What this model does is it looks at not only  
16 hydropower generation but also what the flow releases are  
17 from the projects. The output from this model will be  
18 discharge below Cabot, water level changes in the  
19 impoundment, will be used as input into other studies. So  
20 this is an important one.

21 We are also -- this is kind of standard with  
22 water quality and monitoring, and that typically entails  
23 dissolved oxygen, temperature and percent saturation. And  
24 it's usually continuous monitoring over the summer period.  
25 So we would put monitoring equipment below Vernon, one being

1 further down in the impoundment, one in the bypass, and  
2 throughout the system below Cabot and so on.

3 AUDIENCE: Mark, what is percent saturation?

4 MR. WAMSER: It's the amount of oxygen in the  
5 water; so for example what you don't want is a case where  
6 it's supersaturation, like over 100 percent. The standards  
7 are, I think you want at least 75 percent. So it's looking  
8 at the temperature of the water and the dissolved oxygen in  
9 the water.

10 MS. CHANG: Claire. Will you be putting one of  
11 those measures in the dead reach, the dead --?

12 MR. WAMSER: In the bypass channel?

13 (Laughter)

14 AUDIENCE: The dead reach.

15 MS. CHANG: The bypass channel? I've never heard  
16 it called that. So that's where the Gill and Montague gates  
17 open?

18 MR. WAMSER: No. The intent is to put one in the  
19 bypass channel; but I will say this: We also had water  
20 level reporters in the bypass channel that were either  
21 vandalized or stolen literally every two weeks. So we will  
22 attempt to do temperature and DO monitoring out there; we  
23 can disguise those a little bit easier. But the intent is  
24 to put one in the bypass channel.

25 And the last thing I wanted to hit -- oh.

1                   MR. MORGAN: Just quickly -- John Morgan from  
2 Delta.

3                   So all of the information that you're gathering -  
4 - I heard you mention at the beginning the impoundment and  
5 below Cabot, and you ran through all the information you  
6 were gathering there. Will all of that information be  
7 gathered for the bypass channel?

8                   MR. WAMSER: You mean temperature and dissolved  
9 oxygen?

10                  AUDIENCE: Operations --

11                  MR. WAMSER: Oh, okay. Yes, I see what you're  
12 saying. So yes, the model will give us information on  
13 what's being spilled at the dam, what's going down the  
14 canal, and what's below, as we merge to get up below Cabot.  
15 Yes. So we'll look at that.

16                  MR. MORGAN: So you will look, in particular, at  
17 what's going through the bypass channel?

18                  MR. WAMSER: Yes.

19                  MR. HOGAN: How far downstream -- Ken Hogan with  
20 FERC -- does the model go?

21                  MR. WAMSER: The model we have goes down to  
22 Holyoke right now. However, I think the Nature  
23 Conservancy's model does go further downstream; so if we  
24 wanted to extend it, if we could. For right now, that's  
25 where it's -- it's at Holyoke.

1                   MR. BENNETT: Just one clarification, John  
2 Bennett.

3                   You said the dates for these data, for the HAC  
4 modeling was when?

5                   MR. WAMSER: 1960 to 2003.

6                   AUDIENCE: Why are you not doing more current?

7                   MR. WAMSER: The reason why is not really us;  
8 it's the Nature Conservancy, when they developed the model,  
9 there's actually a woman at the U.S. Geological Survey that  
10 did it, and it ended in 2003. I don't have an explanation  
11 why they didn't extend it further.

12                   SPEAKER: But how can that be valid for a project  
13 that's getting relicensed in 2018 -- for many years?

14                   MR. WAMSER: The reason why is, and the reason  
15 why we're looking at the full period record from 1960 to the  
16 year 2003, you know, that's 40-plus years of record, is the  
17 future hydrology is probably similar to the previous  
18 hydrology, recognizing that there is climate change. But  
19 the idea is we're going to simulate how these projects  
20 operate in today's current condition; but the flows through  
21 the system are going to vary based on day-to-day.

22                   So it's not necessary that we have to have the  
23 hydrology, the flows from 2003 to now, because this wave of  
24 a model of projects is how they're operated today.

25                   SPEAKER: So you'll take the data from Northfield

1 Mountain and Cabot Station in terms of what those flows were  
2 from 2003 to the current, and plug that into this. Is that-  
3 ?

4 MR. WAMSER: No. What we will actually do is a -  
5 - I don't want to get too far into the weeds here, but it's  
6 a demand schedule. We say this is normally when it comes  
7 on; for peaking operations this is when it tails off. We  
8 tell it the megawatts, and the model will determine how much  
9 water is needed to make those megawatts.

10 MR. McCOOL: Don McCool. Are you going to do  
11 this study below the dams?

12 MR. WAMSER: Which study. This one up here?

13 MR. McCOOL: Yes.

14 MR. WAMSER: Yes, we --

15 MR. McCOOL: You're going to look at the flow --  
16 and will it be minute-to-minute or a daily --

17 MR. WAMSER: Ours is going to be an hourly time  
18 study.

19 MR. McCOOL: So 24/7?

20 MR. WAMSER: It will be an hourly time study from  
21 1960 to 2003.

22 MR. McCOOL: You don't have hourly data?

23 MR. WAMSER: No. What we have is --

24 MR. McCOOL: Do you have any data from what goes  
25 on at the Sunderland and 116 bridge?

1 MR. WAMSER: No, no --

2 MR. McCOOL: The entire stretch is not navigable  
3 by a boat that only draws 3 inches.

4 MR. WAMSER: What we have for information is USGS  
5 gauge data.

6 MR. McCOOL: That's approximately where the Rail  
7 Trail Bridge goes over it?

8 MR. WAMSER: Right.

9 MR. McCOOL: Okay. Thanks.  
10 So you don't know what goes on 100 yards from  
11 there.

12 MR. WAMSER: We don't at certain locations -- all  
13 we'll know is what the total flow going through the Turners  
14 Falls impoundment is at a few locations. For example, where  
15 the trail lot is, upstream and downstream of that, upstream  
16 and downstream of Millers.

17 MR. McCOOL: This is a retro effect study.

18 MR. WAMSER: No, it isn't. Maybe afterwards we  
19 could talk further about it, because there's a lot more  
20 behind this --

21 MR. McCOOL: Yes --

22 MR. WAMSER: Okay.

23 MS. AUSTIN: My name is Liz Austin, I'm with  
24 (inaudible). I work on the river in the spring, and I am on  
25 the Board of the Watershed Council.



1           I think there's confusion about the first one,  
2 because that's to develop a model. That doesn't mean that -  
3 - a model for what? What you do with that model once it's  
4 developed.

5           MR. WAMSER: The model is used for quite a few  
6 things. Obviously for FirstLight, we're going to look at  
7 what is the impact of alternative project operations on  
8 generation?

9           So for example right now the impoundment has a 9  
10 foot fluctuation. What if there's a change in that amount  
11 of fluctuation that's permitted? How does that affect the  
12 Northfield project operations? Will it have an effect on  
13 generation?

14           Similarly we're going to look at, over the output  
15 of this model will be flow information. So we'll be able to  
16 look at different conditions that people are considering for  
17 alternative operations and what the impact is on flows. In  
18 the bypass, below Cabot, through the Turners Falls  
19 impoundment.

20           MS. AUSTIN: So this is a model to help  
21 FirstLight figure out what the effects will be of different  
22 kinds of operations.

23           MR. WAMSER: Yes, it is.

24           MS. AUSTIN: All right. And that's why taking  
25 that old data -- it doesn't matter about current data;

1       you're using all of that data to help you develop a model.  
2       Right?

3                   And then you could plug in various scenarios and  
4       say 'this is what's going to happen.'

5                   MR. WAMSER: Right, yes.

6                   SPEAKER: So is there a proposal to increase that  
7       nine foot limit right now? Is that what's part of this?

8                   MR. WAMSER: No. That's not. We're not making  
9       that proposal, no.

10                  SPEAKER: Would the increased capacity of the  
11       Northfield Mountain reservoir -- that would be a really nice  
12       thing to do for FirstLight, wouldn't it?

13                  MR. WAMSER: Well, I think where people are  
14       missing the point is, when they can be pumping is a function  
15       not only of how much storage is in that 9 feet, but how much  
16       water is coming in. So if you have more water coming in to  
17       fill that up and still be able to pump, to use that extra  
18       feet, you're not drafting more water from the lower  
19       reservoirs.

20                  SPEAKER: How is that possible? You've got a  
21       volume in the river -- and we're not talking about an  
22       impoundment; it's a river. You've got a volume of water in  
23       that river. Maybe -- so you're talking about what comes  
24       down from Vernon, so Vernon lets more down so that  
25       Northfield can pump more up?

1                   MR. WAMSER: I'll give you an example. In the  
2                   springtime when there's a lot more water in the river, they  
3                   could be maintaining the pond at 185 and still be pumping  
4                   water, because there's that much more water coming in.

5                   SPEAKER: I live just next to the dam. So I very  
6                   rarely see a significant amount of water going over the dam  
7                   anymore. It used to be much more, but nowadays -- and this  
8                   is why I'm worried about your only doing logging -- using  
9                   data only up until 2003 -- because currently, in the last  
10                  five, six years, there's very little water that goes over  
11                  the dam. That's quote, unquote "safety"; it doesn't go into  
12                  the canal.

13                  And I think that a lot more water needs to go  
14                  through that area.

15                  MR. WAMSER: That is part of one of the studies  
16                  we're looking at, flow in the bypass channel.

17                  AUDIENCE: Uh-uh.

18                  (Laughter)

19                  MR. HOGAN: And those are the types of comments  
20                  that we're very interested in hearing today, your interest  
21                  in having more water in the bypass reach, is what we want to  
22                  hear.

23                  So right now, FirstLight is going through what  
24                  the studies that they are proposing are, but we want to hear  
25                  what your concerns are. So if we can hold that type of

1 comment until, for a little bit, that would be great. If  
2 you have questions -- and I admit, some of these questions  
3 about the modeling and the studies being proposed are  
4 perfectly appropriate. But I do want to concentrate the  
5 issue-type comments for the next step of the meeting; and  
6 that will also help us to make sure that -- because when I  
7 read the transcripts, I'm probably not going to go through  
8 the proposals again; I'm going to go straight to your  
9 issues, and that's what I want to be able to concentrate on,  
10 and I don't want to miss an issue that was raised early in  
11 the meeting. That helps me.

12 MR. WAMSER: So there was one last study that we  
13 are looking at, and it was talked about a little bit  
14 earlier; it was the hydraulic model of the Turners Falls  
15 impoundment. And we'll be filing something, I'm not quite  
16 sure when, in the next month or two. But what we looked at  
17 a Turners Falls is how far upstream does the effect of the  
18 project go? And what we're finding, preliminarily right now  
19 is, it isn't all the way up to the Vernon tailrace but a  
20 little bit below. I think it's near Stephens Island -- is  
21 that the --?

22 AUDIENCE: Stefans.

23 MR. WAMSER: Stefans Island, okay. I think it's  
24 a little bit below that is what we're finding.

25 Yes?

1 MR. SHEARER: Tom Shearer from Northfield.

2 Is there any study going on in regards to  
3 developing a lower reservoir that would be separate from the  
4 river?

5 MR. WAMSER: We heard that today. And that's as  
6 much as I -- we've heard it today, we have not proposed  
7 that, to look at an isolated reservoir, lower reservoir.

8 SPEAKER: (ph) Kelly Ho again. I just want to  
9 say, you've heard it before today? So there has been --, to  
10 think about it as not a new thing?

11 MR. WAMSER: No, we have heard it before today.  
12 Yes, we've heard it.

13 SPEAKER: Mark, do you speak for FirstLight, or -  
14 - analysis for some discussion?

15 MR. WAMSER: I mean, we're working for them.

16 SPEAKER: So are you speaking their policy, and  
17 what you would expect them to do?

18 MR. WAMSER: I'm not quite sure what kind of  
19 question --?

20 SPEAKER: To get an unbiased --

21 MR. WAMSER: Oh, yes. When we do studies, we --  
22 you know, and I think FirstLight would say this, too --  
23 we're going to do scientifically-based studies. Because at  
24 some point when they get to the Commission, they have to be  
25 it rooted in science. So no, when we do studies, our team

1 does studies, they're going to be based in science.

2 MR. HOGAN: Let me also address that.

3 Another component of -- you know, the FERC  
4 licensing process is a very public process. So the studies  
5 are designed with resource agencies in consultation. We  
6 review and approved the methodologies, we definitely looked  
7 at, to make sure that when the study's plans are written  
8 that they're not written to bias the outcomes. And then the  
9 study reports are commented on and reviewed on in a public  
10 forum.

11 So to address the concern about bias, we do have  
12 lots of checks and balances on that. We have to make sure  
13 that the information that's provided to us, as Mark said, is  
14 scientifically defensible and appropriate.

15 MR. WAMSER: Next slide.

16 Okay. This is on fish and aquatic resources.  
17 This past year we did what is called habitat mapping of the  
18 bypass, and below Cabot Station, and what that entailed was  
19 we look at the width of the river, the depths, the  
20 velocities, the substrates; and it's really only to map  
21 where we see changes in the habitat of the river from a  
22 ripple to a run to a pool; and it's really done to inform  
23 this study right here.

24 What we've proposed in the pre application  
25 document was to conduct what's called an in-stream flow

1 study, and that will be done in the bypass as well as below  
2 Cabot. And the point of that study is to determine what  
3 flows are needed for the protection of aquatic resources.  
4 So that is one we are proposing to do. In fact, ideally  
5 we're looking to do that in 2013 during the summer, and we  
6 will be sending out a study plan on that perhaps earlier  
7 than the other study plans that are technically do in April.

8 A mussel survey has been done of the Turners  
9 Falls impoundment and in the canal, but we have not done  
10 anything below Cabot as of yet.

11 And the last thing here is assess impacts of  
12 project operations on sturgeon spawning near Cabot. That's  
13 probably going to be looped into this study right here.  
14 This study not only looks at -- it looks at all life stages  
15 of fish in various species of fish. So sturgeon would be  
16 included in that.

17 Any questions on that?

18 SPEAKER: Judy (inaudible). On that last point,  
19 you mentioned, will you at any point be proposing a similar  
20 hoist or elevator similar to the success they had down in  
21 Holyoke for theirs? It's a failure with the fish. Would  
22 that be something that you would be considering in the  
23 study?

24 MR. WAMSER: That is something that we are going  
25 to have to look at.

1 SPEAKER: The financial aspects of that?

2 MR. WAMSER: Yes.

3 SPEAKER: -- success points.

4 MR. WAMSER: For upstream and downstream passage,  
5 we'll be looking at that.

6 SPEAKER: So that is something, a viable --  
7 possibility.

8 MR. WAMSER: It's a possibility.

9 SPEAKER: I didn't hear that mentioned earlier  
10 with this. It's just very vague.

11 SPEAKER: So which species are on your list?

12 MR. WAMSER: Oh, boy.

13 SPEAKER: Is it somewhere easy to find?

14 MR. WAMSER: It will be easy for you to find on  
15 April 15th, because that's when we'll have the official  
16 study plans out.

17 SPEAKER: Then you can't add anything in.

18 MR. WAMSER: Well, no, you can. The way the  
19 process works is that April 15th, you guys provide comment  
20 March 1st. We have 45 days to send out our proposed study  
21 plans. Then by FERC regulation there's a meeting so you can  
22 then provide comment. If we didn't include all the species  
23 that you thought should be in there, that's when they would  
24 be included. Then we issue a revised study plan, so you can  
25 see if we acknowledged or brought your comment in.



1                   MR. MEYER: Just given that time line -- this is  
2 Carl Meyer -- from what I know about activity of sturgeon,  
3 you may be missing the season anyway. It may not be valid,  
4 what you're actually looking at spawning and using that  
5 reach. If you're getting -- April 15th is when you're  
6 getting the study plan in and any comments and any comments  
7 and getting it back, I think you might want to start  
8 thinking about next year.

9                   MR. WAMSER: The study doesn't have to be done  
10 during the time the fish are there, spawning. But we do  
11 know, in talking to people who are very knowledgeable about  
12 sturgeon spawning, of where the spawning beds are, so we'll  
13 be collecting data in that area, but it doesn't have to be  
14 during the time that they're there.

15                   Okay, Terrestrial resources, which includes  
16 rare, threatened and endangered species. In the pre  
17 application document we proposed what's called a baseline  
18 inventory study of the Turners Falls impoundment, the bypass  
19 reach.

20                   And what that entails is looking at wetlands,  
21 wildlife, rare, threatened and endangered species,  
22 submergent aquatic vegetation, emergent aquatic vegetation  
23 in the littoral zone. So I heard this morning, I believe  
24 there was a lot of discussion about fish spawning, what the  
25 impact of project operations is on that, When we go look in

1 the littoral zone, which is kind of the edge of the river,  
2 where fish may be for spawning, we're going to take a look  
3 at where that is, where that spawning habitat is in relation  
4 to water level changes. So that will be something to look  
5 at.

6 Yes?

7 MS. DOWD: Just on that note -- Jean Dowd.

8 Do you have any previous studies, since that's  
9 been going on for like thousands of years -- the spawning,  
10 you said, you will be --. I wonder if you have anything to  
11 look back on with this particular study.

12 MR. WAMSER: I'm not aware of any that's actually  
13 physically gone out and mapped where habitats are, for like  
14 spawning habitats. So that's part of what we're trying to  
15 do, is go out and find where those areas are.

16 MS. DOWD: Okay.

17 MR. WAMSER: And see how project operations may  
18 have impacted them.

19 Yes?

20 MR. McCOOL: Don McCool. How far below Cabot  
21 Station are you looking? Ten miles?

22 MR. WAMSER: Right now we're thinking of --

23 MR. McCOOL: Because you -- on the water.

24 MR. WAMSER: Right now we're thinking down by, to  
25 Rainbow Beach.

1 MR. McCOOL: Oh, good.

2 MR. WAMSER: Yes?

3 AUDIENCE: (inaudible)

4 MR. WAMSER: I'm sorry, I couldn't hear you.

5 SPEAKER: Radioactivity. (inaudible) coming out,  
6 and -- you know.

7 MR. WAMSER: That's beyond me; I'm not sure. I  
8 don't have an answer for you on that one.

9 MR. HOGAN: Can I get you to state your name for  
10 the record, please? Your name?

11 MR. EZIOT: Gesti Eziot. {ph}

12 MR. HOGAN: Thank you.

13 MR. WAMSER: Okay, next, which I don't think says  
14 much; and next. So Sarah's up.

15 I can't get off yet?

16 AUDIENCE: No.

17 (Laughter)

18 MR. CONWAY: I've got to go back. You don't need  
19 to go back. Peter Conway, Gill.

20 As far as spawning and when they're left high and  
21 dry, I can definitely show you where. Since I fish this  
22 section about nine months out of the year, and I watched  
23 them just having their spawning areas just dry up.

24 MR. WAMSER: I heard you say that.

25 MR. CONWAY: You heard me say that yesterday.

1 MR. WAMSER: Yes.

2 MR. CONWAY: Okay. Thank you.

3 SPEAKER: Just one more comment on that  
4 (inaudible).

5 I know the Native Americans aren't here to speak  
6 for studies about these spawning grounds. I'm sure you're  
7 aware that the spawning does take place and that you said  
8 you will do a study of your own.

9 So if we were to find a good reference for you  
10 and when we send in our recommendations for studies, is it  
11 okay if we quote the studies that we would like you to look  
12 at?

13 MR. WAMSER: I think that's part of why you're  
14 here tonight, is for you to tell FERC and us what studies  
15 you want.

16 SPEAKER: Okay. I didn't know if that was  
17 something that would be in the scope of --

18 MR. HOGAN: Well, I think the question is not  
19 only what studies should be conducted; but the comment is,  
20 do we want you to provide existing studies, or a reference  
21 to existing studies?

22 SPEAKER: In other words, it may not be  
23 scientific studies; I mean, Native Americans didn't have  
24 data, but they can look at the scope and the size and --

25 MR. HOGAN: The answer is we're interested in all

1 available information.

2 SPEAKER: Right. From different sources and  
3 different studies. You would think that that would be  
4 something that we can send in to you.

5 MR. HOGAN: Absolutely. Thank you.

6 MR. WAMSER: Okay. Thank you.

7 MS. VERVILLE: Good evening. My name is Sarah  
8 Verville from TRC; I'm another consultant working with  
9 FirstLight. And our firm is going to be working on  
10 recreational and cultural resource issues.

11 In 2012 we started conducting an inventory of  
12 existing recreational facilities within the FirstLight  
13 project area, and the data from that inventory you saw a  
14 couple of earlier slides.

15 And what that inventory did, it was a season-by-  
16 season study, and it determined what the existing facilities  
17 are, what kind of amenities they provide, what kind of  
18 condition they're in. We're going to try to finish the  
19 study in 2013, although weather hasn't been permitting, to  
20 sort of do an inventory of what sort of winter recreational  
21 facilities are available; obviously the Torren Trail Center  
22 is the obvious one.

23 We also, in our PAD, we proposed that we would  
24 develop study plans and study recreational use and doing  
25 user survey to figure out what sort of the recreational

1 demands are out there and what recreational opportunities  
2 are out there; whether or not changes to facilities needed  
3 to be made, whether or not there need to be new facilities,  
4 and what sort of demand there is.

5 We're also going to do a land use clarification  
6 inventory, which is sort of an exercise to classify the  
7 management of lands within the project boundary. And then  
8 finally we're going to take the other studies and look at  
9 the effects of project operations on recreational use and  
10 land use. We've heard a lot over the last few days, for  
11 instance, about, are there project operational effects on  
12 Barton Cove, for instance. Are there water level effects on  
13 some of the recreational facilities?

14 MR. SNEDEKER: Greg Snedeker, resident of Gill.

15 Just a question on the lone use classification.  
16 Do you have classifications now or are you proposing to  
17 create classifications; and what do you mean by that?

18 MS. VERVILLE: Well, first of all what we mean by  
19 that is going out and taking at how much of agricultural  
20 lands there are within the project boundary; how much, is it  
21 just devoted to the project itself? Is it undeveloped land?

22 MR. SNEDEKER: In terms of the land, you're  
23 talking about FirstLight land.

24 MS. VERVILLE: FirstLight's land.

25 MR. SNEDEKER: Okay, because much of that is not

1 -- it's on the boundaries of the banks, so you can't really  
2 consider it to be agricultural. There's agriculture above  
3 it.

4 MS. VERVILLE: There are areas where FirstLight's  
5 land ownership goes just beyond the bank; or it goes up  
6 beyond the bank. But the other part of that inventory is to  
7 get to your second point which is, are lands within the  
8 project boundary that are owned by FirstLight being  
9 appropriately managed?

10 Yes.

11 MS. KRUG: Hi, Stefanie Krug from Greenfield.

12 The bullet has No. 1 conducting the recreation  
13 use survey. How will you try to survey recreation use?

14 MS. VERVILLE: Well, at the moment what we tend  
15 to do is, and I'm not completely the expert on this, but  
16 what we do is we take -- we leave user cards at different  
17 recreational facilities; we interview, survey recreational  
18 users at different facilities.

19 MS. KRUG: Would there be a -- maybe create a  
20 website or some on-line survey that people could volunteer  
21 and access them, and so you wouldn't -- I know a lot of  
22 people that use the recreation office that would never see a  
23 survey.

24 MS. VERVILLE: Right. We can take that into  
25 account.

1 MR. HOGAN: Is it Stefanie?

2 MS. KRUG: Yes.

3 MR. HOGAN: The reason I'm here tonight is, how  
4 do you want the recreation survey done? So you tell me.

5 MS. VERVILLE: We'll definitely take that into  
6 consideration as a way of doing the survey.

7 I'm sorry?

8 MS. TUFTS: My name is Jennie Tufts, and I'm here  
9 tonight on behalf of the Northfield Open Space Committee.  
10 And I just wondered if you were aware that we had done an  
11 extensive survey of the residents of Northfield. If aren't  
12 aware, then I can direct you to it.

13 MS. VERVILLE: That would be great.

14 MS. TUFTS: If you went out to everyone in town,  
15 asking them what they wanted, what they use now in terms of  
16 recreational facilities; and that's all on the town website.

17 MS. VERVILLE: That would be great. Thank you  
18 very much for letting us know.

19 Cultural resources, we have proposed to, with  
20 respect to archaeological resources, we're going to start  
21 out with sort of a standard phase 1A archaeological survey  
22 where we will do a literature review and an onsite visit  
23 with all of the SHPOs to get a handle on what historic sites  
24 have already been identified. We'll then probably develop a  
25 sensitivity model to figure out what areas of the project



1 are sensitive, likely to have the presence of archaeological  
2 resources; and then depending on that modeling, to do some  
3 field testing to determine eligibility of archaeological  
4 resources.

5 We'll also do an historic structures survey, and  
6 we will be evaluating the project's facilities for  
7 eligibility on the register, and whether or not the project  
8 itself has an impact on eligible historic structures within  
9 the project vicinity.

10 MR. HOGAN: Thank you.

11 Oh, we have a question? Claire.

12 MS. CHANG: About the archaeological survey, are  
13 you using the Mass archaeological database?

14 MS. VERVILLE: We will be. We haven't done  
15 anything yet.

16 MR. HOGAN: So at this point in time we're going  
17 to quickly go through the resource issues that FERC has  
18 identified in its Scoping Document 1. If you wanted to  
19 follow along, it's on page 27. This will be very quick,  
20 won't take us very long at all to do this. And then -- it  
21 is 27, right?

22 And then, give you guys an option for a break  
23 after we do that, or we can jump right into a public comment  
24 period, either one.

25 I'd like a show of hands. Either way, I have to

1 do a break at least by 8:30 to give this gentleman here, who  
2 is working very hard, a short rest.

3 MS. DOWD: Excuse me, sorry for interrupting.  
4 Jean Dowd, Greenfield. I just felt there would be a  
5 balance, since you've listened to 23 slides, that maybe the  
6 public could say something at this point for some of us who  
7 have to go home and take care of family.

8 MR. HOGAN: Would you folks rather that FERC  
9 doesn't do its --

10 SPEAKER: I appreciate that, a break, and then  
11 listen to the public at 9:30.

12 MR. HOGAN: Okay --

13 AUDIENCE: How long is the FERC --

14 FERC: We'll be quick.

15 MR. HOGAN: About five minutes for the FERC  
16 portion.

17 So we'll do the FERC portion for five minutes and  
18 then we'll take a break at 8:30. It's 10 of 8 now, so we  
19 will get into the public portion, okay?

20 AUDIENCE: Thank you.

21 MR. HOGAN: Geology and soils.

22 Geology and Soils

23 MR. NELSON: My name is Rob Nelson. So I'm going  
24 to be looking at page 26, 27, 4.3. And these are some of  
25 the issues and concerns initially identified by the FERC;

1 and I'm going to speak to geology and soil resources.

2 There are two bullets, and I'll just read from it for you.

3 We're looking at the effect of project-induced  
4 water level fluctuations in the Turners Falls impoundment on  
5 shoreline stability and river bank erosion, particularly  
6 where erosion might impact protected plant species, critical  
7 wildlife habitat, adjacent structures, recreational use  
8 facilities, cultural resources and/or private land owners  
9 within the project boundary.

10 Second bullet, we're looking at the effects of  
11 Turners Falls project operation on river bank erosion in the  
12 bypass reach and downstream of Cabot Station.

13 Water Resources - Water Quantity and Quality

14 MS. SCANGAS: Angie Scangas, Section 4.3.1.2,  
15 Water Resources. We've identified the effects of current  
16 and proposed project operations on water quantity, including  
17 power generation, and the effects of project operations on  
18 water quality, particularly dissolved oxygen and  
19 temperature.

20 MR. WARNER: John Warner, is that water quality  
21 analysis to include sediment load?

22 MR. HOGAN: John, should that water quality  
23 analysis include sediment load?

24 (Laughter)

25 MR. HOGAN: Why don't we hold the comments -- or

1 questions like that, and you tell us what you want to see  
2 when we get to the public comment period, okay.

3 Aquatic Resources

4 MS. GREEN: Mary Green. Aquatic resources and  
5 the preliminary issues that have been identified. The  
6 effects of project operations including fluctuations in  
7 water levels and downstream releases on aquatic habit and  
8 resources in the project vicinity. For example, resident  
9 and migratory fish populations, fish spawning, rearing,  
10 feeding and overwintering habitats, and mussels and  
11 macroinvertebrate populations and habitat.

12 A second bullet is the effects of project  
13 facilities and operations, including the reservoir  
14 fluctuations and generation releases on fish migration  
15 through and within project fishways, reservoirs, and the  
16 downstream riverine corridor.

17 And a third bullet is the effects on entrainment  
18 on fish populations at each project.

19 Terrestrial Resources

20 MR. BATTAGLIA: Brett Battaglia with FERC,  
21 terrestrial resources. Effects of project fluctuation in  
22 water levels and flow releases from the project on riparian,  
23 wetland and littoral vegetation community types, and the  
24 spread of invasive species as a result of project operations  
25 along the shoreline of the project. Effects of project

1 operation and maintenance activities; for example, road and  
2 facility maintenance, and project-related recreation on  
3 wildlife habitat and wildlife.

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

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

11 And lastly, the effects of project operation and  
12 maintenance activities and project-related recreation on  
13 bald eagles and their habitat.

#### 14 Threatened and Endangered Species

15 MS. McCANN: Effects of project fluctuations and  
16 releases from the project on aquatic species listed as  
17 threatened and endangered under the federal Endangered  
18 Species Act. For example, shortnose sturgeon. Effects of  
19 project fluctuations and releases from the project on  
20 wildlife and plant species listed as threatened or  
21 endangered under the Endangered Species Act.

22 Effects of maintenance and use of project  
23 recreation facilities on plants and wildlife species listed  
24 as threatened or endangered. And effects of project  
25 operation and maintenance activities on plants or wildlife

1 species listed as threatened or endangered under the ESA.

2 Recreation

3 MR. BEECO: Recreation. Under recreation, the  
4 adequacy of existing recreation and public use facilities,  
5 existing and future regional public use and river access  
6 needs. Effects of project operations on quality and  
7 availability of flow-dependent and water level-dependent  
8 recreation opportunities, including boating. The adequacy  
9 of structural integrity, physical capacity and/or management  
10 methods to support recreation use at existing facilities.

11 Land Use and Aesthetic Resources

12 And under land use: the advocacy of existing  
13 shoreline management policies and programs to control non-  
14 project use of project lands. The adequacy of shoreline  
15 buffers to achieve project purposes in compliance with local  
16 and state requirements.

17 And under aesthetic resources, at this time we  
18 have not identified aesthetic resource issues.

19 MR. HOGAN: Do I need to translate?

20 (Laughter)

21 SPEAKER: How do you define an aesthetic  
22 resource?

23 MR. HOGAN: How do you define an aesthetic  
24 resource?

25 Basically viewsheds; for FERC a lot of times it's

1 the aesthetics -- a lot of our hydro projects may occur at  
2 existing waterfalls, and they route the water around the  
3 waterfall and there's no water on the fall anymore, there's  
4 an aesthetic issue. You know, it's prettier with water over  
5 the falls than not over the falls.

6 But it can be anything. If you want to identify  
7 eyesores that you feel should be addressed, that's what  
8 we're interested in.

9 Leena?

10 MS. NEWCOMB: Leena Newcomb. Does the color of  
11 our homes and cottages and camps on project lands fall under  
12 aesthetics, and who governs that?

13 MR. HOGAN: The answer is 'possibly yes.' And  
14 possibly us. Not to say that it's an issue. I haven't  
15 heard that yet. So -- okay?

16 MS. NEWCOMB: Yup. We'd like to (inaudible)

17 MR. HOGAN: I'd like to know if it's an issue.

18 MS. NEWCOMB: It is.

19 MR. HOGAN: And we'll get to that.

20 For socioeconomic resources, when we developed  
21 Scoping Document 1, we did not identify any socioeconomic  
22 resources. However, through our scoping meetings thus far,  
23 we have identified socioeconomic concerns associated with  
24 recreation opportunities, and we've been asked for an  
25 economic analysis of the recreation availability, recreation

1 in the project area. So just to identify that currently.

2 Culture resources?

3 Cultural Resources

4 MR. QUIGGLE: Section 4.3.10, of Scoping Document  
5 1 describes the issues we've identified in association with  
6 cultural resources. And those are project effects on  
7 archaeological and historic properties listed in or eligible  
8 for inclusion in the National Register of Historic Places,  
9 including properties of traditional religious or cultural  
10 significance.

11 MR. HOGAN: Regarding developmental resources, we  
12 typically don't seek public comment on this resource; this  
13 is an analysis that the Commission Staff does to evaluate  
14 any recommendations that we are making for mitigation or  
15 enhancement measures, and their effect on project economics;  
16 and those recommendations are made to the Commission, the  
17 five Americans appointed by the President of the United  
18 States.

19 Yes, sir.

20 MR. LEE: Kitch Lee, PCR. They've done the  
21 archaeological studies. Do you have any plans or projects  
22 to develop the Greenfield Memorial in Northfield?

23 MR. HOGAN: We're having a real hard time hearing  
24 you. Would you stand up and project, please? Or come up  
25 and use the microphone?



1                   MR. LEE: I just was asking about the Kingfield  
2 Memorial in Northfield by the river, whether there's a --  
3 plans for making more than a little sign.

4                   MR. QUIGGLE: I think that's something we will  
5 get to as part of this scoping process, to see what interest  
6 is in the public, and then as FirstLight enters into their  
7 study scoping thing.

8                   MR. HOGAN: So if you feel that's an appropriate  
9 issue to raise tonight, please do so.

10                   MR.                   (inaudible) Yes, I do.

11                   MR. HOGAN: But you raised it as a question. I  
12 want to hear it as a statement.

13                   AUDIENCE: I didn't hear the question.

14                   MR. HOGAN: The question was, or the comment, if  
15 I can paraphrase is: And I didn't quite catch the memorial  
16 --

17                   AUDIENCE: Kingfield Memorial.

18                   MR. HOGAN: The Kingfields Memorial, something  
19 more should be done than is currently being done; right now  
20 there's only a small plaque, and -- did I paraphrase that  
21 well?

22                   MS. TUFTS: Also, Jenny Tufts again from  
23 Northfield.

24                   I'm not aware it's called a memorial. There is  
25 King Phillips' Hill, which is a site that's been identified

1 as a historical site; and there are some signs up there with  
2 a little history and some trails.

3 And some questions about what's really there. So  
4 that may be --

5 MR. LEE: Yes. I'd like to see it expanded.

6 MR. HOGAN: Okay.

7 MS. TUFTS: It's about a ten acre parcel that's  
8 owned by the Town of Northfield. And there have been some  
9 archaeological studies done there by the University of  
10 Massachusetts over the last 40 or 50 years, but a lot of  
11 that information isn't public information, actually. It's  
12 been kept rather quiet.

13 MR. HOGAN: And is it --

14 MS. TUFTS: And that's at the request of Native  
15 American tribes, actually, that it be kept --

16 MR. LEE: I wonder how far that is from the  
17 river.

18 MS. TUFTS: It's on the river, right on the  
19 river.

20 MR. HOGAN: Okay. And in the Turners Falls  
21 project area?

22 MS. TUFTS: Definitely.

23 MR. HOGAN: Thank you.

24 Yes, sir.

25 MR. MERRIAM: Bruce Merriam, Montague.

1                   I was just curious, this summer, are FERC Staff  
2 members going to be in the area? Are they going to be  
3 available if we want to take them on a tour of the river and  
4 show them different things?

5                   MR. HOGAN: I have no plans for that right now,  
6 but if we determine that it's appropriate and necessary,  
7 that could be done.

8                   All right. So that's what we had for what we've  
9 identified in Scoping Document 1.

10                   Public Comment Section

11                   MR. HOGAN: What I'd like to do now is, I'm going  
12 to call the next person to speak. I'm going to call the  
13 next person to speak, and the follow-up. So the follow-up  
14 person, I'd like to have you, for efficiency purposes, move  
15 to the front of the room, take a chair, and then when the  
16 current person speaking is done, you can assume the mic and  
17 I'll call the next person. So we'll just keep things moving  
18 along.

19                   It's 8 o'clock. Like I said, I will take a break  
20 at 8:30. It will be a ten minute break, and then we'll  
21 continue on until we're done.

22                   Yes, ma'am.

23                   AUDIENCE: I know I have to be home soon, so I  
24 guess -- what is the order of the list?

25                   MR. HOGAN: I actually do not have an exact

1 order. I have sheets. I've had one request to go first.

2 What's your name?

3 MS. DOWD: Jean Dowd, D o w d.

4 MR. HOGAN: Okay, Jean, you're on deck for  
5 second.

6 MS. DOWD: Okay, thank you.

7 MR. HOGAN: And then I'm not taking any more  
8 special requests.

9 (Laughter)

10 MR. HOGAN: Leena; and Jean, you're up next.

11 MS. NEWCOMB: My name is Leena Newcomb, and I own  
12 a cottage on the horse race section of the Connecticut River  
13 here in Montague, and it is on the project lands.

14 I've been asked to speak on behalf of the River  
15 Residents Association. We are dedicated to preserving a  
16 life worth living on a river worth loving. And in the  
17 back of the room our photographs that were prepared, that  
18 show some of our concerns. It's not all-inclusive, but it  
19 does show many of our concerns, and it also shows some of  
20 our properties and the investment in remodeling we've done.

21 The Association is comprised of people who own  
22 camps, cottages and homes. There are 24 of us on project  
23 lands. There are also private landowners and homeowners,  
24 and members of private clubs that recreate on the  
25 Connecticut River within the Turners Falls and Northfield,

1 Mass. section of the river.

2 We're concerned for the future of this beautiful  
3 natural resource as well as our existence along the river  
4 banks. We take exception to it being called the 'lower  
5 reservoir of the project.' And yes, we're emotional. We're  
6 passionate, because we live here and it means a lot to us.

7 As many of us live on this river, we see things  
8 changing, sometimes on a daily basis. Our major concern is  
9 the negative effects we see occurring from extreme erratic  
10 water level fluctuations. The following are some  
11 observations by people who live and recreate along the  
12 river, and many of us have spent decades here.

13 Observations included but not limited to: shifts  
14 in the shoreline and riverbed, erosion along the shores,  
15 loss of recreation areas that allowed boat access at one  
16 time, now have no shoreline, only steep banks to climb up.  
17 Lack of adequate tenting facilities, silt and sediment  
18 buildup, sandbars that come and go, algae growth in Barton  
19 Cove. Damage to personal property at low tides, meaning we  
20 have torque damage to our docks, our boats get stranded on  
21 rocks and stuck in mud, and we're also concerned about the  
22 wetland cattail marsh habits; we see them changing and we  
23 see them vanishing.

24 Land mass loss around the islands, sand bank  
25 habitat for the swallows; they're gone. Beaches appear and

1 disappear within hours some days in the summer. And I say  
2 the summer, because I don't know in the winter. I'm not out  
3 on the beach.

4 Backwaters, shallows, coves and the depths  
5 diminishing. Less herring, osprey and Kingfisher sightings,  
6 less dragonflies seen. Changes in fishing bounty, fish egg  
7 nests exposed at low tides drying out and dying, and  
8 waterfowl breeding grounds unexpectedly become submerged and  
9 the offspring being drowned.

10 Those are just some of the things that we see  
11 that we as a group were able to make a list of that we  
12 wanted to share here with FERC and FirstLight. We believe  
13 everyone here wants to work together, to ask the right  
14 questions and find effective solutions; and we feel that we,  
15 the River Residents, are an integral part of this process.

16 Is there a way to create moderation or eliminate  
17 altogether dramatic water level fluctuations? Can it be and  
18 should it be regulated differently? And for the record, we  
19 are in favor of the research of a closed loop system that  
20 we've heard mentioned a couple times over the last few days.  
21 A true, man-made lower reservoir that would allow the river  
22 to return to its natural state.

23 Our other concern is about our continued  
24 existence as residents along the river. Most of us in this  
25 association are camp owners with a license agreement

1 allowing us to occupy the land. Our existing structures are  
2 a historical use that began back in the early 1920s; and the  
3 previous licensees for these projects issued permits to  
4 manage their use.

5 Prior to 2008, the previous licensors, and I  
6 couldn't possibly tell you who they are, but many of us have  
7 timelines of how things changed hands with the companies  
8 selling. Previously the licensors did not seek Commission  
9 approval of these uses and occupancies of the project  
10 property; a minor technicality in paperwork and documents.  
11 Someone dropped the ball along the way. We owe great thanks  
12 to Mr. John Howard of the Northfield Mountain Pumped Storage  
13 facility for noticing this oversight. He realized there was  
14 no mention of the existing residential and private  
15 structures, and he took action to correct this.

16 An application was filed in October of 2008. It  
17 requested the Commission give authorization to issue  
18 revocable five year licenses as well as life use licenses,  
19 otherwise known as permits for some, for us on the lands at  
20 the Northfield Mountain and Turners Falls hydroelectric  
21 projects.

22 The Commission granted what is called an order  
23 modifying and improving non-project use of project lands and  
24 waters. And that was issued in October of 2009. As  
25 licensees, we are mandated to do certain things. We're

1 inspected once every year, and to be in compliance with the  
2 terms FirstLight Hydro Generation Company sets forth.

3 As you can imagine, it is very unsettling to not  
4 know if all our love, sweat and money spent on our river  
5 homes will be for naught at the end of a five year license.  
6 The power company reaps many rewards using the river to  
7 generate power, and for nearly 100 years our families have  
8 lived and recreated on this stretch of the river.

9 My grandchildren are now the fifth generation to  
10 grow up at our cottage, learning to swim in the river,  
11 fostering a love and respect for the natural world provided  
12 by this incredible watershed. We see ourselves as assets to  
13 this majestic waterway; and yet we have no reassurance that  
14 we'll have any future past five years. It's a very one-  
15 sided situation and tenuous position to be in. We act as  
16 caretakers, we are self-appointed stewards. We are the eyes  
17 and ears of the woods and the water. We investigate smoke  
18 sightings in the woods and have aborted forest fires. We  
19 provide shelter and rides to canoeists that are caught in  
20 storms, tow boaters who are out of gas or with broken  
21 engines or props. We rescue anglers and others who fall  
22 overboard and can't swim, rescue kayakers who flip during  
23 cold water months, pick up countless amounts of trash after  
24 the weekend warriors leave Sunday night, and we assist  
25 novice boaters and escort-weary paddlers, rescue women in



1 labor off the water and get them to hospital; and sadly, we  
2 even help search for bodies.

3 As proprietors of our footprints, we take  
4 seriously the investment in our life-style on the  
5 Connecticut River, both financially and emotionally. The  
6 majority of us have remodeled and made improvements to our  
7 properties; they really aren't camps any longer.

8 We have taken great pride in bettering our  
9 environments and we have given gladly, and we are gifted by  
10 the beauty, serenity and solitude that the river offers. We  
11 delight in her recreational diversity, we celebrate family  
12 and friends, generation after generation, and we continue on  
13 year after year in blind faith that our five year licenses  
14 will be renewed. Does this seem equitable?

15 We realize that, we make the assumption that you,  
16 FERC and FirstLight want us to continue to be on project  
17 lands. It would be nice to know how the Commission and how  
18 FirstLight really views us. What laws, if any, protect our  
19 interest. We really don't know and we would like to know.

20 We'd like a clearer understanding of how the  
21 licenses are administered. We were under the impression  
22 that FERC governs over the use of the lands; however,  
23 according to the language in the order approving us having  
24 use of the project lands, it appears that FirstLight Hydro  
25 Generation Company makes the decisions governing us, the

1       licensors.

2                   Does FERC have any say in our interest? And is  
3       there a liaison within the FERC organization that can work  
4       with our association in helping us better understand our  
5       rights and our responsibilities? How can we alter the  
6       current arrangement to meet our present and future needs?  
7       And as always, we're very, very happy to meet with John  
8       Howard and Beth Fazzler (ph); they have always extended  
9       themselves to us and we've dragged our heels in getting  
10      organized for a while now, even at their request. So we did  
11      it finally, John.

12                   We respectfully ask for consideration in  
13      lengthening the license term commensurate to the number of  
14      years approved for FirstLight Hydro Generation Company's new  
15      license to operate, beginning in 2018. And what is the  
16      procedure to effectuate this?

17                   We endeavor to continue to assist and promote and  
18      ongoing cooperative relationship with all parties' interest  
19      in mind. We are dedicated to a life worth living on a river  
20      worth loving. We thank you for your time, and we  
21      respectfully submit this inquiry and the photographs to the  
22      Commission.

23                   Thank you.

24                   (Applause)

25                   (The documents follow:)

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1 MR. HOGAN: On deck will be Paul Nowill.

2 MS. DOWD: Hi. This is Jeanne Dowd, I'm from  
3 Greenfield.

4 I came here from the kennel; I work with homeless  
5 animals. I also work with poverty. There's 50 million kids  
6 in poverty. So I'm getting used to speaking for those that  
7 have no voice. I'm getting used to contacting congressman  
8 and Senators and making my voice known.

9 Some of us are good at research, some of us are  
10 good at speaking. I was in research and I conducted studies  
11 for 15 years for the federal government, and I was a senior  
12 statistician/economist. Now, studies can say what you'd  
13 like them to say.

14 So today I'm here to speak on behalf of fish. I  
15 wrote this on my way over from the kennel. I'm here on  
16 behalf of migratory fish; their habitat, their spawning  
17 ground -- which is being systematically exterminated. Their  
18 first life, black hole, there's sludge, and the stressful  
19 conditions including the switching stations' current  
20 changes, turbines,  
21 the slicey-dicing and coe is the pond.

22 The federal trust shad, the endangered sturgeon  
23 and other migratory fish on the river run during spawning-  
24 migration season. I know you're all wondering why I'm  
25 mentioning -- this seems redundant to you. However, I

1 waited for an hour and a half to speak my mind to  
2 FirstLight.

3 I'm here also today to relay to FirstLight the  
4 outrage and anger which is felt by children. They connected  
5 the dots for me. They discovered that FirstLight was the  
6 source of the cause and effect the decimation of their  
7 beloved fish.

8 This past March-April-May we took a group of  
9 elementary, home-schooled, whole life learners from  
10 Greenfield and all the children down to Holyoke to enjoy the  
11 first visit to the Holyoke Hoist to examine the river  
12 migration. They were thrilled when they could visibly see  
13 thousands of fish through the window, waiting to be set free  
14 after being lifted over the dam to swim to freedom and to go  
15 to the ancient spawning grounds near Turners Falls.

16 The children, they counted and watched, they  
17 tallied the numbers. All the people there, I heard a  
18 comment, someone said to me: "You're from Greenfield.  
19 They're killing the fish there." I turned, I had no idea  
20 what they were referring to. I gave them actually a dirty  
21 look; I was very proud of my town.

22 The children continued to watch as these  
23 migratory fish looked out the window. They were ready to  
24 go, and they made it, they made it over the dam.  
25 Unfortunately, after they were released, we followed up with

1 a visit, a trip to Turners Falls' ladder, and we did so on  
2 and on, many visits throughout the migratory season. What  
3 did we all see? We saw a very dirty window and no fish.

4 Ninety percent of the fish were gone. The  
5 children were wondering why the water was filthy, and they  
6 saw no fish. We had to do research, we had no choice. What  
7 they learned was heartbreaking. So that's why I'm here to  
8 speak for them. They deserve to have a clean river, to see  
9 the fish fulfill their lifecycle, to migrate as they had for  
10 thousands of years and only to return to the sea.

11 Why can't we find a way like they did in Holyoke?  
12 It's costly, I know. So we're looking forward to  
13 recommending maybe more studies that might help initiate  
14 something along those lines. And our question, I guess at  
15 the end of the day here is: How have you adequately  
16 protected the endangered shortnose sturgeon, the federally  
17 protected shad and other migratory fish?

18 This is our heritage river, as President Clinton  
19 who was from my mother's state -- and it's required, as  
20 codified under the Massachusetts Endangered Species Act,  
21 Managerial 131A, the Wetlands Protection Act, to be  
22 protected.

23 I'll leave that in your hands today. Thank you.

24 (Applause)

25 (Document follows:)

1 MR. HOGAN: Thank you, Jean.

2 Leena, I've got a question from Brett of my team  
3 for you.

4 MR. BATTAGLIA: Brett Battaglia with FERC.

5 Leena, you mentioned two things that you saw;  
6 changes in wetlands, you saw changes in water quality. If  
7 you could just provide me with a brief summary; A) were  
8 those changes within the input of the project. If you can  
9 give me a quick example of what those changes might have  
10 been in the wetlands you saw; and for the waterfall, did you  
11 see the nest that was set, eggs were laid, and then water  
12 was moved from the nest, was stranded or just the opposite:  
13 the nest was set up, water came and flooded the nest?

14 MS. NEWCOMB: I personally did not see a  
15 waterfowl nest being flooded; however, other people in our  
16 association who live in areas where the birds nest and breed  
17 have seen it; so I'm reporting what our group has observed.

18 MR. BATTAGLIA: Okay.

19 MS. NEWCOMB: And my own personal experience as a  
20 photographer, I am habitually photographing along the river;  
21 and in 2008 and 2009 there were a pair of swans -- and  
22 again, I said yesterday I know the swans aren't native; but  
23 at what point when an animal lives somewhere for a long,  
24 long time, doesn't it eventually become a native? I don't  
25 know how that works scientifically.

1                   But anyway, I know people love them and I know  
2 people hate them, but nonetheless I think they may be  
3 indicative of showing what might be happening to other  
4 habitats along the river. Because in 2008-2009, I saw a  
5 pair of swans who had five signets, and week after week,  
6 some of us along the river who are there constantly, daily,  
7 saw these signets disappearing due to falling prey, I'm  
8 sure, to other animals.

9                   Well, one survived. And a year later I  
10 photographed it. It's on the board back there with its  
11 parents. I haven't seen any signets since 2009 and that one  
12 teenager adolescent that seemed to have survived. I haven't  
13 seen any since. I don't know if anyone else has; I have no  
14 scientific proof, but I think it's something to look at.

15                   And the other question was, previous to that was  
16 what?

17                   MR. BATTAGLIA: You mentioned that you observed  
18 changes in wetlands, and I'm curious if you could summarize  
19 what those changes are.

20                   MS. NEWCOMB: The water level goes up and down; I  
21 don't know anything about how all this works, how things  
22 grow; but I do know areas that had cattails, reeds, grasses  
23 that grew up out of the wet ground are diminished; they're  
24 not as -- the peninsulas that exist of these marsh areas and  
25 cattails aren't as prolific as they used to be; they're not



1 as wide, they're not as long. There used to always be one  
2 in front of the Turners Falls Rod and Gun Club cove. I have  
3 pictures on the board back there of it -- it doesn't exist  
4 anymore at all. And I'm just talking five years ago, or six  
5 years ago. It's not there anymore. In the summer you may  
6 see a couple of little grass reeds sticking up, but that's  
7 it. And there's other areas like that along the Turners  
8 Falls up to Northfield regions of the river that I'd be  
9 happy to take anyone to see them, when the weather warms up.

10 MR. BATTAGLIA: Thank you. That's very helpful.

11 SPEAKER: I can answer the first question that  
12 Leena couldn't.

13 MR. BATTAGLIA: I'll just ask this real quick.

14 Are the properties that people in your  
15 association have, are they fee based?

16 MS. NEWCOMB: Are they what?

17 MR. BATTAGLIA: Fee based. Do you pay a fee to -  
18 -?

19 MR. HOGAN: Fee based.

20 MS. NEWCOMB: Yes. We pay money to be on the  
21 land. We pay for our license on a yearly basis.

22 MR. CONWAY: Peter Conway, Gill.

23 And I know that -- yes, John and Claire are still  
24 back there. So we're referring right now to the swan  
25 nesting area, and this was in last spring, right?

1                   Yes. So in regard to your first question, where  
2 did this happen? As far as the swan was concerned, it was  
3 on Riverview Drive on the Barton Cove side. And this  
4 particular swan nested high enough, and I think she laid  
5 seven eggs --

6                   MS. NEWCOMB: Yes.

7                   MR. CONWAY: -- first time?

8                   MS. NEWCOMB: First time.

9                   MR. CONWAY: First time, and then after the first  
10 eggs were laid, the water came above her nest; and I noticed  
11 water coming up so I went and saw the eggs, and I said  
12 'those eggs are going to get flooded out.' Well, when I  
13 went there the next day, because of the high water that  
14 happened overnight, the eggs were gone.

15                   And so as a result of that, this swan kind of  
16 floundered around for a while. And I think probably a week  
17 or two later she laid more eggs, correct? Yes.

18                   And so she nested for a while on those; and then  
19 perhaps three weeks after that, approximately, the water  
20 came up over the nest again, and she continued -- I think  
21 she sat there for about four or five weeks, and I don't know  
22 what the period of time is needed for these eggs to hatch;  
23 but eventually they I think just rotted or something like  
24 that.

25                   MS. NEWCOMB: Well, but she and her mate kept on

1 building the nest up, as high as they could --

2 MR. CONWAY: Right.

3 MS. NEWCOMB: -- they kept on adding more and  
4 more material as each clutch died. Finally, by the third  
5 clutch, they lived, and I don't know how many. It was  
6 around five or six.

7 MR. CONWAY: This one made a valiant effort in  
8 that they did keep on bridging around the nest, but the  
9 water was coming in underneath and going up. So this was an  
10 abnormally high rise in the water, and she was there high  
11 enough. And as far as these -- whatever you call these  
12 little baby swans --

13 MS. NEWCOMB: Signets.

14 MR. CONWAY: -- signets, yes. I have seen them  
15 when I go fishing around where the old eagle's nest used to  
16 be; I've seen them in the past year or two. So I know that  
17 they do succeed. Thank you.

18 MR. HOGAN: Thank you. Paul?

19 MR. NOWILL: I'll be brief. My problem is with  
20 the power canal. I'm an abutter, and I believe there's  
21 excessive leakage through the canal.

22 MR. HOGAN: Hold the mic a little closer.

23 MR. HOWILL: Any water that leaks out of the  
24 canal is not generating power, and I believe now is a good  
25 time for FirstLight to repair the canal and fix the -- and

1 reduce the leakage. Thank you.

2 MR. HOGAN: Elizabeth O'Neil, I think.

3 Lizzy Oriole (ph)? She left.

4 Kim Lee?

5 I'm actually not sure of the last name. It looks  
6 like -- and I'm not sure of the first name, sorry. But the  
7 phone number is 413-6568 -- 7 or 9.

8 And on deck we have Howard Fairman.

9 MR. LEE: My name is Kitch Lee, PCR.

10 A very brief information, basically. I know that  
11 you have a storage facility that's going to be increasingly  
12 used for changing a grid. Basically the wind power  
13 generation is increasing in this area, in ISO market.

14 And the hydro pumped station is important to  
15 station is important to supplement the capacity when the  
16 wind dies down, then you no more have generation therefore  
17 to stabilize that electricity energy; they probably use the  
18 pumped storage to meet that capacity, demand. So it becomes  
19 an important project.

20 My question or concern is that therefore the  
21 large body of water is going to be held for that occasion,  
22 and when the ISO dispatches the pumped storage to release  
23 the water all of a sudden, how much of the water is going to  
24 be released all of a sudden and affect the river rise and  
25 fall? I just want to bring that issue.

1 MR. HOGAN: Thank you.

2 (Applause)

3 MR. HOGAN: After Howard we have Karen Evans --  
4 I'm sorry. After Howard we're going to take a break, and  
5 then Karen Evans will be up.

6 MR. FAIRMONT: For the record, Howard Fairmont F  
7 a i r m a n from Vernon, Vermont.

8 I, since the 1960s, have independently studied  
9 New England's energy supply and its seasonal aspects, which  
10 include GDF Suez, which you may have noticed along with  
11 FirstLight Power Resources. GDF is Gaz de France, and Suez  
12 is the original Suez Canal Company, which is now in the  
13 energy business.

14 A small sidelight that you may be interested in;  
15 earlier on it was mentioned, where can you see the  
16 Connecticut River as it used to be before development? And  
17 the answer is, the longest such stretch is north and south  
18 of Sumner Falls, which is between Hartland, Vermont and  
19 Plainfield, New Hampshire, or if you prefer, below the  
20 Wilder Dam and above the Bellows Falls Dam.

21 Someone mentioned quite early in this discussion  
22 that the scale of Northfield Mountain Pumped Storage is  
23 truly astonishing, and I'm going to give you a bit of  
24 practical information to give you an idea of the true scale  
25 of this project.

1                   It has been mentioned that the total generating  
2                   capacity is 1100 megawatt. I come from Vermont, population  
3                   635,000. The most electricity we have ever used was 1100  
4                   megawatts. In other words, in any circumstances, Northfield  
5                   Mountain can power the entire state of Vermont all by  
6                   itself.

7                   Now in that regard you may have noticed also in  
8                   the presentation they referred to when they're pumping,  
9                   they're pumping 15,200 cubic feet per second; when they're  
10                  generating -- that's 15,200 going up the mountain -- when  
11                  they're generating, it's 20,000 cubic feet per second coming  
12                  down.

13                  I don't know about you, but cubic feet per second  
14                  don't mean anything to me; so I converted that into gallons,  
15                  at 7.48 gallons per cubic foot. So that's 114,000 gallons  
16                  per second going up the mountain, and 150,000 gallons per  
17                  second coming down the mountain.

18                  Well, I still had trouble visualizing that. But  
19                  living on the railroad in Vernon, I see tank cars all the  
20                  time, so I took a look at the GATX website; they are the  
21                  leading lessor of tank cars in the United States. They said  
22                  that their capacities range from 10,000 to 30,000 gallons.

23                  All right, so let's say 20,000 gallons per tank  
24                  car. that means when they're pumping, they're 6 tank cars  
25                  per second going up the mountain, or a 340 car train going

1 up every minute. When they're generating, there's 8 tank  
2 cars per second coming down the mountain, or a 450-car train  
3 coming down the mountain every minute.

4 Now the official history of the New England  
5 electrical system tells us that when Northfield Mountain was  
6 originally built, it was built essentially to deal with  
7 certain emergencies. The original motivation was, the Great  
8 Northeast blackout of the 1960s. You can't restart a grid  
9 unless you have electricity, and they any electricity with  
10 which to restart the grid. Northfield Mountain was one of  
11 the projects built to make that happen.

12 Now I got interested in this because I was  
13 watching the counts of American shad and the percentage that  
14 made it from the Turners Falls gatehouse to the Vernon  
15 fishway, which is not far from my house, and I noticed that  
16 after 2004, the percentage of American shad that made it up  
17 there, and all they did was pass up the Turners Falls  
18 reservoir, decreased drastically.

19 Now the only thing that's happening in between is  
20 Northfield Mountain pumped storage, this enormous quantity  
21 of water being taken out of the river and going back in; and  
22 the big difference between the original intent of Northfield  
23 Mountain and the way it runs now is that now it's a merchant  
24 power plant, and as you can read in the scoping document,  
25 they cycle it almost every day. So almost every day they

1 bring the reservoir down, and they bring it back up again --  
2 this during several hours.

3 Now I'll remind you, I said that's a 340-car  
4 train going up every minute, this during many hours. And a  
5 450-car train coming down every minute, once again during  
6 many hours. That is a huge quantity of water. And my  
7 purpose here, and what I'll be doing during this is to make  
8 sure that we have a thorough study of the environmental  
9 impacts of such an enormous quantity of water being moved on  
10 a daily basis between the upper and lower reservoirs.

11 Thank you.

12 (Applause)

13 MR. HOGAN: Thank you, Howard.

14 Question, Leena?

15 MS. NEWCOMB: May I make a comment?

16 MR. HOGAN: Sure.

17 MS. NEWCOMB: Leena Newcomb. I would just like  
18 to say thank you to this gentleman, because he's the first  
19 person that's ever created a visual for me that explains why  
20 I can sit on my dock and watch my ledges in an afternoon get  
21 covered or uncovered while I sit there. I've never known  
22 how that much water could move that fast. Now I do. Thank  
23 you.

24 MR. HOGAN: All right, let's take a ten minute  
25 break, so we'll reconvene at quarter of 9. And Karen is up



1 next to speak.

2 (Recess.)

3 - 0 -

4 MR. HOGAN: Let's restart, folks. Karen Evans is  
5 next, and then Brian Kenney on deck.

6 MS. EVANS: I'm afraid my problems don't impact  
7 too many people but myself, but my property abuts FirstLight  
8 property and I spoke earlier and angrily about problems I've  
9 had with bad behavior. And I'm hoping we can come up with  
10 some way to make more of a presence, a civilized presence  
11 known in that park area, where it won't be the place where  
12 you can do anything that you can't do anyplace else.

13 The other problem I have is on the back of my  
14 privately owned property, I have a very steep bank where I  
15 own the bank, but FirstLight has an easement along the  
16 riverbank; and in the five years I've lived in the house,  
17 eroded substantially. I know this because the kids can't  
18 walk by anymore; and last year they were in fact cutting  
19 down trees to try and make a better path for themselves.

20 And it's hard for me to manage my bank if I can't  
21 control the edge of the river. So I'm hoping something will  
22 be figured out here. Thank you.

23 MR. HOGAN: Thank you, Karen.

24 Brian?

25 And on deck we have Bruce Merriam.

1                   MR. KENNEY: My name is Brian Kenney. I'm the  
2 business manager of the International Brotherhood of  
3 Electrical Workers, Local 455. And I represent the  
4 employees at both Cabot Station and Northfield Mountain.

5                   I don't live in the area here, so I really don't  
6 know a lot of the issues that you're talking about, but I do  
7 however have a 17 year relationship with the managers and  
8 the employees of the company here.

9                   These are skilled, well-paying jobs with good  
10 benefits. Most of the people that hold these jobs live  
11 right here in the community. They own homes and their  
12 children attend schools here. The wages earned toward  
13 property taxes and spent in businesses in the area. The  
14 owners of the plants are among the largest property  
15 taxpayers in the area. The community depends on this tax  
16 revenue to fund its schools, police, fire departments, et  
17 cetera.

18                   The plant, when outside help is needed for  
19 repairs and upgrade, uses local companies to supplement the  
20 work force. Local vendors are used for supplies or when  
21 equipment needs to be rebuilt or replaced. Although at  
22 times we could have our typical union management issues with  
23 the company, the one thing we have never had to do battle  
24 over is the company providing a safe, responsible workplace  
25 here at Cabot Station and Northfield.

1                   GDF Suez, as did their predecessors, have proven  
2                   to be good, responsible stewards of the resources they have  
3                   been entrusted with, and in my opinion they should be  
4                   granted a renewal on their license. Thank you.

5                   MR. HOGAN: Thank you, Brian.

6                   Bruce. And on deck we have Jeff Squire.

7                   MR. MERRIAM: My name is Bruce Merriam from  
8                   Montague. I'm a 32-year member of the Turners Falls Rod and  
9                   Gun Club, which for you people that aren't familiar with the  
10                  area, is just upriver from the Turners Falls Dam. I'm here  
11                  tonight representing the 16 boat owners from the Rod and Gun  
12                  Club. We have 16 boat slips there. I've had a boat there  
13                  for 18 years. I've been on the river for hundreds of hours  
14                  every summer during boating season.

15                  Every year, every single one of those 18 years,  
16                  at least once, sometimes more than once, it's always on a  
17                  Sunday for some reason; FirstLight and Power or Northeast  
18                  Utilities before them, for whatever reason would drain the  
19                  river way down; it would be right to the top of its banks on  
20                  Saturday night, you'd come down Sunday morning to go boating  
21                  and there was no water.

22                  One of the worst times I have experienced was  
23                  this last year, July 29th. I was at the Rod and Gun Club,  
24                  the club hosts the annual Northfield Dive Team's clambake  
25                  every year. I was out on the river the night before because

1 the Franklin County Boat Club hosts a Christmas in July the  
2 last Saturday of July every year, with fireworks down at  
3 Unity Park. The river was right to the top of its banks on  
4 Saturday night when we came back upriver after viewing the  
5 fireworks. I came down Sunday morning, they had to have  
6 dropped the river a minimum of five feet.

7 Our boat ramp, you could get your boat down the  
8 boat ramp into the water, but then you could never get your  
9 boat out through the narrow channel that we have to use to  
10 access the river. The Gill state ramp over in Barton Cove,  
11 that was inaccessible to boaters; and I know the one in  
12 Northfield was, because the river was just too low.

13 And it stayed that way all afternoon, it never  
14 came up until shortly after 6 o'clock that night when a news  
15 piece aired on the NBC station in Springfield, Channel 22,  
16 who I had called up to do a piece on how low the river was.

17 Miraculously, within 10 to 15 minutes after that piece  
18 aired on the 6 o'clock news, the water somehow miraculously  
19 started coming back up, like somebody had opened a gate  
20 somewhere.

21 They're taking away one of the best days of the  
22 year, the last of July. The weather was perfect that day.  
23 Boaters were not able to access the river; even if you had a  
24 boat in the water. There were boats at the Franklin County  
25 Boat Club that were high and dryers, sitting in the mud.

1 They're taking away a day of recreation for us boaters, and  
2 boating season in New England is extremely short to begin  
3 with.

4 I've got picture that a fellow club member took  
5 showing how low the river was, which I will give to FERC to  
6 look at. I've also got an article from the local newspaper,  
7 the Greenfield Recorder, because they came down and did an  
8 article and took a picture.

9 And what I would like to propose as a solution to  
10 this problem, I'm not arguing or contesting the fact that  
11 FirstLight was within their nine foot limit for pumping the  
12 river down; I'm sure they were in their permitted right.  
13 But I think to alleviate the problem in the future, FERC  
14 should mandate that FirstLight and Power hire a dredging  
15 company to dredge the channel that the Rod and Gun Club and  
16 the channel that the Boat Club and the boat users over at  
17 Barton Cove use to get in and out from the State boat ramp  
18 as well as the one in Northfield; dredge it down so it's  
19 deep enough and wide enough. And I think they should also  
20 be mandated to extend the length of both the ramps, both in  
21 Gill and Northfield, out into the river further so when they  
22 do lower the river as low as they do, from time to time,  
23 boaters will still have access to the river.

24 I would also like to suggest that FERC study the  
25 idea of a closed loop system, that's been brought up.

1 MR. HOGAN: Thank you, Bruce.

2 (Applause)

3 (Documents follow:)

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1                   MR. HOGAN: Jeff, and then on deck we have Kirk  
2                   Hettinger.

3                   MR. SQUIRE: My name is Jeff Squire, I'm a  
4                   resident of South Hadley here as a representative of the  
5                   Western Massachusetts Climbers Coalition. So I'm going to  
6                   shift from the water to the other end of the spectrum.

7                   We're a climate organization that was founded in  
8                   2000. We're a 13-year organization comprised of 500  
9                   members, roughly, all over the country. We are an advocacy  
10                  group for preservation of recreational resources, primarily  
11                  climbing resources, and improved access to them.

12                  As climbers, we are -- our situation is a little  
13                  bit more difficult in that our resources are finite  
14                  resources; quality, rock climbing resources, access to them,  
15                  are very limited; and we're fortunate and blessed to have an  
16                  abundance of them in this section of the State. And Rose  
17                  Ledge and Fairleigh Ledge, both within the Northfield  
18                  project, are two of the best climbing resources in Southern  
19                  New England. They get visitors from all over the Northeast  
20                  and all over the country, for that matter, for visiting  
21                  folks.

22                  I don't want to take a lot of time. I want to  
23                  echo, in regards to the user surveys, echo what Stef said  
24                  earlier about providing user survey opportunities on-line,  
25                  maybe working with some of the local recreational groups,

1       advocacy groups, to distribute some of these surveys;  
2       because I know that at least from a climber's perspective  
3       that the way we access the cliffs, we're never going to see  
4       the cards posted at any of the stations.

5               So I'd be happy to work with whoever is  
6       responsible for distributing the surveys to figure out a way  
7       to distribute those to a significant user group of those  
8       areas.

9               And I'd also encourage FERC and the Northfield  
10       project to work toward improved protection of some of these  
11       recreational resources. We wrote an award-winning  
12       management plan for Farleigh Ledge in 2003; we funded a  
13       biological survey in recognition of Peregrine falcon  
14       habitat, which the habitat -- they returned to the cliff in  
15       2007, having been absent from this part of the State since  
16       the early Sixties, late Seventies; and they've been  
17       returning to the cliff ever year since; and we've worked  
18       with Fish & Wildlife and implemented a successful protection  
19       strategy to have them return to the cliff.

20               We've recently purchased land, in 2007, at the  
21       base of Farleigh Ledge abutting Route 2, and the Northfield  
22       property in an effort to protect the ledges from development  
23       encroachment and to protect the climbing resources; and  
24       we've also worked intimately with the AMC and DCR in  
25       rerouting the net and creating unique hiking opportunities



1 up to the ledges.

2 And in speaking to, scenic vistas I think was  
3 brought up earlier, some of the views from the top of  
4 Rattlesnake Mountain, which is facing south towards the  
5 Millers River Valley, I think are some of the most  
6 significant views of that section of the valley. You're  
7 looking across Wendell State Forest, largely undeveloped  
8 forest land; and I think in terms of aesthetic resources,  
9 that's one that should be considered. So thanks.

10 (Applause)

11 MR. HOGAN: Kurt?

12 SPEAKER: I think he had to go.

13 MR. HOGAN: Liz Austin.

14 And on deck we will have Patricia Crosby.

15 MS. AUSTIN: Hi. I'm Liz Austin, I live in South  
16 Hadley also, I don't know where the gentleman climber went,  
17 but. I work at the Holyoke Dam; I'm the Director of the  
18 Public Programs. I have worked there in the spring for the  
19 last -- well, 2002, each spring, so I have a familiarity  
20 with the fish passage process; also just being on the river  
21 that much time each year. I'm also on the Board of  
22 Directors for the Connecticut River Watershed Council.

23 I feel like I'm here primarily -- I'm certainly  
24 not here speaking for the Holyoke Dam folks because they  
25 don't even know I'm here -- but I'm really here as a citizen

1 concerned about our river. I want to speak to a couple of  
2 sort of bigger issues, but then some specific things.

3 First to say, this is something we all know, the  
4 federal government allows corporations to come and use our  
5 river to develop power and then sell us the power and make a  
6 lot of money. And they do make a lot of money. If they  
7 can provide enough power to, for the whole State of Vermont,  
8 they're making a lot of money; they would not be doing this  
9 if they were not making money. So they're taking our  
10 resource and benefiting from it by making a lot of money.

11 And so I also feel like -- this is not in my  
12 statement, but I feel like we need to change sort of the  
13 corporate culture, because I feel like in our country today  
14 corporations, the way corporations operate is: 'We want to  
15 do as little as we can possibly do for our society, for our  
16 citizens, and get by with it.' Rather than 'We want to fall  
17 all over ourselves trying to make it right.' And that's  
18 FERC needs to make sure, that these corporations are making  
19 it right if they're coming and using our resources; that we  
20 need to make sure that they are falling all over themselves  
21 when they are coming in, putting up dams.

22 The dams, as you know, delay or stop the fish  
23 from migrating to their spawning grounds. They delay or  
24 stop them from returning to the ocean. The fish are  
25 exhausted trying to climb these almost impossible fish

1 ladders in certain spots, Cabot being one of them. Fish are  
2 impinged on trash racks, they're killed in turbines when  
3 migrating, and if that's not enough, the changes in water  
4 levels erode the river banks and change the topography of  
5 our wetlands that provide a variety of habitat for wildlife.  
6 The dam and the water levels affect the use of the river by  
7 people living in the area. Harm is done, pursuit of power  
8 generation, and I know you've heard about a lot of this in  
9 the last few days.

10 So I ask FERC to adhere to a no-harm-done policy.  
11 In the case of Northfield, I posit, as many people have  
12 tonight, that -- well, I posit that we have been in a trial  
13 period -- this is Northfield's first relicensing. They were  
14 licensed, and this is the first time. So this is their  
15 trial period they've been in. And I think they have not  
16 done so great; they've created a lot of problems.

17 The water level changes have caused substantial  
18 human, river bank and wildlife problems, and I think these  
19 could be alleviated by a closed loop pumping system, and I  
20 ask that that be considered. I also ask that radical  
21 changes be made in the fish passage system at Turners Falls.

22 There are many, many other things that have been  
23 brought up by other people that I don't want to duplicate,  
24 but I also want to say that I was fortunate to go on the  
25 tours of the projects this past fall, and basically no

1 attention was paid to the environmental education programs  
2 at Northfield Mountain, and the Turners Falls fishway on the  
3 project tours. That was my experience, that I did not  
4 experience that that was covered in those tours.

5 And I think the cutbacks, I know there have been  
6 cutbacks in the environmental education programs at  
7 Northfield Mountain, and I think that should be investigated  
8 by FERC to find out exactly what has been cut, and why has  
9 that happened. And also, that we need -- that I would also  
10 ask FERC to look at how the fishway can be -- how that can  
11 be maximized as an environmental education opportunity.

12 In addition, the fishway at Turners Falls is not  
13 handicapped-accessible. That anybody who cannot walk up and  
14 down two flights of stairs cannot see the fish that have  
15 climbed the ladder and are going by the window. So it's  
16 really an inadequate public facility in that regard. Thank  
17 you very much.

18 (Applause)

19 MR. HOGAN: Thank you.

20 Patricia Crosby.

21 Thomas Shearer.

22 MR. SHEARER: This is a letter to FERC.

23 We own the first privately owned parcel upstream,  
24 approximately a thousand yards upstream of the Northfield  
25 Mountain Pumped Storage Project. We have a verbal agreement

1 with Chuck Momney of FirstLight for a repair of a previous  
2 repair of the Connecticut River bank done in 1996.

3 The promise is to do it this year or next. If  
4 this agreement is not fulfilled, as has happened in the  
5 past, we would like to reserve the right to bring it to your  
6 attention in a couple years.

7 Signed, Thomas R. Shearer and Patricia Shearer.

8 (Applause)

9 (Document follows:)

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1 MR. HOGAN: Looks like Don McCool.

2 And on deck we have Stefanie Kenney.

3 MR. McCOOL: I actually don't have anything  
4 prepared, but I decided to come up and speak anyway.

5 I just share with everybody here a real passion  
6 for the river. I just love this river. I am out on the  
7 reach that I enjoy three, four, five times a week in middle-  
8 late summer, into October, and I am not able to use that  
9 river a lot of times, the water changes so rapidly and  
10 extremely.

11 Now this is a section of the river, it's between  
12 116 where the bridge is and the dam here in Turners; it's  
13 never going to be a piece of river that's good for power  
14 boats and a lot of activity, and water skiing. However, I  
15 have a boat, it's a rowing shell, it draws a few inches of  
16 water. And there are days when I can hardly go anywhere  
17 with that boat. It happens quickly, it's unpredictable, and  
18 it's frustrating.

19 It just brings to mind the fact that -- just  
20 remember that FirstLight doesn't own the river. They don't  
21 own the water; we're letting them use it. Somebody's making  
22 a lot of money somewhere. It's some guy on Wall Street in a  
23 big, tall building; it's somebody in England or in like the  
24 Suez Canal in Egypt, wherever the hell they're organized out  
25 of -- who knows? They don't care. They don't care. They

1 don't care that I like the river. They just want to make  
2 some money off of our water.

3 We need to -- I don't know what to do. I just  
4 think they need to be responsible. My personal little niche  
5 is "I would like a little trickle of water to be going down  
6 the river all the time." I don't know that that's too much  
7 to ask; I mean, it is a river, and it flows downhill. It  
8 doesn't always flow downhill very much.

9 I think they're abusive and arrogant, and a few  
10 other A words, and then we can go to B and C and D and E and  
11 F, right down the line. I think they don't give a damn  
12 about anything about the money they're making. And I guess  
13 I'm done. Thanks.

14 (Applause)

15 MR. HOGAN: Stefanie, and on deck is Andrea  
16 Donlon.

17 MS. KRUG: Hi, I'm Stefanie Krug, I'm a resident  
18 of Greenfield, and I'm the President of the Pioneer Valley  
19 Chapter of the New England Mountain Bike Association. And  
20 I'm here to talk about Northfield Mountain as a recreational  
21 destination in the area.

22 So I think, as was mentioned before, FirstLight  
23 on their website, is probably advertising their recreational  
24 trails that they have there, over 26 miles of trails; so I  
25 kind of came up with notes, but I can't really read my

1       handwriting all that well, so I know there's an extensive  
2       multiuse rec trails that are utilized by various user  
3       groups. A lot of horseback riders go out there every  
4       weekend. There's a lot of hiking, mountain biking -- as we  
5       heard from Jeff, rock climbing -- not to mention all the  
6       water-based recreation that's in the area.

7                   I know the M&M trail runs through part of the  
8       Northfield Mountain trail; it comes very close to the  
9       Northfield Mountain trail system, connecting the Northfield  
10      Mountain trail system with trail systems in Irving and  
11      Wendell and further north, too.

12                  So a couple of things I would like to bring up  
13      with that. I would like to add another point to the  
14      socioeconomic study, because I know tourism in the area,  
15      there's a lot of recreation-based tourism in the area, so  
16      Pioneer Valley has been referred to as the outdoor adventure  
17      capital of New England, and not only the water-based  
18      recreation, but also the trail systems and other things that  
19      I think could have a big impact on the socioeconomic state  
20      of the region.

21                  My main goal of speaking up is to ensure the  
22      continue public access to the recreational facilities that  
23      are already in place now. As part of that, as I mentioned  
24      earlier, I would like to see the user survey access to be  
25      made more publicly accessible, so they have a website and



1 have the link published and maybe the full survey published  
2 in the various newspapers going around; because I'm pretty  
3 sure most user groups would not come across the survey other  
4 places; and then we can distribute and make sure it gets to  
5 the right places.

6 So from my personal experience, I have been  
7 hiking and biking and skiing Northfield Mountain for years  
8 and I love the varied terrain there, the breathtaking  
9 scenery; and it's so conveniently located; close to 91 and  
10 Route 2 that it's really easy -- easy access, there's great  
11 parking which is a lot more than a lot of other trail  
12 destinations have, plus it has the nice facility at the  
13 bottom; so I think it could be even more than what it is now  
14 and has the potential to be a recreational destination that  
15 could even draw in more tourists from other areas, too.

16 So in the future, I just want to make sure that  
17 continued public access is going to be maintained/protected;  
18 and also in addition I would like to see if there's  
19 something that could be put into place to allow for a better  
20 maintenance and improvement of the already existing trail  
21 system. A lot of the trails there -- they're really nice.  
22 I think some of them are not very sustainably built and have  
23 had some erosion. So if those could be evaluated for the  
24 impact, make the current trail system for the impact on the  
25 ecosystem around and for signs of erosion, and seeing if he

1 could improve those.

2 And then also if there could be put into place a  
3 process to allow for permitting of maybe developing more  
4 sustainable trails in the area to take advantage of the nice  
5 varied terrain there and allow even more use of the  
6 facilities.

7 One last thing, I have no idea how this -- I know  
8 the canal side bike trail falls on FirstLight's property; I  
9 don't know if there's any interest in possibly extending  
10 that further along the FirstLight property, further down the  
11 river, because I know the public would love to see more bike  
12 trail, and maybe even connecting it with other bike trails;  
13 but I don't know if this is the right group to talk to about  
14 that.

15 MR. HOGAN: It is the right group. If you'd like  
16 to elaborate on that point, that would be great. And I had  
17 a question about your second to last bullet, about the  
18 permitting, about the trails, I didn't quite understand.

19 MS. KRUG: So if an organization like the New  
20 England Mountain bike organization or the AMC, but who has  
21 substantial training and experience developing sustainable  
22 trails for recreational purposes. In the past we've  
23 attempted to talk to FirstLight and people there to see if  
24 they could possibly put in another trail or extend the  
25 trail, reroute the trail, and I think there were issues with

1 liability if we could build a new trail; and I think any  
2 kind of effort usually helps that.

3 So I don't think there's a process in place at  
4 this time that would be, like step one to get a permit, step  
5 two would be this, and then -- so I think if you could  
6 develop some kind of process, a feasible process to develop  
7 sustainable trails in the future and add to the trail  
8 system.

9 MR. HOGAN: Thank you.

10 MS. KRUG: I guess, I'm related to this -- I know  
11 on Tent Mountain, it's a high road on the right hand side of  
12 the Northfield Mountain; it used to be -- over the recent  
13 years they had to dig in very deep water bars that now make  
14 this really difficult to navigate. I'm sure horseback  
15 riding, I know biking makes this really difficult. I don't  
16 know if that could be, maybe if the water bars could be put  
17 underground and filled in so that you could still use it  
18 safely.

19 I've had two people go down rather hard and end  
20 up with various injuries because they had gone down in an  
21 unexpected spot.

22 And to talk about the Ken (inaudible) bike trail,  
23 there's a lot of development -- I don't know if you're  
24 familiar with the Normatec bike trail that goes from  
25 Belchertown through New Hampton and up into Florence and

1 East Hampton. There is talk about extending bike trails all  
2 the way from Boston through the State, and tying them into  
3 bike trail systems up in like Vermont and Keene, New  
4 Hampshire.

5 I don't know where the process is at right now,  
6 but -- I don't know who funds all of these, and a lot of  
7 these go along old retired rail trails, but if there's an  
8 opportunity to extend the bike trail along the river side  
9 and tie it into the rail trail bike trail system to allow  
10 even more off boat, road biking possibilities. I'm sure the  
11 public would be very much in favor of that.

12 (Applause)

13 MR. HOGAN: We've got Andrea Donlon, and on deck,  
14 Louie Dickinson.

15 MS. DONLON: My name is Andrea Donlon, I work for  
16 the Connecticut River Watershed Council. Our offices are  
17 based in Greenfield, and we cover the whole four state  
18 watershed.

19 Our organization is a nonprofit organization that  
20 started in 1952. We love to celebrate the river; it's the  
21 focal point of life in the valley, and we have published a  
22 voting guide that allows people to learn about how to plan  
23 trips on the river; and we're very proud of the American  
24 Heritage River and BlueWay designations for the river.

25 Thanks to the support of our members, we really

1 try our best to protect and celebrate the Connecticut River.  
2 It's so great to come to meetings like this and hear people  
3 speak so passionately about the river that we work for every  
4 day; so it certainly enriches my job to hear everybody speak  
5 tonight.

6 Hydropower relicensing is a part of our advocacy  
7 work. We take it very seriously when you have participated  
8 in other relicensings; namely the Holyoke Dam and Fifteen  
9 Mile Falls, which is upstream of all the facilities that are  
10 going to be relicensed in this group.

11 As people have mentioned, water is a public  
12 resource and historically, or as long as my organization has  
13 existed, and we have always recognized the balance of uses  
14 of the river, economic uses, and habitat and people --  
15 recreational use. So we do keep that in mind.  
16 Nevertheless, we view our role as really working to improve  
17 conditions on the river; and this relicensing is a  
18 tremendous opportunity, you know, we're going to be planning  
19 for 40 years in the future, and so I really appreciate  
20 everybody coming and speaking about their interests tonight.

21 As Liz Austin mentioned, Northfield Mountain has  
22 only been licensed once, and the whole combination of  
23 Turners Falls and Northfield Mountain has greatly affected  
24 this section of the Connecticut River. People have  
25 mentioned issues like fish passage, erosion, recreational

1 use, and so I won't go into those; but we certainly will be  
2 providing comments, study requests, participating in this  
3 whole process on all those issues.

4           Importantly, the shortnose sturgeon habitat, very  
5 important part of the river, downstream of the dam, feel  
6 that the effects on the habit have been neglected up until  
7 this point, and I certainly hope that improvements will be  
8 made as a result of the new license.

9           In terms of recreational use, I would also like  
10 to encourage you guys to use our organization to get out to  
11 users; we can send out eBlasts and that type of thing -- I  
12 think an electronic survey is a good idea that people have  
13 mentioned.

14           One thing that people haven't mentioned is there  
15 used to be an eagle camp that the company sponsored, and  
16 unfortunately the branch or the tree broke, and so that  
17 nesting site is no longer available; and it was not part of  
18 the license, it was optional; but it was very popular. I  
19 loved looking at the nest on line in the spring.

20           People who came to the fishway also had a feed, I  
21 think to the camera or at least there was a spotting scope.  
22 Public access, TV, had like 24 hour coverage of this eagle's  
23 nest. People watched it. It was very popular. So it would  
24 be nice to somehow make a substitute program that would take  
25 the place. I don't know if the eagles have established a

1 new site and whether a camera is possible there, but I think  
2 that was really a neat educational thing that the company  
3 provided to the public.

4 Another issue is, that people have brought up but  
5 the camping on the river -- FirstLight provides the only  
6 official camping along the river in Massachusetts. Every  
7 other spot downstream is just, you kind of have to do it  
8 maybe asking landowner permission, maybe doing it illegally;  
9 but it's my understanding that those facilities, at least  
10 the Barton Cove campground, they close after Labor Day -- is  
11 that true -- so that does shorten the available -- I know we  
12 get calls from people who want to do trips on the river in  
13 September, it's a great time of year, beautiful weather,  
14 water is warm, not as many motor boats, so it would be nice  
15 to extend that season. And that's all I wanted to say  
16 tonight.

17 (Applause)

18 MR. HOGAN: Louie Dickinson or Roy?

19 Our last speaker of the night is John Bennett,  
20 who has indicated to me that -- Okay. Name?

21 MR. SNEDEKER: Greg Snedeker.

22 MR. HOGAN: Greg.

23 MR. SNEDEKER: I'm up?

24 AUDIENCE: Resident of Gill.

25 MR. SNEDEKER: Resident of Gill.

1                   Hi, Greg Snedeker, resident of Gill. I just want  
2 to say a couple of things.

3                   I tend to, I've been listening to a lot of people  
4 with their own narrowly focused concerns, and I sort of go  
5 along with all of them. My experience, I've lived on the  
6 river for 20 years, and I have a family, have a boat on the  
7 river thanks to a nice dock permit issued by FirstLight. So  
8 I have a lot of connection to the river.

9                   Also was the head assessor in Gill for three  
10 years, so I understand a lot of the land uses around the  
11 river. But my main concern -- I'm going to try to do a  
12 little -- and I'll try not to take too long. But I tend to  
13 look at the really big picture. And what I see is, what  
14 we're talking about in terms of this license, for five  
15 different areas, is a global concern. And hear me out,  
16 because if you look at what's going on right now in the  
17 world in terms of energy, you look at -- if you know  
18 anything about your return, your net yield on energy in  
19 terms of oil.

20                   Anybody know what that is?

21                   Over here. Keep you guys awake.

22                   (Laughter)

23                   What is in relationship to natural gas? You guys  
24 are the ones regulating this.

25                   MR. HOGAN: This is hydro. We do hydro.



1                   MR. SNEDEKER: Okay, fine. But the three are  
2 tied together, right? So we got oil, and sweet crude oil  
3 really is about 101, it's the most powerful thing we have on  
4 this planet. And it's not a coincidence that our gas prices  
5 have risen probably 300 percent. So bear with me.

6                   So now we're fracking like crazy. Why are we  
7 fracking like crazy? You guys are the experts: Why are we  
8 fracking like crazy?

9                   AUDIENCE: It's an excellent source of fuel.

10                  MR. SNEDEKER: Why? Because the net yield is  
11 somewhere around -- the net yield of energy for this is  
12 somewhere between one-third and half of the power of oil.

13                  Now you're looking at --now that's a huge -- we  
14 have a huge gap now to make up, because we're running out of  
15 the very easy accessible sweet crude oil. So when they talk  
16 about North Dakota and these huge oil deposits way down --  
17 they've always known about this; it's been there; 2 trillion  
18 barrels. You know, "Wow, we're never going to run out of  
19 oil."

20                  But what they're not saying is, how much does it  
21 cost to extract it? When the extraction cost is higher than  
22 what you're going to get for the yield, it doesn't make  
23 sense to extract it. No company or no government is going  
24 to pay the money to do it.

25                  So now we're stuck in this predicament. So we're

1       stuck in this predicament where you cannot extract this oil  
2       without it costing more in the extraction process, when  
3       you've got to use sweet or crude oil to extract heavier  
4       crude oil which doesn't, it's great for making plastics and  
5       things like that, but you can't run your automobiles on it.

6                So now the shift that you're seeing away from, if  
7       you notice Exxon and all those have been doing research in  
8       this particular -- the ship is now switching to fracking, or  
9       going for natural gas, because it is -- it's actually the  
10      next highest yield. So they're going after it like crazy,  
11      which is why you're seeing these wells popping up  
12      everywhere. The problem is that the depletion rates of  
13      these wells are very quick. The depletion rates of the  
14      wells that we actually are building in the center of our  
15      country are much quicker, I mean that they're going to run  
16      out quicker.

17               Now look at the fluctuation in price per barrel.  
18      Does anyone in here think we're going to go down to a dollar  
19      a gallon gasoline?               (Laughter)

20               I mean, we don't have -- do we know what OPEC's  
21      resource are? No. Why? Because they won't give it to us.  
22      Why, because it's a cartel, and the way they operate, they  
23      don't want to give it to us. All right. So we're stuck in  
24      this predicament now of, we've got to shift to alternate  
25      sources. The demand for electricity is going to go way up.

1           You saw the article in the Greenfield Recorder;  
2           the robot's going to be taking over -- it was last Friday,  
3           right? The push for moving to robotic means of production  
4           is so that we can move to electricity, because 1) human  
5           resources are expensive; you have to pay social security,  
6           all that good stuff, the benefits. So we're moving in the  
7           direction of using more and more and more electricity.

8           So when we talk about coming down on the  
9           electrical companies, they're just giving us what we're  
10          demanding or demand more of. So as much as I don't like  
11          seeing the river go down, and as much as -- I've got a boat  
12          down there that's stuck in the mud and I can't get it out,  
13          and I'd like to be able to recreate, I also acknowledge that  
14          this morning I lost power in my house -- it was getting  
15          cold; really happy when it came back on.

16          So I do acknowledge that as much as, you know,  
17          everything has a trade-off. Technology has a trade-off, as  
18          much as we love science and technology, you guys are the  
19          scientific experts over here, it all has a trade-off.

20          So what's my point in all this? We begin to see  
21          that the electricity demand is inevitably going to go up.  
22          Now electricity demand, electricity does not have as high a  
23          yield as all these other ones; plus it's not really a viable  
24          source of transportation yet. Yet. That's why we have  
25          hybrid cards and not strictly electric, but they're coming;

1 we haven't figured out the storage, pumped storage. We  
2 haven't figured out a real good way to store energy yet;  
3 that's why they're working on batteries like crazy.

4 But here's my point. My point, which I think is  
5 the most crucial in all of this: To both the utility  
6 company and both to our government is that the license, the  
7 term and length of the license agreement is the utmost  
8 important thing. And the reason I say that is because  
9 you're talking about looking at studies that go back to the  
10 Sixties.

11 Now if you look at the trends in energy usage,  
12 the trends in population, the trends of almost anything --  
13 when you just look, in terms of our usage and why we're  
14 hitting a steeper curve and why our gas has gone up 300  
15 percent the last ten years, you're on this part of the  
16 curve. Back in the Sixties going through to 2004, you are  
17 on a very flat part of the curve. This is all technical  
18 analysis. So it's on the steep part of the curve right now.

19 Now what does that mean? Does anybody really  
20 know what's going to happen in the next ten years in terms  
21 of energy? We don't really have sufficient data as to what  
22 the cartels have, because they won't report it to us, and  
23 they legitimately don't want to, I understand that. But if  
24 we don't know what that research is, or even if we have  
25 vague ideas, none of us in this room -- I'm guessing the

1 utility company really doesn't understand, they're  
2 projections -- but if you don't know, here's the problem.

3 If you don't know what you're stepping into, and  
4 let's just use the river as an analogy. You don't know how  
5 deep it is, you don't know what's changed on the bottom.  
6 How often are you going to put your foot in the water to  
7 test it to see if you can actually dive into it? Pretty  
8 often.

9 So my point is, fifty years: way too long. I'm  
10 not saying that in terms of, I think it's a control issue  
11 that they want to come down and control what's going on for  
12 the next 50 years. I think it's bad for the public because  
13 the rate of innovation is increasing at a dramatic pace,  
14 faster than we realize. So when that's happening, you don't  
15 understand how the shift -- in the bottom of the river is  
16 shifting. It's constantly shifting; you don't know how deep  
17 it is.

18 So the point is, 50 years is way too long. It  
19 may be when you're looking at it in terms of the hockey  
20 stick curve way back in the Sixties. Way too long, though.  
21 Our innovation is rapidly changing, which means even 30  
22 years I think is too long. I think it's going to be a  
23 mistake. And the reason I think it's going to be a mistake  
24 even for the utility company -- right, because maybe you're  
25 looking at it and saying "Well, we can gain some control

1 over this." But the problem I see with that, if you  
2 understand the concept of system lock-in -- any computer  
3 programmers?

4 Right. So you're the only one who knows what  
5 system lockout is, pretty much. Does anybody know what  
6 system lock-in is? System lock-in is basically -- yes, he  
7 knows what system lock-in is. System lock-in means that  
8 when you begin to take on a technology -- remember, we've  
9 got technologies everywhere. The dam is a technology. The  
10 river is a river, but it's not -- it's a resource standing  
11 in reserve.

12 But the point is, when technology is moving very  
13 rapidly, and the web is a great example, your capacity to  
14 get in system lock-in, meaning that you go and you make an  
15 innovation, that's a big innovation, that could be  
16 disastrous for your company. Because the minute you begin  
17 to hit the -- if you know that you have a 50 year window and  
18 you're thinking out that far, that could be actually really  
19 detrimental to your profit scheme, to everything, because  
20 you get stuck in a technology that was 1) a bad technology,  
21 and we've seen this over and over in our lives; we've seen  
22 the technology where we look at -- the benefits obviously --

23

24 AUDIENCE: Can you -- I feel like you're talking  
25 way over our heads. Can you make your point? It's very --

1           MR. SNEDEKER: My point is -- again, to me the  
2 most important thing is the length of time in this. Because  
3 if we don't, we're not going to visit this issue enough to  
4 make the necessary changes to be flexible in a time where we  
5 don't know what is coming down the pipeline; and things are  
6 moving much quicker than we think.

7           (Applause)

8           MR. HOGAN: Thank you. I would like to pick an  
9 opportunity just to briefly talk about this.

10           The Commission is authorized by Congress to issue  
11 license terms on a relicense for 30 to 50 years. It's a  
12 statutory requirement; we can't issue for less than 30 and  
13 we can't issue for more than 30, so our hands are tied on a  
14 term within 30 to 50 years. So just to let folks know, we  
15 don't have a choice in it.

16           MR. SNEDEKER: But just why. Why is that?

17           MR. HOGAN: It's law, from 1935.

18           And I can't revisit it. Takes an Act of  
19 Congress.

20           AUDIENCE: Good luck with that.

21           MR. HOGAN: Literally. When I first went down to  
22 Washington, D.C. someone said "that would take an Act of  
23 Congress." I said, "Well, why would it take so long?"  
24 Because growing up in New Hampshire, an Act of Congress just  
25 meant "Oh, that's impossible" or "It would take forever."

1 They actually meant it literally, that it would take a Act  
2 of Congress. And literally here change the term of license  
3 that FERC can issue would take an Act of Congress.

4 John Bennett signed up to speak; he asked me to  
5 potentially go last. He also told me he's going to  
6 filibuster me -- that's another congressional term that I've  
7 learned since I moved to D.C.

8 I just want to make sure that I've had an  
9 opportunity for -- and Peter wanted to speak, and just told  
10 me that.

11 MR. CONWAY: I'll go before him, since he wants  
12 to be last.

13 MR. HOGAN: Exactly, but I want to make sure that  
14 I got everybody else also.

15 Howard?

16 MR. FAIRMAN: May I? May I speak now?

17 MR. HOGAN: Did you want to speak again?

18 MR. FAIRMAN: But I wasn't sure whether you said  
19 I could do it now, or you want me to wait.

20 MR. HOGAN: You'd like to speak again, is that  
21 what you're saying?

22 MR. FAIRMAN: Very briefly, and for a  
23 clarification.

24 MR. HOGAN: Let's get Peter, then you'll be up,  
25 then we'll go to John.



1 MR. CONWAY: It's past my bedtime, guys.

2 Peter Conway, Gill. And I have to get up and say  
3 something, everybody, I really do.

4 First of all, speaking to John right now. John,  
5 you have a lot of patience and a lot of self control, I just  
6 want to tell you that. It's real good. And you had a great  
7 show.

8 (Applause)

9 And Howard, I'm not going to buy a ticket to ride  
10 on your train, by the way; I am not going to up that hill,  
11 and down as fast as you say we go.

12 (Laughter)

13 So, and Greg. Greg, I really enjoyed working  
14 with you, and I knew that you were talking way over my head  
15 most of the time when we sat together and talked, but I got  
16 you tonight, okay?

17 So I'm up here first of all -- and I've got to  
18 speak for myself on this, because I've got to address  
19 something that a gentleman said up here, and I don't see him  
20 here tonight -- maybe he is; he represented the employees --  
21 he's not here anymore from what I can see, but -- and I've  
22 got to speak for myself but others may feel the same as I  
23 do. We don't have an issue with the employees, everybody.  
24 We do not have an issue with the people that work for these  
25 companies, all right?

1                   Our issue is with the investors' demands. And  
2 because of their demands, they're changing the way this  
3 river -- they have impacted the river because of their  
4 demands; it's that simple. No more complicated than that.  
5 The people that work for these investors, they run the show  
6 the way the investors want it to work so they can show a  
7 profit; that's how it works.

8                   And so, I mean I've talked about the fish nets  
9 and everything else; I'm not going to spend time on that.  
10 But I do live on the river, and I'm there all year long, and  
11 the river looks different in the winter than it does in the  
12 summer; you don't see as much of a change in the winter  
13 because of the ice. The only place you do notice a  
14 difference as far as up and down is when you go over to the  
15 old red bridge abutment and you can see how low it is or  
16 high it is. But you don't notice it in the winter. You do  
17 notice it in the summer.

18                   And by the way there is a natural shoreline. If  
19 you see the river every day as I do, there is a natural  
20 level that it reaches, but it doesn't stay there very long,  
21 okay? It drops and it goes up because of demands that are  
22 needed for the power. And I think that Greg mentioned it,  
23 and I agree with him, too: I like electricity, and so I  
24 don't know how much of a compromise I want to make right now  
25 on how high the water goes, and how low it goes; I don't

1       like the way it works, I can't compromise that much. But I  
2       know that if, years ago when this project was first in  
3       somebody's brain, if one of the restrictions they had on it  
4       back then was that "you will build this with a closed loop"  
5       they wouldn't have built it then; it wouldn't have happened.

6                Because first of all, there's a restriction on  
7       what they can do down below to build a lower reservoir --  
8       and we can't call it a reservoir, it really isn't; but it's  
9       being used as one, and that's why it's being impacted. And  
10      also, yes the impact is below the river, too. Down below  
11      Cabot if you drive over that bridge down there, you'll see  
12      the shoreline go out, come in, go out, come in depending on  
13      what Cabot station is doing and what's happening above.

14             And so the 20 miles of river that we're talking  
15      about from this dam and a little below Cabot, all the way up  
16      to Vernon, I think it is, 20-plus miles, it's really tearing  
17      the crap out of the river. And it's not good. I don't know  
18      what other word I can use beside 'not good'; but it's lousy.  
19      And Bruce spoke about the low river, and you see it, all the  
20      people on the river see it. The people that come in and  
21      out there on the weekends, they don't know that much  
22      difference. So they just go out and paddle around. If they  
23      get hung up and they can't get back in at the end of the  
24      day, they say "What the hell's going on?" And so they're  
25      stranded out there. But you live and learn; they don't come

1 back again. So that's not good, either.

2 What else have I got to say, because I'll tell  
3 you, my brain just comes whirling around here. And I think  
4 maybe I've got everything that I want to say -- let me see.  
5 Hang on, guys. Yes, I do. You did a nice job, too, okay?

6 Okay. Thank you very much.

7 (Applause)

8 MR. HOGAN: Howard, you have a clarification you  
9 want to provide?

10 MR. FAIRMAN: Howard Fairman from Vernon again.

11 This is a very brief clarification. I mentioned  
12 earlier, to give an indication of the scale of Northfield  
13 Mountain, that they can generate 1100 megawatts, and I said  
14 that can power the entire State of Vermont. What I wanted  
15 to clarify is, that's all four generators running, and that  
16 is the most electricity Vermonters have ever used at one  
17 time; it was on a really hot summer day a few years ago.

18 On a typical day in Vermont, just two of the four  
19 generators would power the entire state, population 635,000.  
20 Those are big generators.

21 (Applause)

22 MR. HOGAN: John Bennett.

23 MR. BENNETT: John Bennett with the Franklin  
24 Conservation District.

25 Point of clarification: I never uttered the word

1 'filibuster'--

2 (Laughter)

3 MR. HOGAN: That was my interpretation.

4 MR. BENNETT: I did say that I would go last  
5 because I had a lot of questions and I didn't want to keep  
6 people unduly.

7 I'm with Franklin Conservation District. We've  
8 got a statutory interest in the conservation of soil, water  
9 and related natural resources. We've actually been engaged  
10 with the erosion issue on the Turners Falls pool since the  
11 late 1980s. We were late to the party, but we've been  
12 thoroughly engaged since.

13 I think it's useful to point out to folks that  
14 you don't have much of a sense of what the river might have  
15 looked like in the Turners Falls pool before the dam was  
16 raised and the Northfield project started operations; but if  
17 you go downstream of the confluence with the Deerfield, the  
18 reach of the river between Montague and Deerfield, the  
19 shoreline has natural flood plain terraces and mature silver  
20 maples, three and four feet in diameter, in good health all  
21 the way down the banks and right to the water. That's what  
22 we've lost on this stretch of the river.

23 Issues of concern to the Conservation District  
24 include loss of land, loss of agricultural land and soils,  
25 the degradation of water quality and degradation of habitat.

1 And it's not just our pin but actually Julian Flint of FERC  
2 determined back in the Nineties that the bank instability on  
3 the Turners Falls pool was significantly due to the water  
4 level fluctuations, water saturating the bank and then  
5 coming out of the bank and removing fines, tended to upset  
6 the stability of the bank.

7 Now to the part that I mentioned to Ken was  
8 perhaps going to take a little while; this is going through  
9 the scoping document and just touching on some of the  
10 topics. The scope of cumulative effects issues on page 22  
11 talks about water quality and one of the things that should  
12 be certain to be addressed in that is water temperature and  
13 the sediment load in the water. That may be the intent, but  
14 it wasn't clear from reading the document, so I wanted to  
15 point that out.

16 And the geographic scope on page 23, there ought  
17 to be at least consideration of carrying the scope as far as  
18 the Holyoke Dam, if not further.

19 Pertaining to the FirstLight projects, the  
20 geology and soil resources section -- or actually, that was  
21 somewhat well-addressed. It was interesting to hear it read  
22 and it mentioned cultural resources in the first bulletin,  
23 and that wasn't in the copy that I had downloaded, talking  
24 about impacted resources, recreation use facilities. I  
25 didn't have cultural resources in the copy I got off line.

1 But it is in there, beauty.

2 MR. HOGAN: This is the offline group.

3 MR. BENNETT: Well, this one says FERC PDF, but  
4 it does say: Unofficial, 12-21-2012. Anyway.

5 Under water resources, 4.3.2, second bullet  
6 point. This is where I was instructed to wait until the end  
7 and bring it up. The second bullet point: Effects of  
8 project operations on water quality, particularly dissolved  
9 oxygen and temperature, and this is where I think that  
10 sediment should be the criterion to evaluate.

11 I had a question for the FERC folks. Under  
12 Terrestrial Resources, the first bullet talks about effects  
13 of project fluctuation in water level and flow releases from  
14 the projects. The second bullet talks about effects of  
15 project operation and maintenance activities on wildlife  
16 habitat and wildlife. It doesn't talk about the  
17 fluctuations specifically, and I didn't know whether that  
18 was an intentional omission or not.

19 MR. HOGAN: Project operations encompass  
20 fluctuations.

21 MR. BENNETT: Thank you. Under Terrestrial  
22 Resources, the further clarification, the third and fourth  
23 bullets: Effects of project O&M on riverbank integrity and  
24 effects of the frequency, timing, amplitude and duration of  
25 reservoir fluctuations. Is there a distinction between the

1 two, or -- and I think Ken just answered that amplitude and  
2 duration of fluctuations is all part of O&M. Thank you.

3 Under Recreation bullet number two: Effects of  
4 project operations on quality and availability of flow-  
5 dependent and water level-dependent recreation opportunities  
6 including boating. Also including the impacts. I want to  
7 be clear that it should include the impacts, not just in the  
8 impoundment but also the bypass reach.

9 MR. HOGAN: Where are you?

10 MR. BENNETT: Recreation, 4.3.6, second bullet  
11 point.

12 MR. HOGAN: Thank you.

13 MR. BENNETT: The effects on quality and  
14 availability of recreation. Do you include the bypass reach  
15 in that also? And to sort of reiterate other folks'  
16 comments, that should also include not just boating, but  
17 fishing and also just to -- the water level dependent stuff  
18 really does include the boat ramps, just point of emphasis.

19 Under Land Use, and I stick with my notes and not  
20 go off on what I was thinking about tonight, the second  
21 bullet talks about adequacy of shoreline buffers to achieve  
22 project purposes in compliance with local and state  
23 requirements.

24 The shoreline buffers have been decreasing for 20  
25 years as the riverbanks have receded or moved inland. So I



1 think the adequacy has been decreasing from whatever  
2 perspective you're looking at it. But I want to sort of  
3 make that clear that we think that's a concern that you all  
4 ought to be taking a look at. Where there used to be 20  
5 feet of trees at the edge of a field, now there's 2 feet or  
6 no feet of trees left, and the field is now at the top of  
7 the riverbank; and that's not because the field's been  
8 cleared further. Actually, you can check the plow ruts and  
9 they've been moving back away from the river, because the  
10 farmers don't want to lose their equipment down the banks.

11 FERC: A question for you.

12 MR. BENNETT: Yes, sir?

13 FERC: Do you believe that we should look into  
14 the adequacy of the shoreline buffers? We really don't have  
15 an issue. I'm asking.

16 MR. BENNETT: I don't think so, as long as --  
17 well, to achieve project purposes in compliance with local  
18 and state requirements, that can be parsed very finely.

19 FERC: That's what I'm trying to get at; which  
20 part of our bullet is your concern? You'd rather shorten  
21 the bullet to 'the adequacy of shoreline buffers'?

22 MR. BENNETT: Bingo. Thank you.

23 Thank you for helping me sort through.

24 &FERC: Well, I want to make sure I understand.

25 MR. BENNETT: I will try to elaborate better in

1 writing, but you never know, I might get hit by a bus or  
2 something, so.

3 Under 4.3.8, Aesthetic Resources: At this time  
4 we've not identified any aesthetic resource issues. I  
5 would beg to differ. The raw, eroded banks as distinct from  
6 the intact and vegetated banks elsewhere on the river I  
7 think is an aesthetic impacted. Dead and dying trees I  
8 think are a negative aesthetic impact. The mud flats that  
9 you see at low tide, I think, are a negative aesthetic in a  
10 riverine environment.

11 Socioeconomic resources. Haven't identified any  
12 socioeconomic resource issues. I think that if the farmers  
13 that are trying to farm on the edge of the river were here,  
14 they would say that the loss of agricultural land is in fact  
15 a socioeconomic loss. Look at the farmer Kendall site up in  
16 Vernon that lost 900 feet long by 60-plus feet deep of  
17 field. That's a significant loss.

18 And I don't know whether there's socioeconomic  
19 value to the recreational opportunities that are available,  
20 could be available, but I think that that's worth examining.

21 Cultural Resources, effects of the project on  
22 historic, et cetera sites. Sites may be eligible for  
23 inclusion in the National Register of Historic Places. I  
24 think it's a broader, there are broader values than that in  
25 terms of, I don't know about eligibility for inclusion in

1 National Register of Historic Places, but I do know that  
2 when we've been working on bank restoration projects there  
3 have been numerous archaeological studies and there have  
4 been determinations that you couldn't have an access point  
5 here because there were artifacts that might be disturbed,  
6 and I do not know whether that makes that site eligible for  
7 inclusion in the National Register of Historic Places or  
8 not; but the potential loss of the site is something that  
9 should be evaluated.

10 And I guess that's my quick summary of my  
11 questions or observations on the scoping document. I had a  
12 couple of notes about the PAD; I'll be brief. Not that the  
13 document is brief, but two things that I thought should be  
14 brought up.

15 In Section 3.4.1, Current License Requirements,  
16 on page 3-27. Following is a description of key license  
17 requirements for Turners and Northfield, and we start with  
18 Article 30. But there are very important license articles  
19 earlier than 30; in particular Articles 19 and 20 that  
20 pertain to erosion on the riverbanks.

21 And a sort of final note: Section 4.4.1, Field  
22 Studies gets to the 1999 Erosion Control Plan on page 4-11.  
23 It talks about erosion control plan being implemented in  
24 cooperation with streambank erosion committee, and that the  
25 erosion control plan requires the licensee to periodically

1 repeat classification and prioritization process at three to  
2 five year intervals; and we've had some difficulties with  
3 replicable classification endeavors over the last four  
4 iterations of the full river reconnaissance. And we haven't  
5 had much progress on the prioritization process, the  
6 original ECP actually included a list of over 100 sites.  
7 You've got it condensed down to the top 20, and that's all  
8 we've been focusing on, and there hasn't been any moving up  
9 of lower sites.

10 The next underlined heading is actually the Full  
11 River Reconnaissance studies, and we just would note that it  
12 concludes that the 2008 report concluded that "The rate of  
13 erosion in the Turners Falls impoundment is decreasing."  
14 And that I think is subject to question, that a lot of  
15 people don't think that's the case. And that in fact the  
16 erosion committee has been engaged in lengthy efforts to  
17 correct that misimpression. Thank you.

18 (Applause)

19 SPEAKER: Can I make a short comment?

20 MR. HOGAN: Sure. Go on up.

21 SPEAKER: I just thought of something, I was just  
22 -- of course, my own personal interest, but: Can FirstLight  
23 tell us when they're changing the water levels prior to them  
24 doing that?

25 I suppose the downside of that is because it's a

1 competitive spot market they don't want to show their cards  
2 to someone else who wants to sell electricity to the same  
3 area. But it would make a big difference and I think a lot  
4 of people's lives if we knew when the water was going to go  
5 up or down nine feet on the top side or five feet on the  
6 other side of the river.

7 MR. HOGAN: Can I get your name?

8 MR. McCOOL: Oh, Don McCool.

9 MR. HOGAN: I had the last name, but I wasn't  
10 sure of the first name; so thank you.

11 So you would like to see some type of --

12 MR. McCOOL: Well, they have a website -- we  
13 talked about kind of technology. We can probably just go in  
14 and see if -- if I have an opportunity to go on the water at  
15 6 in the morning or I have an opportunity to go on the water  
16 at noon on a particular day, it would be just fantastic to  
17 know that the water would be deep enough to row a boat that  
18 draws 6 inches of draft.

19 MR. HOGAN: Do you have interest in real-time  
20 versus advance notice?

21 MR. McCOOL: Oh, the day of. I know they can't  
22 do day before. Just a couple of hours, perhaps. Three  
23 hours, four hours, six hours? The more the better. I know  
24 they're restricted; but I just think that perhaps someone  
25 could look at that. I think it would help everybody. You

1 know, the guys at the Rod and Gun Club would get their boats  
2 in for the weekend; they find them abandoned and -- Sunday  
3 afternoon they can't get them out.

4 Whatever the issues are, it would be nice to know  
5 before it happens. Before it happens; you can look at that,  
6 too.

7 MR. HOGAN: Thank you, Don.

8 Stefanie?

9 MS. KRUG: I had a comment on what Don was  
10 saying.

11 I know that on the (inaudible) River, there were  
12 a series of five or dams that are being released, and I  
13 don't know how their schedule is, but I know they have a  
14 website where they communicate their releases. I don't know  
15 how sophisticated they are with actually communicating with  
16 them, but --. Things like this are in place, other things  
17 affecting flow of rivers in this area.

18 MR. McCOOL: There are a lot of guys who go out  
19 with these small boats from Sunderland, which is one of the  
20 few ramps on that side; and they'll find themselves without  
21 water in the afternoon or night, whatever.

22 I think I recall maybe within the last ten years  
23 somebody actually drowned south of Cabot when the water was  
24 released; and it would be a huge safety concern to know that  
25 somebody was going to wade out in hip boots and fish, to

1 know that the water is going to be coming up five feet in  
2 about one minute, and it's going to have a real crest.  
3 Maybe somebody can look into that. I don't recall, but I  
4 remember somebody drowning out there not that long ago.

5 MR. HOGAN: My understanding is that at FERC  
6 projects, there's usually sirens and alarms that give you a  
7 lot more than one minute of notice, John, if you want to --

8 MR. McCOOL: Is there a siren anywhere around?

9 AUDIENCE: Yes.

10 MR. McCOOL: Where?

11 (Simultaneous audience discussion)

12 MR. HOGAN: John, can we speak up?

13 MR. HOWARD: There's a (inaudible)

14 MR. HOGAN: Do you know how much advanced notice  
15 it gives?

16 SPEAKER: No, I don't know off the top of my  
17 head.

18 MR. HOGAN: Any other quick comments before we  
19 wrap it up for the evening?

20 Okay. You guys are die hards.

21 (Laughter)

22 I want to thank everybody for being here tonight.  
23 It really does help us provide you all a better product. So  
24 pat yourselves on the back. Thank you for coming, and we'll  
25 be in touch and we'll see you in the coming weeks.

1 Thank you very much, everybody.

2 (Applause)

3 (Whereupon, at 10:05 p.m., the scoping meeting  
4 concluded.)

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