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FEDERAL ENERGY
REGULATORY COMMISSION

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BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION
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IN THE MATTER OF: : Docket Number
SMALL HYDROPOWER DEVELOPMENT IN : AD09-9-000
THE UNITED STATES :
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Commission Hearing Room
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D. C. 20426

Wednesday, December 2, 2009

The above-entitled matter came on for technical
conference, pursuant to notice, at 1:02 p.m., John Katz,
presiding.

Also present: Chairman Jon Wellinghoff,
Commissioner Philip Moeller and Commissioner Marc Spitzer.

1 PROCEEDINGS

2 (1:02 p.m.)

3 CHAIRMAN MOELLER: Welcome to our Small
4 Hydropower Development in the United States Technical
5 Conference today. I'm Phil Moeller, a Commissioner here at
6 the FERC, from the great state of Washington, deep in hydro
7 country, and proud of it.

8 I welcome all of you today in the audience,
9 particularly our panelists, who came from a ways away. We
10 also welcome those of you who are watching on the webcast,
11 wherever you may be, and also in our five Regional Offices.

12 Many of people are surprised to know that we have
13 five Regional Offices that focus solely on hydropower
14 issues, in New York, Chicago, Atlanta, San Francisco, and
15 Portland, so we welcome all our fellow FERC employees there,
16 as well as anyone from the public who might be watching
17 there at the five Regional Offices.

18 I send the regards from our colleagues,
19 Commissioner Kelly and our Chairman, Jon Wellinghoff, who
20 was pulled away in front of a Congressional hearing this
21 afternoon. Hopefully, he will be able to attend this
22 Conference later in the day, but, obviously, that is a
23 somewhat higher priority, when Congress calls.

24 We're excited about this topic today. I'll turn
25 it over Commissioner Spitzer in a moment, but, small hydro,

1 as with the rest of hydro, as with every other energy source
2 in this country, has tradeoffs involved, and we can manage
3 those tradeoffs, and I think we can do so in a fair manner,
4 that allows more small hydropower to be developed.

5 Of course, you know, from my perspective, I think
6 hydropower is the most ideal of all renewable energy
7 sources. As I've gone around the country and spoken to
8 people, it seems like, sometimes, developers who may be new
9 to the process of small hydropower development, occasionally
10 think that FERC may be the problem, in terms of limiting
11 this resource's development.

12 I would say that that is actually misplaced
13 blame; that this is an Agency that is very amenable to
14 considering the tradeoffs to small hydropower projects, but,
15 of course, first of all, we must follow federal law in doing
16 so, but, more importantly, as Jeff Wright, our Director of
17 Energy Office Projects pointed out, hydro is really more of
18 a local energy resource, and so, when you are developing
19 hydropower, you have to make sure that you have the local
20 community onboard, the various stakeholders.

21 That's something that, if developers do their
22 homework and are allowed or make the effort to involve the
23 various stakeholders involved in a project, their chances of
24 success are, naturally, going to be greatly enhanced.

25 Our focus today is to hear, on the existing

1 system, of how we deal with this resource, and, of course,
2 take recommendations and ideas for improving the process.

3 And I can speak for myself, that I know that I'll
4 be following up. We'll have John Katz talking momentarily
5 about the formal process, of how to follow up, either with
6 comments or reactions to what you hear today.

7 So, again, thank you to all for the effort and
8 the interest in being here, and I'll turn it over to my
9 colleague, Commissioner Spitzer, from the more hydro-
10 challenged state of Arizona.

11 (Laughter.)

12 COMMISSIONER SPITZER: Thank you very much,
13 Commissioner Moeller. I'm proud of the work Phil Moeller
14 has done on energy infrastructure, generally, and,
15 specifically, his interest in hydro, and we're appreciative
16 of his efforts to bring us together today.

17 I apologize in advance. I had, many months ago,
18 accepted a speaking engagement in Oklahoma, on wind energy,
19 and I'll be departing in just a few minutes. Hopefully, if
20 the weather and the Lord are willing, I'll make my
21 connection at DFW airport, but Monique Watson, from my team,
22 as a lot of you know, covers hydro, and we'll both be very
23 attentive, and I'll be apprised of all of the proceedings.

24 You know, Arizona is a desert, but, in my office,
25 I've got the Arizona Power Authority hat with the state

1 flag, and we've got 200 megawatts from Hoover Dam, which is
2 Arizona. We claim that part of the River that we share with
3 Nevada.

4 In fact, those of you who have been to the
5 facility, you go onto the walkway, and you've got the clock
6 with Nevada time and a clock with Arizona time. We stopped
7 Daylight Savings Time in Arizona. It killed people's roses,
8 so it was repealed.

9 (Laughter.)

10 COMMISSIONER SPITZER: I kid you not. That was
11 the Legislature.

12 So, you know, there's hydro everywhere, and it's
13 interesting that you mentioned the history of Hoover Dam.
14 That was an era of the Great Depression, and the FERC has
15 its roots in hydropower regulation and dam safety, and in
16 the 1930s, we were in a similar, perhaps greater challenge
17 than we are currently.

18 Currently, we all know about very volatile
19 commodity prices, power challenges in the early part of the
20 decade, and now we have an economic crisis, financing is
21 difficult to obtain for those who are in the energy
22 business, as in all sectors of the economy.

23 Unemployment is at ten percent, but, in the
24 1930s, when this Agency was formed in response to the
25 collapse of the Sam Insol situation with electric

1 regulation, unemployment had reached 20 percent. Most of
2 America had no power, and the response was Rural
3 Electrification and the construction of the hydro facilities
4 today in the Northwest and across the country, to provide
5 reliable, affordable supplies of energy to the people of
6 this country.

7 So, the challenges in energy and the construction
8 of energy infrastructure, are not unique to this era. We
9 have complicated the circumstances with a very legitimate
10 concern about the environment, and there is a growing
11 recognition reflected by those attending today, that a
12 hydropower-generated electron, is a renewable electron.

13 I know there's some debate on that topic, but in
14 terms of greenhouse gas, it is unquestionably correct, and
15 what we hope today, is, as Government, balancing competing
16 interests and listening to and hearing concerns, and
17 adjudicating disputes, to have a forum for discussion, so
18 that those disputes could perhaps be resolved prior to
19 coming to FERC, which is a great help, and, in addition, to
20 spread the word, not only about hydropower, generally, but,
21 particularly, this particular, I think, under-appreciated
22 segment of your industry, is very important to the future
23 well being of this country, and we'll collectively hope to
24 meet those energy challenges, just as we did in the 1930s,
25 meet them here today.

1 COMMISSIONER MOELLER: Thank you, Marc.
2 Obviously, we are very appreciative of your interest, and
3 you can get as much in as you can before you have to head
4 for Oklahoma.

5 With that, I'll turn it over to John Katz, our
6 facilitator today, from the Office of General Counsel, to
7 talk about kind of the guidelines and the ground rules.
8 John?

9 MR. KATZ: Thank you, Commissioners. We very
10 much appreciate your attendance here. I know that new
11 Commissioners get warned, and they don't believe it until it
12 happens, that they wind up spending far more time on hydro
13 issues than they ever thought was possible, once they
14 discover how complex the issues are and how important hydro
15 is to so many segments of the United States population.

16 While we have had much more occasion to work on
17 hydro in Washington, I can say, certainly for Ann and
18 myself, we have worked on hydro projects in the great state
19 of Arizona and we're always happy to do that.

20 I'm going to briefly go over the agenda for this
21 proceeding, which I think you have before you. We're going
22 to start out with a PowerPoint presentation by Steve
23 Hocking, who is with the Office of Hydropower Licensing.

24 We will then have two panels of folks who have
25 expertise in small hydro and its challenges. Following

1 those, we will have an opportunity for an open-mike forum.
2 We may or may not have time for public questions after the
3 two panels. It sort of depends on how much time we use.

4 We'll have the panels; the Commissioners will
5 then have the opportunity to ask questions, and, if there's
6 time left over, we may ask questions or we may ask folks to
7 save those until the end of the proceeding.

8 As a couple of guidelines, I guess the most
9 important one is, we cannot discuss ongoing cases, so no one
10 should reference any concerns or problems they have with
11 regard to specific cases that are currently before the
12 Commission, because the Commissioners, under the Sunshine
13 Act, may only discuss such things when those projects are
14 specifically in a Public Notice, and we did not notice any
15 particular projects.

16 When you speak, please make sure that you give
17 your name and your corporate affiliation, because we have a
18 Court Reporter here, and she's going to need to note those
19 down. We also have folks listen via the Internet and via
20 the TV, who may not know who we all are, I believe, as
21 strange as that may seem.

22 Throughout the proceeding, there are members of
23 FERC Staff here, who are willing to help you, and you can
24 also come up and check with those of us up here, if there is
25 anything urgent that we can help you with during the

1 proceedings.

2 Other than that, we are ready to roll, and I'll
3 turn it over to Steve Hocking, to give us a presentation
4 outlining FERC's jurisdiction, licensing processes, and the
5 background on what we do.

6 I'm sorry, the other thing I should mention with
7 regard to speaking, make sure that you're at a microphone,
8 and those of you who are up here, the panelists, make sure
9 your microphone is turned on, or the Court Reporter will
10 start waving at us, to indicate that she can't hear.

11 MR. HOCKING: My name is Steve Hocking. I'm with
12 the Office of Energy Projects, and I'm in the Licensing
13 Division.

14 I have a short presentation that will cover
15 existing and potential hydropower capacity; authorization
16 options for small hydropower projects; and the Commission's
17 licensing processes, plus some ways to expedite the
18 processing of small hydropower applications.

19 We hope this presentation will set the stage for
20 the panel discussions.

21 The Commission's mission in our strategic plan,
22 is providing reliable, efficient, and sustainable energy for
23 consumers. A goal related to that mission, is providing the
24 development of safe, reliable, and efficient energy
25 infrastructure that serves the public interest.

1 As we're about to discuss, there has been an
2 increased interest in small hydropower development that
3 could help us attain that goal.

4 Currently, the United States has a total of
5 98,000 megawatts of hydropower capacity, which represents
6 about nine percent of our nation's electric generating
7 capacity.

8 Of that total capacity, about 54,700 megawatts is
9 generated by non-federal projects that are under the
10 Commission's jurisdiction, pursuant to the Federal Power
11 Act. That capacity represents about five percent of our
12 nation's power supply.

13 The majority of the Commission's regulated
14 projects are small hydropower projects, with about 71
15 percent having a capacity of five megawatts or less.

16 So, how much conventional hydropower capacity is
17 available in the United States? A Department of Energy
18 study found that our nation's waterways have another 350,000
19 megawatts of potential hydropower capacity, of which about
20 60,000 megawatts are considered develop-able.

21 This estimate of 60,000 megawatts of potential
22 capacity, is a very conservative estimate and includes, for
23 example, only projects for which the construction of a new
24 dam is not needed. Of the 60,000 megawatts of develop-able
25 capacity, an estimated 38,000 megawatts could come from

1 projects with an installed capacity of two to 60 megawatts;
2 16,000 from projects with an installed capacity of less than
3 two megawatts -- that's the second and third bullets,
4 combined -- and 6,000 megawatts from projects with less than
5 200 kilowatts of installed capacity.

6 If all these projects were developed, this would
7 represent a significant addition to renewable energy in the
8 United States, more than doubling the hydropower capacity
9 that's under the Commission's jurisdiction.

10 At the Commission, we've noticed some increased
11 interest in small hydropower in recent years. We've seen
12 more state and industry initiatives, and we have received
13 over 150 phone calls and e-mails inquiries to our dedicated
14 small hydro e-mail address and phone line, almost double
15 what we had last year.

16 We've also issued more preliminary permits and
17 have seen an increasing trend of more development
18 applications being filed with the Commission in recent
19 years.

20 We believe that some of this increased interest
21 has been generated by state renewable portfolio standards,
22 renewable energy incentives, and an increase in developing
23 and promoting distributed generation.

24 Under the Federal Power Act, non-federal
25 hydropower projects must be licensed by the Commission, if

1 they are located on a navigable waterway, occupy lands of
2 the United States, use surplus water from a federal dam, or
3 are located on a waterway subject to the Commerce Clause,
4 involve post-1935 construction, and affect interstate or
5 foreign commerce.

6 Now, I'd like to take a few minutes to briefly
7 explain the Commission's authorization and preliminary
8 permits, conduit exemptions, 5-megawatts exemptions, and
9 licenses.

10 The Commission issues preliminary permits to
11 applicants interested in studying a particular hydropower
12 site. Preliminary permits are issued for up to three years
13 and maintain priority of application, while the permittee
14 studies the site and develops its license or exemption
15 application.

16 Preliminary permits do not authorize
17 construction, but, instead, protect a permittee from
18 competing applications during the three-year permit term.
19 Under a permit, a permittee is required to file periodic
20 reports with the Commission on the status of the development
21 and their application preparations.

22 The Commission issues conduit exemptions under
23 Section 30 of the Federal Power Act. Conduit exemptions
24 are issued in perpetuity. They are issued for projects up
25 to 15 megawatts, however, municipalities may apply for up to

1 40 megawatts.

2 A conduit exemption must be located on a conduit
3 constructed primarily for non-power purposes and for which
4 the power facility is located entirely on non-federal lands.

5 Conduit exemptions are subject to mandatory Fish
6 and Wildlife conditions, provided by federal and state Fish
7 and Wildlife agencies.

8 Due to the fact that most conduit exemptions do
9 not affect environmental resources, the Commission generally
10 does not prepare an environmental document for these
11 projects.

12 Five-megawatts exemptions are issued pursuant to
13 Section 405 of the Public Utility Regulatory Policies Act of
14 1978. These exemptions are also issued in perpetuity, for
15 projects that are five megawatts or less and that would be
16 located on existing dams or would use the natural water
17 feature.

18 Like conduit exemptions, five-megawatts
19 exemptions are subject to mandatory Fish and Wildlife
20 conditions provided by federal and state Fish and Wildlife
21 agencies. The Commission issues environmental assessments
22 for these projects.

23 If a small hydro project is not eligible for an
24 exemption, an applicant may apply for a license. Licenses
25 are typically issued for 30 to 50 years, with no limitations

1 on the project's installed capacity.

2 Applicants that receive a license, receive
3 eminent domain authority under Section 21 of the Federal
4 Power Act. The Commission sets the conditions of the
5 license, along with any other mandatory conditions that are
6 provided by other federal, state, or tribal entities or
7 authorities.

8 Finally, the Commission prepares and Environment
9 Assessment or an Environmental Impact Study, pursuant to
10 NEPA, for licenses.

11 The Commission has three application processes:
12 The integrated licensing process; the alternative licensing
13 process, and the traditional licensing process, or TLP,
14 which is often used for small, low-impact hydro projects.

15 The integrated licensing process is the
16 Commission's default process for license applications, and
17 the traditional licensing process is the Commission's
18 default process of exemptions.

19 While we encourage the use of ILPs for complex
20 issues and potential study disputes, the TLP is often
21 requested for small, low-impact projects where applicants
22 find that there are few complex issues and study needs.

23 The TLP is also requested when applicants
24 anticipate that the TLP would allow them to develop their
25 application more quickly or would provide more flexibility.

1 I'd like to briefly explain the steps in the TLP:
2 This slide shows the prefiling steps in the TLP; that is,
3 all the steps that must be completed before an applicant
4 files a license or exemption application with the
5 Commission.

6 Starting from the top left-hand box, these steps
7 include: Filing a Notice of Intent and a preliminary
8 application document and the request to use the TLP for
9 license applications; Commission approval of the TLP, if
10 appropriate; a public meeting where the applicant explains
11 the proposed project and requests comments, information, and
12 study needs; consultation, and, hopefully, agreement with
13 stakeholders on the information needed to prepare an
14 application, and, any studies needed to fill information
15 gaps; conducting any needed studies, and then, lastly,
16 issuing a draft application for stakeholder review and
17 comment.

18 The post-filing process includes: The applicant
19 filing a final license or exemption application with the
20 Commission; the Commission issuing a Public Notice that the
21 application has been filed; Commission Staff conducting
22 scoping, under the National Environmental Policy Act; the
23 Commission requesting comments and conditions from
24 stakeholders, including federal and state agencies and
25 tribal entities; Staff issuing a single or a draft

1 environmental assessment; Staff responding to comments on
2 the single or draft environmental assessment, Staff issuing
3 a final environmental assessment, if that's needed, and,
4 finally, the Commission issuing an Order, based on the
5 record, with its decision on the license and/or exemption
6 application.

7 Note that all the NEPA-related steps, are
8 typically not needed for conduit exemptions, because conduit
9 exemptions are categorically exempted from NEPA under the
10 Commission's regulations.

11 Now, a few notes on expediting small hydropower
12 projects. Hydropower applicants can do a lot to help reduce
13 the amount of time it takes the Commission to review and to
14 make a decision on license and exemption applications.

15 A few examples include: Proposing projects at an
16 existing dam where hydropower facilities don't currently
17 exist; projects that would have little change to water flow
18 and use; projects that are unlikely to affect or threaten
19 and endangered species or are unlikely to need fish passage
20 facilities; and projects where an applicant owns all the
21 lands needed.

22 Other options that can expedite the process,
23 include early stakeholder consensus, particularly on
24 information needs and studies, and filing a complete
25 application with the Commission, with all the information

1 that's needed for the Commission to make a decision on the
2 application.

3 Likewise, Commission Staff looks for
4 opportunities to expedite our review of small hydropower
5 applications. Some examples include: With resource agency
6 coordination, waving some prefiling requirements; combining
7 our scoping under NEPA with the applicant's prefiling
8 efforts; combining public noticing and shortening comment
9 periods, where possible. I'm sure that today, we'll hear
10 some additional suggestions on how to shorten the process.

11 As John Katz mentioned earlier, this meeting is
12 being recorded by a Court Reporter, and all comments and
13 statements will be made a part of the Commission's record
14 for this Conference. In addition to statements being made
15 today, you may file written comments on small hydropower
16 issues, with the Commission.

17 Comments are due January 4, 2010, and can be
18 filed electronically or via paper. For instructions on how
19 to file comments, we direct stakeholders to our website, to
20 the Commission's website, www.ferc.gov. See the Documents
21 and Filing link.

22 If anyone has any questions about the Conference,
23 including questions on how to file comments, afterwards,
24 they can give me a call, contact me via phone or e-mail. My
25 contact information is up on the board, and it's also in the

1 PowerPoint presentation, which is back on the back table.
2 Thank you very much.

3 COMMISSIONER MOELLER: Thank you, Steve. That
4 was a thorough, but concise overview. I have a question,
5 either for you or for any of the FERC Staff:

6 I find it a little baffling, coming from the West
7 and seeing all the irrigation canals and ditches and various
8 conduits, that that resource hasn't been exploited more. Do
9 you have any thoughts as to why that's the case?

10 MR. HOCKING: Do you want to take that, Ann?

11 MS. MILES: Okay, or Heather. Actually, I don't
12 know what our folks who would file, would say. I'd be
13 curious about that.

14 I wonder if it would be valuable for us to do
15 more education on the ease of filing applications through
16 the conduit exemption process, using that process, because
17 it can actually be done quite quickly, as long as there is
18 adequate consultation and information available.

19 So I certainly would like to see more of those.
20 It appears that -- I'm personally not aware that anyone has
21 looked at the amount of power that's available at conduit
22 exemptions. I think that's kind of an interesting -- might
23 be an interesting thing to know more about.

24 And we're certainly prepared to process them,
25 should more come in.

1 COMMISSIONER MOELLER: Thank you. Any other
2 thoughts? Heather?

3 MS. MILES: The only other thought that I would
4 have, is, a lot of it is on federal lands, and if there are
5 federal lands involved, that there wouldn't be the
6 opportunity for conduit exemptions.

7 COMMISSIONER MOELLER: Okay, good. Steve, thank
8 you again. Shall we go to our first panel, John?

9 MR. KATZ: Yes. Thanks again, Steve, and if
10 first panelists can work their way up to the front, we'd
11 appreciate it.

12 (Pause.)

13 Thank you all very much. I will briefly
14 introduce the panelists, most of whom need no introduction,
15 but they can add any other details that they'd like, as we
16 go along.

17 Mark Stover is the Vice President of Corporate
18 Affairs for Hydro Green Energy. He's responsible for
19 directing the Company's media efforts and assisting in the
20 design and implementation of the Company's business and
21 project strategies.

22 Melissa Grader is a Fish and Wildlife Biologist
23 for the U.S. Fish and Wildlife Service in the New England
24 Field Office.

25 Linda Church Ciocci has for many years been the

1 Executive Director of the National Hydropower Association,
2 the national trade association dedicated exclusively to the
3 interests of the hydropower industry.

4 John Seebach is the Director of the Hydropower
5 Reform Initiative, and works for American Rivers, a leading
6 non-governmental organization with interests in
7 environmental protection.

8 Ken Homolka is the Hydropower Program Leader of
9 the Oregon Department of Fish and Wildlife, and he' served
10 in that position since 2004.

11 Finally, Kimberly McLaughlin is a Regulatory
12 Program Manager with the U.S. Army Corps of Engineers, in
13 their Headquarters for Community Practice. We work a lot
14 with the Corps, because there are a number of projects at
15 or proposed at Corps dams, and we appreciate working with
16 the Corps on those matters.

17 Now, if you each could give your presentations,
18 starting with Mark, please. Remember to turn your
19 microphones on.

20 MR. STOVER: All right, thank you, John. Good
21 afternoon, Commissioner Moeller; it's nice to see you again.
22 We greatly appreciate the opportunity to be here. Again, I
23 am Mark Stover with Hydro Green Energy.

24 We applaud the Commission for holding this
25 workshop today. We think it's certainly time to take a look

1 at how we might be able to improve or expedite the licensing
2 of small, low-impact hydropower facilities, and it's our
3 hope that this workshop will, similar to the 2006
4 Hydrokinetic Workshop, result in some policy changes at the
5 Commission, that will accomplish that goal.

6 I certainly do have some recommendations that I
7 will offer today, but I think I would like to set the table,
8 if you will, as to what's driving a lot of this development
9 right now, and who are the players, because you have a lot
10 of new entities that are in the hydropower space.

11 Quickly, Hydro Green Energy is a venture capital-
12 backed water power technology company. We're based in
13 Houston, Texas. We operate the only FERC-licensed
14 hydrokinetic project in the United States, that's presently
15 putting out power, a small amount of power, but power to the
16 grid.

17 Earlier this year, Commission Moeller joined us
18 in Hastings to perform the official flip-the-switch
19 ceremony, which was one of our corporate highlights. We
20 greatly enjoyed having him out there.

21 And, in addition to hydrokinetic development, we
22 have turned our attention to low-head hydro and small hydro,
23 and we presently have 23 projects in 11 states, before the
24 Commission, nearly 500 megawatts under development, and,
25 again, these are low-head hydropower, conventional

1 hydropower sites, using a patented technology that we have
2 designed.

3 We are developing projects on our own, as well as
4 with utility and independent power producer partners, and we
5 recently filed our first license application at the
6 Commission in November, for a project in Minnesota. For
7 whatever reason, we keep going back to Minnesota to develop
8 projects.

9 And we have a number of permits before the
10 Commission, some issued, some pending, but our goal as a
11 Company, is to quickly and aggressively move into licensing,
12 after we receive the preliminary permits.

13 So, why is there so much interest in renewable
14 energy development, as a whole? I don't think it's any
15 surprise and I don't really have anything new to say here,
16 but there certainly is an interest in developing more clean
17 domestic energy. We obviously need to reduce greenhouse
18 gases and air pollution, and, certainly, there is a need now
19 for more economic development and jobs in the United States.

20 We believe there is a strong preference for new
21 energy sources that are developed at existing infrastructure
22 or near existing infrastructure, whether it's converting a
23 non-hydro dam into a clean generating facility, or deploying
24 a small hydro project near existing transmission
25 infrastructure.

1 We have, I think, all read many articles from
2 economists and academics who are predicting that the green
3 technology sector is going to help lead the next economic
4 boom in the United States, and there is clearly strong
5 support for clean technologies and green energy on Capitol
6 Hill and within the Administration, and from the American
7 public.

8 That is the general interest renewable energy,
9 but why hydro? As Steve just showed us, there's an
10 explosion of activity at FERC, probably the highest since
11 the 1980s, on low-head and small hydro.

12 There are lots of permits, lots of projects in
13 development, some actually even being built right now. I
14 think the interest in hydro, lies in the fact that there is
15 great untapped potential in the United States -- and Steve
16 referenced that -- anywhere from 60,000 to 175,000 megawatts
17 of potential, depending on the study that you look at.

18 Secretary Steven Chu recently called Hydro one of
19 America's best kept secrets. Governor Ed Rendell from my
20 home state, recently said, we're sorely under-utilizing one
21 of America's cleanest energy sources, and we could not agree
22 more with both of those statements.

23 It's obviously carbon-free, produces no air
24 pollution. Run-of-river projects like the ones that we and
25 others in this room are developing, can operate at baseload

1 or near baseload capacity, unlike a wind or solar project.

2 As I mentioned earlier, we are developing sites
3 that are located near existing infrastructure. In fact, all
4 of our projects are at Army Corps of Engineers' dams.

5 They have wonderful infrastructure that has long
6 served the country for navigation and flood control, but
7 they're not being used for hydro. They have the site, we
8 have the technology, and we would like to marry the two.

9 Finally, you have great job potential, and I
10 think Linda will probably speak to this Navigant study that
11 recently came out, announcing that there could be as many as
12 700,000 new jobs created in the hydropower industry.

13 So these are the drivers that are creating all of
14 this activity, and I guess, if there's one more, it's that
15 these low-impact projects are that; they are ones that can
16 operate in an environmentally-friendly manner, and this is
17 why you have seen groups like John's and others, supporting
18 incentives for qualified hydropower development at non-hydro
19 dams.

20 So what are the developers' needs? I think it's
21 important to recognize that in the low-head and small hydro
22 space, you have new players that are on the scene. You have
23 companies like mine, that are venture-capital-backed
24 companies. We have different drivers, we have different
25 needs, we have different timetables.

1 This is certainly not an issue that affects us.
2 You have a number of companies out there -- Advanced Hydro
3 Solutions, Symbiotics, Reflow Power, just to name a few.

4 You have some mom-and-pop shops that are
5 producing applications right now, and if there's one thing
6 that these types of entities need, it's to reduce the up-
7 front burdens and to speed up licensing on these projects.

8 One of the reasons that's important for us, is
9 that we have clean-energy incentives with a ticking clock.
10 Treasury grants PTCs and these all expire in the relatively
11 near future.

12 If we can't get projects underway or in the
13 water, we can't take advantage of those, and those are vital
14 to developing new resources, using new technologies. I
15 would argue that there is as much technology development in
16 the low-head space right now, as there is in the
17 hydrokinetic space. It's an exciting sector to be in, and
18 there is great growth potential, but, as we talked to
19 venture capital outfits and to private equity firms looking
20 to deploy money into the renewable sector, they've done a
21 lot of wind and a lot of solar, and there is a lot of
22 curiosity right now about hydro.

23 A conversation has a tendency to go quite well,
24 until we talk about the regulatory process, and, at the end
25 of the day, a lot of these entities with cash that they want

1 to deploy into the sector, would rather go back to wind and
2 solar, than jump into hydro, due to some of the regulatory
3 costs and the uncertainties, particularly for small
4 projects.

5 So, generally speaking, we need to reduce
6 repetition, and, as I said earlier, reduce the burdens on
7 small companies with limited resources. We would like to
8 keep pre-licensing activities to a minimum, and really
9 conduct the heavy lifting in the post-filing or even post-
10 installation phase.

11 We would like to see a little more efficiency and
12 more certainty in this process, and what we have seen, not
13 across the board, but with some of the resource agencies, is
14 that there seems to be a disconnect from what's happening in
15 the field and what's being said by the leadership in
16 Washington, so I think that a little bit of a shift in
17 perspective, might be helpful.

18 We need stronger support out at the field level,
19 for the desires that are being expressed in Washington by
20 the Administration and other leaders, which is supported by
21 the American public.

22 So, quickly, a few recommendations, before we
23 move to Q&A: The overarching theme for Hydro Green Energy,
24 is to speed up licensing and improve licensing, without
25 taking away anybody's responsibility or ability to

1 participate in the process. We think this can be done.

2 A few specific recommendations for the prefiling
3 activities, which is what we're to address today: We would
4 like to see the Commission process, initially, preliminary
5 permits, more quickly.

6 There are times when we will submit a preliminary
7 permit and it takes four or five months for it to get
8 noticed. We have times when we'll file preliminary permits
9 for the same type of project on the same river in the same
10 state, and two will pop out fairly quickly, one will
11 languish for months, and then appear out of the blue.

12 We see some inconsistency in additional
13 information requests, so, hopefully we can tighten that up a
14 little bit.

15 We would like to reduce timelines. If there's a
16 regulatory timeline of more than 30 days in the prefiling
17 scheme, we would like to see that cut in half, with 90 days
18 to 45 and 60 to 30. Again, don't cut anyone out, let
19 everyone participate, but let's do it more quickly and more
20 efficiently.

21 MR. KATZ: Mark, sorry to interrupt. I'm going
22 to ask you to save the rest of your suggestions for perhaps
23 during the Q&A period, just to make sure that we get all of
24 the panelists in. Just to be clear, we're going to ask the
25 Commissioners or anyone else with questions, to wait till

1 the entire panel has spoken, before we do Q&A.

2 MR. STOVER: Okay, great, thanks.

3 MR. KATZ: Thank you very much. Melissa, you're
4 up.

5 MS. GRADER: Good afternoon, Commissioner. The
6 Fish and Wildlife Service thanks you for the invitation to
7 participate on this panel discussion.

8 For over 40 years, the New England Field Office
9 has actively participated in the permitting of federally-
10 licensed hydropower projects. Current staff, combined, have
11 over 35 years of experience working on FERC projects.

12 Presently, there are roughly 325 active FERC
13 projects in the six New England states, plus 25 active
14 preliminary permits.

15 Over the past 15 years, our workload has focused
16 on relicensing of existing projects, as well as involvement
17 in post-licensing activities, however, recently, as Steve
18 noted, we've seen a substantial increase in the number of
19 new projects proposed.

20 When you consider the number of dams in our
21 region, it's not hard to see why. According to the National
22 Inventory of Dams, there are about 3600 dams in the six New
23 England states.

24 In reality, there are many more, as Connecticut
25 and Massachusetts each estimate that they have over 3,000

1 dams.

2 So, clearly, there are a lot of potential
3 opportunities for small hydro development. Over two-thirds
4 of our region's FERC projects, are less than five megawatts,
5 and most of the extant dams, given their size and the
6 drainage area that they are sited on, likely would be
7 evaluated for small, micro, or picohydro potential.

8 The Fish and Wildlife Service participates in the
9 FERC process to provide input and work to minimize any
10 potential environmental impacts associated with a project.
11 In New England, many of our rivers have active migratory
12 fish restoration programs, so our main focus is to ensure
13 that the proposed projects won't hinder restoration efforts.

14 In New England, the Service routinely coordinates
15 with other federal agencies and our state partners on FERC
16 projects. With respect to the increased interest in
17 developing dams for hydro, the New England Field Office has
18 several concerns, including the potential to inundate free-
19 flowing habitat, altering flows, and, therefore, habitat
20 suitability in bypass reaches; impingement and entrainment
21 mortality, especially as we see more proposals for cross-
22 flow units; fish passage; and water quality.

23 With respect to water quality, our concern
24 centers on impacts to dissolved oxygen, as more flow is
25 routed through turbines, rather than over spillways, and

1 important source of re-aeration, and in rivers where
2 dissolved oxygen may already be an issue, can be lost.

3 In addition, we are seeing new types of turbines,
4 such as siphon, Archimedes Screw, and vortex, being
5 proposed, units we have little familiarity with.

6 Regarding facilitating the prefiling process, the
7 New England Field Office supports recent efforts by
8 stakeholder groups, to pre-screen projects for their
9 suitability for hydro development. This helps ensure that
10 only the most economically viable projects with the fewest
11 environmental issues, move forward.

12 However, in order to be effective, these types of
13 analyses should have resource agency input and involvement,
14 but it may not be possible for Service staff to participate
15 in these initiatives, given that our priority is to be
16 engaged in those projects that have already started the FERC
17 process.

18 Another measure we believe would help minimize
19 prefiling delays, is if applicants initiate consultation
20 early, and, by the time an initial consultation package is
21 submitted for our review, have a concrete proposal with as
22 much detail as possible.

23 We look forward to answering any questions that
24 you may have.

25 MR. KATZ: Thank you very much. Linda?

1 MS. CHURCH-CIOCCI: Thank you, John, Commissioner
2 Moeller. The National Hydropower Association is very
3 pleased to be able to be here today to participate in this
4 important workshop.

5 We wish the Chair was here. We're sorry that
6 he's not able to make it this afternoon, but he'd be pleased
7 to know that NHA has taken up his challenge that he posed to
8 our industry nearly two years ago, to double hydropower's
9 current contribution.

10 NHA has a new vision, which calls for the
11 development of another 96,000 megawatts of clean energy.
12 This means new green jobs for our economy.

13 Our recently-commissioned job study, released
14 just last month, reports potential for 60,000 megawatts of
15 new development by 2025. This translates to 700,000
16 cumulative jobs. You can find that full study on our
17 website at www.hydro.org.

18 Small hydropower will play a critical role in
19 meeting this goal. According to the DOE, nearly half of the
20 potential rests in the area of small hydro. As such, we
21 applaud the Commission for recognizing the importance of the
22 nation's small hydro resource, much of which remains
23 untapped.

24 This workshop comes at an opportune time as the
25 nation focuses on transition to new, clean-energy options,

1 using more distributed energy resources, with lower carbon
2 emissions. The benefits of small hydropower can help meet
3 all of these important needs.

4 Let me begin by offering our primary
5 recommendation: We believe this workshop must act as a
6 catalyst for change and continued action by FERC and all
7 governmental agencies, both state and federal, to address
8 small hydropower needs.

9 We strongly encourage the Commission to follow
10 this workshop with a Notice of Inquiry on ways to facilitate
11 responsible new hydropower development.

12 This pathway has worked successfully in the past.
13 As Mark mentioned in his remarks, in 2004, FERC hosted an
14 NHA meeting that brought together resource agencies,
15 industry, and the conservation community, to discuss the
16 licensing process for small hydro and new hydrokinetics.

17 That led to the Commission's successful work on
18 the pilot process for hydrokinetics. We are much
19 appreciative of that work.

20 However, the small hydro focus was tabled until
21 now. NHA is committed to working with FERC and all
22 interested stakeholders in identifying potential solutions
23 to aid the development of small hydro. To that end, we have
24 established a Small Hydropower Council and initiated
25 discussions with the conservation community such as American

1 Rivers and others, to discuss ways in which we can
2 responsibly grow this new source for building environmental
3 protection.

4 The Council has been meeting for several weeks to
5 identify various and potential solutions, focusing on six
6 general areas: Approval processes for new development;
7 improvements for incremental hydro; improvements for the use
8 of exemptions, both for conduits and small projects under
9 five megawatts; implementation of other federal agency
10 processes; operations, dam safety, and R&D issues; as well
11 as, finally, project finance, economic incentives, and
12 market issues.

13 For each of these categories, the Council has
14 identified three different types of proposed solutions:
15 Those that could be implemented through changes in agency
16 policy; those that would require regulatory action; and,
17 finally, those that may require legislative fixes.

18 NHA will be providing more details in our written
19 comments, and would request that the Commission provide all
20 interested parties, 60 days to file comments.

21 Regarding the problems facing small hydropower,
22 to put it simply, small hydro poses unique challenges, with
23 a need to reduce delays, expedite processes, and keep costs
24 reasonable, all while preserving environmental protection,
25 and working closely with all stakeholders.

1 We believe we must get to a smarter and more
2 efficient licensing process, one that considers the
3 economies of scale and is commensurate with the project.
4 It's a tall order, but absolutely critical.

5 While our member companies will address specific
6 issues, we offer the following brief examples: On agency
7 policies, much of the potential rests on existing non-power
8 federal locks and dams, updating the MOU between FERC and
9 these agencies to ensure interagency cooperation is
10 maximized, is very much needed. We urge this all with a
11 focus to reduce process time, potential duplication, and to
12 ensure consistency across agencies.

13 We understand that the Commission is considering
14 an update of the Small Hydropower Handbook. We applaud and
15 support this initiative, and encourage additional outreach
16 to the sister federal agencies, and, in particular,
17 localities, because we receive so many calls from local
18 communities looking to build small hydropower.

19 On regulatory and administrative changes, several
20 process improvements have been recommended. NHA members
21 have examined past FERC regulation allowing an automatic
22 approval process for exemption applications.

23 We appreciate the Commission's actions to quickly
24 process certain projects, such as conduit exemptions, but we
25 wonder whether the automatic approval process can be brought

1 back for certain non-controversial and unopposed exemption
2 applications, to expedite these projects.

3 On studies, perhaps there are ways to share study
4 results, that would reduce costs for developers. We support
5 the ILAP's study criteria, and we seek new ways to achieve
6 balance in small hydro.

7 On potential legislative changes, one focuses on
8 the economic incentives which plays a critical role in
9 securing the funding necessary to pursue projects, as Mark
10 had mentioned earlier.

11 NHA is seeking to change the tax code to increase
12 the production tax credit for all qualified hydropower
13 projects, including eligible small hydro projects.
14 Currently, hydro receives only one-half the credit other
15 renewables receive.

16 In addition, we are pleased to continue our
17 discussions with the conservation community, to expedite and
18 to expand the use of these important tools, to include more
19 small hydro development.

20 In conclusion, these are only a few examples the
21 industry is examining to stimulate small hydro development.
22 Again, NHA intends to provide more in-depth comment in our
23 written comments.

24 We look forward to working with the Commission,
25 the Corps, the Bureau, resource agencies, and the

1 conservation community, to develop consensus on these issues
2 and to craft solutions which will result in more clean,
3 renewable hydropower, while maintaining natural resource
4 protection and public participation in the process.

5 Once again, we commend the Commission for holding
6 this important workshop, and we look forward to working with
7 you to doubling our nation's largest renewable. Thank you.

8 MR. KATZ: Thank you very much, Linda. John
9 Seebach?

10 MR. SEEBACH: Thank you, John, thank you,
11 Commissioner Moeller and everyone else who's here. My name
12 is John Seebach.

13 I'm the Director of American River's Hydropower
14 Reform Initiative. I also serve as the Chair of the
15 Hydropower Reform Coalition, which is a group of 150 member
16 organizations, environmental groups, recreation groups, and
17 other groups that have an interest in protecting public
18 values, non-power public values at rivers that are affected
19 by hydropower dams.

20 Most of our experience here, is in relicensing,
21 but we've also noticed a great deal of interest in new
22 licenses, and so we're very pleased to be invited to speak
23 to you and share some of our perspectives.

24 I think, from the point of view of the
25 conservation community, renewable energy is a two-part

1 definition. Renewable energy must be both low emissions and
2 low impact.

3 All energy, regardless of whether it's renewable
4 or not, has some impact, and I think the environmental
5 community is willing to accept some impact in the
6 development of new renewable energy. If we weren't, nothing
7 would be built, no form of energy.

8 What we are less comfortable with, is a reduction
9 in baseline environmental standards or a regulatory subsidy
10 towards development in the form of relaxed environmental
11 standards for the development of renewable energy projects.

12 This is particularly important in projects that
13 affect water resources, like hydropower projects, and
14 particularly important in the face of climate change, where
15 water resources and river resources are increasingly the
16 leading indicator of climate-related environmental stress.

17 So we ask, as you look at hydropower projects,
18 that you consider those cumulative impacts, and we also ask
19 that you consider how climate change may affect the future
20 operations of some hydro projects.

21 I say this, because, this morning, I saw an
22 article published in the Associated Press, referring to a
23 University of California at Davis study that eventually
24 found that by the year 2050, that California's hydropower
25 projects between 1,000 and 2,000 feet, would be producing

1 about 20 percent less than they are producing now, simply
2 because of the effects of climate change on water resources
3 and the availability of water.

4 I believe that the study further found that the
5 timing of that, would be not at a time when energy is
6 currently being expected from those developments. Again,
7 that's one place, but it's something that I think would --
8 is important to consider, as we move ahead in looking at
9 these projects.

10 I think another point for the environmental
11 community, is that, for us, the size of a hydropower
12 project, or, more appropriately, the generating capacity, is
13 a somewhat meaningless metric. I say that because the size
14 of a project does not accurately describe the impact of a
15 project.

16 And, as you look at ways to improve the
17 regulation of hydropower projects, I encourage you to look
18 at projects, based on their impacts or perceived impacts, or
19 the likelihood of impacts, rather than the size of the
20 project or the generating capacity.

21 The example of this is the Edwards Dam on the
22 Kennebec River in Maine, which is no longer there. The
23 Edwards dam was a 3.5 megawatt project, which, by all
24 standards, would constitute a small hydropower project,
25 however, that dam had essentially wiped out the fisheries on

1 that river, and the Commission, ten years ago -- more than
2 ten years ago, decided to issue a non-power license, and the
3 dam was removed.

4 So, just because a dam is small, does not mean
5 that it is low-impact. That said, there is a great deal of
6 hydropower capacity that we believe can be developed and can
7 be developed responsibly.

8 My organization has worked with the National
9 Hydropower Association, to support the renewable energy --
10 the inclusion in the renewable energy standard and
11 production tax credits, and other incentives for new
12 hydropower capacity that utilizes existing infrastructure in
13 a responsible manner.

14 We think this is low-hanging fruit, and certainly
15 should be encouraged, provided it can be done right as
16 Projects that utilize this existing infrastructure, with a
17 minimum of additional environmental impact.

18 From our point of view, good projects sell
19 themselves. If a potential licensee comes to the
20 environmental community and can present a concrete proposal
21 for a project that they can show us will not harm the
22 environment, they are likely to have our support in seeing
23 that project developed.

24 And I think that's likely to lead to using even
25 the Commission's existing licensing processes, short of

1 license issuance, and less chance of a challenged license or
2 a dispute leading to that license being issued.

3 So, what can FERC do? I think FERC can encourage
4 people that come to the Commission with the intent of
5 developing projects, to reach out to environmental
6 organizations, to reach out to state and federal resource
7 agencies, and to really, in a meaningful way, address their
8 concerns as they develop their proposal.

9 I think such a proposal would be much stronger
10 and much more likely to find its way through the Commission
11 with the minimum of difficulty, than a proposal that is sort
12 of put together in a vacuum.

13 I also encourage FERC to have its staff work with
14 potential developers and with resource agencies and with
15 stakeholders, so that your staff can encourage that sort of
16 collaboration and have a good, solid idea for what that
17 proposal looks like and develop comfort at the FERC staff
18 level, with what the proponents of the project are putting
19 forward, as well as other stakeholders.

20 Finally, I think FERC, as it's looking at these
21 projects, new hydropower development, especially small
22 hydropower development, should give a great deal of thought
23 to the cumulative impacts of these projects, as multiple
24 projects are being developed. While some of these things
25 may be very small in individual cases, it is important to

1 look at the aggregate and how the Commission's decision to
2 change any licensing process, or encourage certain types of
3 hydropower development, and how those things may affect
4 water resources, in the aggregate, is very important.

5 Thank you very much. I'd be happy to answer any
6 of your questions later.

7 MR. KATZ: Thank you, John. Ken Homolka?

8 MR. HOMOLKA: Good afternoon, Commissioner. My
9 name is Ken Homolka. I'm the Hydropower Program Leader for
10 the Oregon Department of Fish and Wildlife. I appreciate
11 the opportunity to represent my agency here at today's
12 Conference.

13 Knowing there's a wide range of perspectives of
14 what constitutes small hydro projects, I realize that not
15 everything we'll be talking about, will apply to every
16 project, however, I wanted to have a broader perspective,
17 rather than focusing on one end or the other of that range.

18 A number of my colleagues have expressed concerns
19 about the potential increase in preliminary permit
20 applications. Agency staff were overwhelmed with hundreds
21 of permits in the 1980s, many of which were never developed,
22 yet required agency time to track and participate in those
23 processes.

24
25

1 There may be ways for the Commission to address
2 this concern. One may be careful site selection. Clearly
3 it is important for developers to have a responsibility to
4 conduct initial site scoping to determine whether a site has
5 potential, not just from the generation perspective but also
6 from the natural resources that may be affected. Proper
7 siting of small projects is a key factor in whether
8 biological impacts can be minimized.

9 In the Pacific Northwest the salmon and steelhead
10 resources are important in many ways, including to state
11 economies via commercial and recreational fisheries, and
12 they are central to Tribal cultures as well.

13 In Oregon, new projects can only be developed on
14 streams with salmon and steelhead if an existing facility is
15 retrofitted in a way that will benefit those salmon and
16 steelhead populations.

17 So rather than maintaining the status quo of the
18 impacts caused by the original facility, the intent is to
19 make improvements at the site such as providing fish passage
20 where none currently exists.

21 Potential sites that are located above salmon and
22 steelhead distribution may be less complex and costly to
23 develop. Retrofitting existing facilities at these
24 locations and implementing appropriate environmental
25 protections would likely be a less complex process compared

1 to building new facilities in these areas.

2 We are now seeing preliminary permit applications
3 to retrofit projects on smaller, existing infrastructure
4 facilities such as sewage treatment outfalls, municipal
5 water supply systems, aquifer storage and recovery systems,
6 irrigation conduits. These projects are off-stream and rely
7 on using the existing water supply allowed for other
8 purposes. These projects are the least likely to affect the
9 environment and the least complex to develop.

10 Early notification of stakeholders can address
11 one of the longstanding concerns about having the
12 appropriate people at the meetings at the right time in the
13 process. A prudent developer will work with the fish and
14 wildlife agencies, Tribes, and other stakeholders to
15 determine whether there are any additional flaws with the
16 proposal at a given site. The potential environmental
17 issues are identified, and timing and degree of study is
18 worked out.

19 During consultation, the cost of mitigation for
20 each impact can be assessed and the developer can make a
21 more informed decision about whether to proceed.

22 The Oregon Department of Fish & Wildlife believes
23 that the Commission's current prefiling consultation
24 requirements are adequate if the process is implemented as
25 intended. Because of the size range of projects that may be

1 considered small hydro, it is difficult to talk about
2 information needs that suit all projects.

3 However, it is important to note that the onus is
4 on the Agency to ensure there is evidence in the project
5 record to support recommendations, terms, and conditions.
6 The information which provides the evidence must be reliable
7 and detailed.

8 Lack of information tends to bog down the process
9 and we have found that good science and information will
10 help to streamline a process.

11 During prefilings, the agencies can provide very
12 detailed descriptions of concerns and study needs. We
13 assume that based on advice and recommendations that certain
14 baseline studies will be conducted and the information will
15 form the basis for agency recommendations, terms, and
16 conditions.

17 Incomplete or inadequate information will likely
18 cause delay when additional information must be obtained
19 late in the process or when decisions are challenged. The
20 information collected should be adequate to evaluate direct
21 and indirect impacts, support mitigation measures, and allow
22 a thorough evaluation of cumulative effects.

23 In closing, some project proposals may be more
24 environmentally benign than others. However, the potential
25 environmental effects cannot necessarily be predicted based

1 on whether the project fits within a given FERC process.

2 Notification and consultation for each project
3 allows agencies with fish and wildlife expertise to
4 determine, based on the complexity of the issues, whether
5 they need to participate in the proceeding.

6 Opportunities for review of proposals and
7 developing comments, recommendations, terms and conditions,
8 should not be shortened. We want to ensure we make good
9 decisions during the one opportunity to evaluate projects
10 that will be authorized for up to 50 years, or in the case
11 of exemptions in perpetuity.

12 If the Commission contemplates changes to the
13 policy or regulations in the future, please keep in mind
14 that small hydro does not necessarily mean low impact.

15 And lastly, the developers in Oregon that I've
16 talked with have been more focused on these very small
17 retrofits on the sewage outfall, or municipal water supply
18 systems, the aquifer storage and recovery, and we're seeing
19 these first-time developers that are being very resourceful
20 but may not have the staff, time, or expertise to engage in
21 the FERC requirements.

22 Knowing that, maybe providing support for these
23 first-time developers may be the area where the Commission
24 may want to focus its efforts.

25 Thank you.

1 MR. KATZ: Thank you very much.

2 Kimberly.

3 MS. McLAUGHLIN: Good afternoon. I am very
4 grateful to be a part of this workshop today. I truly
5 believe that the more opportunities we have to meet amongst
6 our agencies, our regulatory agencies, stakeholders, and
7 resource agencies, will go a long way to help achieve I
8 think our shared goal of facilitating concurrent regulatory
9 review processes and reduce the overall burden on the
10 project proponents.

11 I am here representing the Corps's Regulatory
12 Program. I want to make that clear. I am not here on the
13 Engineering and Dam Safety side.

14 Our mission in the Regulatory Program is a little
15 unique in that our goal is to protect the Nation's aquatic
16 resources while allowing reasonable development through
17 fair, flexible, and balanced permit decisions.

18 It is important to keep in mind that the Corps's
19 Regulatory Program is neither a proponent or an opponent of
20 any project or project type. So I wanted to say that up
21 front.

22 Of course our regulatory authorities are Section
23 404 of the Clean Water Act. We would permit any discharge
24 of dredged or fill material into waters of the United
25 States, including wetlands; and Section 10 of the Rivers and

1 Harbors Act, while we recognize that generally speaking the
2 FERC license would satisfy the Section 10 requirement of the
3 Corps's mission.

4 Quickly, some of our challenges that we face at
5 the Corps is we are a very decentralized organization. We
6 have 38 districts. Permit decisions are made at the
7 district by district commanders, not at the headquarters
8 level.

9 The regulatory program itself is a very small
10 business line in the Corps. We only have about 1300
11 employees in the field, but we affect over \$220 billion of
12 economic development a year.

13 We issue about 73,000 authorizations on private
14 property and public lands. And we also do everything from
15 large, complex wind farm projects, or LNG facilities, to mom
16 and pop bulkheads. So we are very busy, but we seem to be
17 able to stay on top of things.

18 Rather than go through all of our authorities,
19 which I think everyone is probably pretty familiar with, I
20 wanted to go straight to how we have been working well I
21 believe in most cases with FERC, and what we see as some
22 current challenges that we are trying to work through.

23 We have an existing Memorandum of Understanding
24 with FERC that applies to non-federal hydropower projects.
25 That MOU really tries to get the concurrent processes for

1 reviews online.

2 We are working with FERC to try and update that
3 MOU to see if we can identify more streamlined approaches to
4 facilitate the concurrent reviews that I mentioned before.

5 Again, under the Federal Power Act, FERC issues
6 the Section 10 permit, or complies with the Section 10
7 permit with conditions for navigability. In many cases,
8 Regulatory may be only responsible for a very small
9 component of the overall project--which is if there is a
10 discharge of fill material in wetlands. Sometimes we do, on
11 the Corps side we would be mostly responsible for NEPA.

12 What we would suggest or recommend, and it has
13 been happening for the most part, but the Corps's
14 Engineering Business Lines, and Dam Safety Business Lines,
15 and Regulatory should be involved as early in the FERC's
16 NEPA process as practical.

17 This will minimize lengthy delays at the end of
18 the process, reduce redundancy and uncertainty, and
19 ultimately it will inform decision making across all
20 regulatory agencies.

21 We just ask, again, that the stakeholders, the
22 project proponents, bring the Corps in as early as possible
23 so that there are no surprises at the end of the day.

24 Briefly I want to touch on this new 408 Approval
25 Process that we have recently discovered that we need to be

1 doing. Essentially the 408 Approval Process comes from 33
2 USC 408 and requires that any modification to an authorized
3 Corps project will require an approval from the Chief of
4 Engineers.

5 This approval authority has not been delegated to
6 the Division or District and must be made by the General in
7 office. This involves an in-house vertical team review.
8 Regulatory is not the lead with respect to 408, but
9 certainly are willing to help inform the Chief's decision.

10 Frankly, Regulatory lacks the resources to work
11 on the 408 Review and, more importantly, the expertise. So
12 we are working currently in-house to get a more streamlined
13 and predictable sort of process in place so that we can try
14 to get the 404 Review, the 408 Review, and hopefully FERC's
15 licensing NEPA process all going at the same time so that
16 the applicant would come in with just one single complete
17 package of information.

18 Because what we have found is that much of the
19 information that FERC needs to do their NEPA review and to
20 issue their license is the same information that the Corps
21 needs to make their 408 Approval, or their 404 Permit
22 decision. So there is no sense in doing these sequentially.
23 They should be done all at the same time.

24 So that is the ideal. That is our goal. And I
25 think that's about it. I would be willing to answer any

1 questions. Thank you.

2 MR. KATZ: That is impressive. All things are
3 relative, because your "poor little section" is the size of
4 this entire agency.

5 (Laughter.)

6 MR. KATZ: We are now open for questions.
7 Commissioner, if you like, we could give Mark a couple of
8 minutes to complete his recommendations.

9 COMMISSIONER MOELLER: Yes, that's a good
10 thought, John. Please.

11 MR. KATZ: A minute or two, Mark.

12 MR. STOVER: Yes, thanks. I appreciate that. I
13 actually don't need that. I only had two more bullets
14 there.

15 I think one of the things that would help move
16 projects more quickly is the transfer of environmental
17 information from project to project for companies that are
18 using the same technology and essentially the same sites.
19 That may be a little unique to Hydro Green Energy, but at
20 our projects it is the same technology, the same
21 installation procedure, the same operational mode, the same
22 turbines. We think that the environmental information that
23 we gather on project one would be applicable to project ten.
24 Of course there will be some site-specific issues, but if we
25 could have a base package that travels from project to

1 project we think that will make projects more efficient.

2 We would like the Commission to extend the filing
3 of competing applications period from 120 days to 180 days.
4 That would give everyone a little more time to work on
5 competing applications. I know the Commission has a few in
6 front of it right now, and it is probably going to see more,
7 given the competitive nature of this industry.

8 We would like to see the ability for developers
9 to use the 5 megawatt exemption at federal dams, and on
10 federal lands.

11 And finally, in agreeing with Linda we would like
12 to see FERC and the Corps very quickly update the MOU. We
13 have got a lot of Corps recommendations that we have been
14 speaking to the Corps about. I think those would certainly
15 help improve the process, but we're focused on FERC today.

16 Thanks.

17 MR. KATZ: Thank you very much.

18 Commissioner, all yours.

19 COMMISSIONER MOELLER: Thank you, John.

20 Thanks again to all the panelists, but especially
21 those who had to travel to get here. First of all, Mark,
22 thank you for the hospitality at Hastings. It was an honor
23 to flip the switch on that day, and hopefully we will have
24 many more switches to flip in the future.

25 For all of you, maybe starting out at a very

1 basic level, what do you think are the most significant
2 factors to focus on when picking a site? Now it's going to
3 be unique to where you're coming from, but from your
4 perspective in terms of picking a site what are the most
5 significant factors?

6 Mark?

7 MR. STOVER: I was hoping you would work from the
8 other side of the room on that one.

9 (Laughter.)

10 MR. STOVER: I think trying to work from existing
11 baseline data would be very helpful. Studies and lengthy,
12 comprehensive, and at times expensive information requests
13 are a little touch for guys like us to swallow.

14 As I said earlier, we would like to move some of
15 those activities into the post-filing phase, if possible, or
16 into post-installation. We are very committed to learning
17 about the impacts, or the lack of impacts, at our projects.
18 And if there are impacts, mitigating for those at Hastings
19 for example, very early in that process.

20 We came out and basically laid on the table the
21 things that we were willing to do in terms of advancing the
22 environmental understanding of hydrokinetic technology. We
23 from day one committed to doing a real-life fish survival
24 study. That cost us \$500,000. At the time, that was a
25 pretty big chunk of our budget--a small, venture-capital-

1 backed firm. We were committed to gathering water quality
2 data.

3 Now before we put the project in, we conducted a
4 lot of modeling on fish survival--impacts to DO, temperature
5 turbidity--and we essentially showed there were not going to
6 be any impacts. But we were willing to put into play post-
7 licensing studies. We have done that. We are consulting
8 right now on the fish survival study; pre-project modeling
9 showed 97.5 percent survivability, the actual real-world
10 test was above 99 percent.

11 The fish that swam through our hydrokinetic unit
12 performed better than the fish that swam freely in the
13 river. The project to date has shown no impacts on DO
14 temperature and turbidity. We knew this going into the
15 project. We had the modeling that showed it.

16 Again, as I said earlier, there is an abundance
17 of information on hydro projects and how turbines behave and
18 what are the environmental impacts. And, yes, there are
19 always site-specific issues but we have a lot of data that
20 we can lean on right now. We would like to make better use
21 of that early on in the process and deal with site-specific
22 issues as we move forward with the license, or again in the
23 post-installation regime.

24 COMMISSIONER MOELLER: Ms. Grader.

25 MS. GRADER: I believe that when we are looking

1 at different sites, the ones that Fish & Wildlife Service is
2 going to have the fewest issues with are those sites that do
3 not have active migratory fish restoration programs; those
4 that don't have a bypass reach; they have the existing
5 infrastructure so that the powerhouse could be sited right
6 at the dam. There is no proposal to increase the headpond
7 by the use of flashboards. And that the intake is not sited
8 low in the headpond so that it could potentially draw low-
9 oxygen waters off the hypolimnion.

10 These are the first cut of the things that we
11 would look at.

12 COMMISSIONER MOELLER: Good. Again, thank you
13 for coming here. I think it is important to point out that
14 in your testimony, and I think we know it is clear, but when
15 you talked about 3000 dams in the region that is total dams,
16 only 300 or so of which are actually hydropower dams that
17 are regulated by FERC.

18 MS. GRADER: Yes, that's the case.

19 COMMISSIONER MOELLER: All right. Thank you.

20 Linda?

21 MS. CHURCH CIOCCI: Well I would certainly agree
22 with Mark that the baseline data issue is important. We
23 certainly see that with industry members within NHA.

24 Environmental sensitivity obviously is critical.
25 It's been raised several times I think in individual

1 statements that we have for siting, and obviously if it's a
2 highly sensitive environmental area it does not make much
3 sense.

4 Using existing infrastructure. We think that can
5 certainly maximize the speed up of approvals and decisions.
6 Again, however, we still have to pay attention to speeding
7 up some and expediting some of the processes with the Corps
8 and other federal owners of facilities.

9 I think another area that is important is being
10 near transmission lines. It is certainly going to be a lot
11 easier to site a project that is near transmission than one
12 that isn't, and again it helps to reduce costs. To the
13 extent you can reduce cost the easier it is to attract
14 federal and private investment to get the project done.

15 So those would be the areas that I would offer.

16 COMMISSIONER MOELLER: Thank you.

17 John?

18 MR. SEEBACH: The further we get down the line,
19 the easier it is to just say what they said.

20 (Laughter.)

21 MR. SEEBACH: First, what they said. But I think
22 my advice to developers would be to choose sites where you
23 are going to avoid potential conflict. So ask yourself the
24 question: Is there already infrastructure there? Has that
25 infrastructure been recommended? So, in other words, is my

1 proposal to put hydropower on this infrastructure--sorry,
2 has the infrastructure been recommended for decommissioning?

3 So does your proposal potentially avoid creating
4 conflict in that way? In most cases that is not the case.
5 And are there fisheries, wildlife, or recreation issues that
6 would have to be affected by the way you are proposing to
7 develop the project?

8 If the answer is yes to already infrastructure
9 and no to the other questions, then I think it is probably a
10 very good site to look at.

11 COMMISSIONER MOELLER: Ken, from my home of the
12 Pacific Northwest.

13 MR. HOMOLKA: Commissioner, I believe the best
14 projects that make the most sense are those that are
15 offstream, retrofitting existing infrastructure. Also, we
16 would want to ensure that, for example, some of these
17 irrigation canals that are being retrofitted are screened to
18 prevent fish from going down them in the first place.

19 Probably the next step would be retrofitting
20 existing facilities; ensuring that we could see either some
21 benefit to anadromous fish as a result of that, some win/win
22 for maybe the developer as well as the fisheries and
23 forests; and that they have adequate mitigation and
24 environmental protection and they don't cause new impacts.

25 COMMISSIONER MOELLER: Thank you.

1 Kimberly, other than staying away from Corps
2 facilities--

3 MS. McLAUGHLIN: Now I can say--yes--from a
4 regulatory standpoint, obviously, the less impacts to the
5 aquatic resources is preferred.

6 Again it is important to talk to our Engineering
7 folks and Safety folks, because they might know things about
8 particular dams that we don't know about in Regulatory that
9 would help site your facilities.

10 But certainly avoiding impacts to the aquatic
11 environment is paramount for our program.

12 COMMISSIONER MOELLER: Moving on to kind of the
13 consulting and coordination process, I am curious. What can
14 people take away in terms of your experiences of the most
15 effective methods of consultation with other stakeholders
16 during prefiling?

17 What's worked? Mark?

18 MR. STOVER: I think the initial consultative
19 meaning, at least from our relatively limited experience,
20 has been quite helpful. And as some of the agencies have
21 said, trying to get them some information prior to that
22 meeting.

23 We usually try to walk in to our first
24 consultative meeting with a pretty clear idea of what we are
25 going to do at that site. And because of our development

1 approach, and because of our technology, that is only going
2 to get easier at project two versus project one. Not only
3 will we be able to talk about the technology, the
4 installation procedure, and the operational mode, but the
5 impacts or lack thereof that we've seen in project number
6 one.

7 So having that initial face-to-face meeting is
8 quite important, and giving information prior to that. I
9 think, unfortunately, a lot of the--or I guess the initial
10 introduction between agencies and stakeholders and the
11 Corps, we see this a lot with the Corps, the first time
12 they, quote, "meet us," is when they get a piece of paper
13 from FERC saying a preliminary permit application has been
14 filed on lock and dam number nine, for example.

15 So they read through that application. They
16 don't have much context. They don't know who is Hydro Green
17 Energy, or any of the other developers. It is not easy for
18 developers to try to reach out to these entities prior to
19 filing a preliminary permit application for a variety of
20 reasons, and one of them is because it's a very competitive
21 industry. You don't want to tip someone off that you're
22 looking at a site.

23 So you're really forced to file paper at the
24 Commission and then reach out to folks. But to the extent
25 you can as quickly as possible get that face-to-face meeting

1 and exchange as much information as possible, we see that as
2 being very helpful.

3 For us, we are going to use the traditional
4 licensing process on these. As was mentioned earlier, you
5 see a lot of that for the small projects that don't have
6 many impacts. And that's obviously more of a paper process.
7 So again, having that upfront meeting face-to-face is going
8 to make that paper process go a little bit easier, we
9 believe.

10 COMMISSIONER MOELLER: Thank you.

11 MS. GRADER: I do also agree that early
12 initiation of consultation is very helpful. I would also
13 throw out that it would probably be beneficial for potential
14 applicants to look in the FERC record for recently issued
15 terms and conditions by the Fish & Wildlife Service on
16 similar projects. That can give applicants a very good idea
17 of the things they will likely be seeking in their project
18 proposal.

19 Up in New England it is a fairly small community.
20 And when you have worked in this arena for awhile you get to
21 know the folks. And so we know the consultants. We know
22 some of the developers, even the small mom and pop ones.
23 And so we find that there is a very open line of
24 communication where people don't hesitate to call us if they
25 have any questions about a particular site.

1 MS. CHURCH CIOCCI: From what we've seen with our
2 members, those who have perhaps had the most success in
3 consultation is a lot of what has already been said: to
4 develop open communications that's two-way; good information
5 sharing early, as has been said; as well as building strong
6 trust in working relationships with all the various
7 stakeholders.

8 COMMISSIONER MOELLER: John?

9 MR. SEEBACH: I'm going to emphasize what Linda
10 said about building strong trust in working relationships.
11 I think from the point of view of the conservation
12 community, or at least for me, there are two type of
13 developers.

14 There are developers that really go into the
15 process with a sort of can-do, problem-solving attitude, and
16 they just want to know what the problems are and let's solve
17 them.

18 And then there are developers that approach it
19 with a much more confrontational attitude. And for us that
20 is very frustrating and tends to be where we dig our heels
21 in and things go less smoothly.

22 I also want to emphasize the importance of early
23 consultation and early outreach. Ideally--and a number of
24 developers have this sort of relationship with us--we would
25 hear from you either before you file your application, or

1 immediately after you filed your application but before FERC
2 has noticed it.

3 It is much nicer to get that phone call than it
4 is to just open your mail and see that someone is proposing
5 a hydropower project on your stream. I know, in talking to
6 local groups who are unfamiliar with the FERC process and
7 what a preliminary permit means, that can be a pretty
8 jarring experience for them to see.

9 COMMISSIONER MOELLER: Ken.

10 MR. HOMOLKA: I agree with most of what I've
11 heard as well, but I have noticed that some of the
12 preliminary permits that have been issued do list maybe four
13 federal agencies that the developer has to send an
14 application to, or the preliminary permit applications, but
15 doesn't specifically list some of the other agencies that
16 have an interest. For example, State Fish & Wildlife. They
17 will list Army Corps of Engineers, the Bureau of
18 Reclamation, Department of Interior, suggesting, yes, they
19 have to send an application to these agencies; and then it
20 goes on to say that FERC will notify these agencies that an
21 application is available.

22 So they have to kind of seek that out. And it
23 may send a mixed message to the developer possibly that they
24 only really have to do serious consultation with the
25 agencies that were specifically listed in that notice.

1 I know on the web site there are agency contacts
2 for each state. It might be useful for the developers to
3 access that and send out more formal notification to each of
4 those agencies.

5 COMMISSIONER MOELLER: Good. Okay. Kimberly.

6 MS. McLAUGHLIN: I couldn't agree with Ken more.
7 One of the challenges we face is we simply do not have time,
8 our project managers, to be on the FERC web site looking at
9 preliminary permit filings. And we really probably in many
10 cases, unfortunately, will not see it until they come in for
11 a license and you issue your NOI for your NEPA review for
12 your EIS.

13 So I am trying to come up with some creative ways
14 to somehow alert the project managers in the field that
15 these preliminary permits are out there. Again, there is a
16 learning curve. I don't think a lot of people in the field
17 understand the difference between your preliminary permits.

18 And I'm working. I've got some outreach ideas
19 that hopefully we can go out and start to educate the field,
20 but the one piece of advice I would give everybody--and I
21 don't care what sort of development it is--if you want
22 substantive comments, "you" being a developer, we need more
23 than conceptual plans for Regulatory.

24 Because we can tell you, yes, if you are going to
25 impact wetlands you need to go to a mitigation bank. If we

1 have top initiate Section 7 consultation--well, FERC would
2 be taking care of that--and we could talk about if it's on
3 Corps property, if we know that there's historic properties
4 that will be impacted; but beyond conceptual, there's not
5 much that we would be able to offer.

6 And that has been a challenge because of
7 information being proprietary, and people not wanting to say
8 exactly where it is going to be. But I think that the
9 outreach that we are starting to work on to educate the
10 field might help--might go a long way toward getting some
11 early comments at least to the project proponents.

12 COMMISSIONER MOELLER: Well you anticipated my
13 next question, and I would have started with you anyway, but
14 that was specifically what type of information is helpful
15 early in the pre-filing process specific to the project that
16 helps you? And I think at least in your case you answered
17 that question.

18 Do you have anything to add?

19 MS. McLAUGHLIN: Well I can't--again, I can't
20 speak for the Engineering and the Dam Safety folks--

21 COMMISSIONER MOELLER: Right.

22 MS. McLAUGHLIN: --but a lot of that information
23 is what you all--I assume is what you will also need. But
24 for Regulatory, for Clean Water Act permitting, it's going
25 to be impacts to jurisdictional wetlands. Do the homework

1 up front. Find out how many acres of impacts you have. And
2 again, if it's on Corps property, if there's any other
3 unique situations--cultural resources, Tribal consultation,
4 issues like that--because we, as our own federal agency,
5 have to also fulfill our Tribal consultation requirement.
6 We can't piggyback onto you, unfortunately.

7 COMMISSIONER MOELLER: Well I have the same
8 question to Ken, and to John, and also to Melissa in terms
9 of what specific type of information from the applicant
10 helps you better understand that specific project.

11 MR. HOMOLKA: The more details about the project
12 that can be provided, the better it will help us understand
13 it. As far as where the project will be located, how it
14 will be operated, run of the river, or peaking. If it's on
15 a river system, I would assume that they would have done
16 some sort of hydrologic evaluation of the river system and
17 have a proposal of how much water they intend to use from
18 the river to help us understand what potential impacts may
19 be in a bypass reach, although that's information that would
20 be--you would get more details on that further in the
21 process when you actually do studies related to in-stream
22 flows and other things.

23 I think eventually, after that initial contact
24 about the project, we need more specific information
25 regarding fish populations, geomorphology, the stream

1 system, how the project may affect those type of resources
2 in the project area.

3 COMMISSIONER MOELLER: John?

4 MR. SEEBACH: Essentially what Ken said.

5 COMMISSIONER MOELLER: Okay.

6 MR. SEEBACH: I think for us a very detailed
7 description of how the project will appear as constructed,
8 how it will be constructed, and then the intended modes of
9 operation I think is a good start.

10 COMMISSIONER MOELLER: Melissa?

11 MS. GRADER: Basically, yeah, I would agree.
12 Really, you can't have too much detail. The number of
13 units. The size of the units. The type of the units. The
14 intake dimensions so we can determine approach velocities
15 for potential impingement. Is there going to be a bypass
16 reach? The level of automation: Will it have a PLC system
17 and SKDA? And then baseline ecological data, knowing that
18 there likely will be outstanding information needs. But at
19 least that gives us a baseline to go from.

20 COMMISSIONER MOELLER: Good. Well I'll let the
21 staff ask the rest of the questions, but I guess I want to
22 commend all of you of course for being here for the NHA, and
23 for American Rivers, and for at least talking about ways to
24 move these issues forward, the resource agencies, the
25 developers. You've got a lot of ambitious plans, Mark, and

1 we're eagerly going to watch how those develop.

2 I want to commend the federal agencies for what I
3 sense is an attitude that's a little bit more, I would say,
4 responsible toward making decisions, and I hope that that
5 continues. And I think particularly it is going to be an
6 interest of mine that we work very closely with the Corps.
7 This potential is enormous, and the time ought to be now to
8 do it. So know that I will be paying a lot of attention and
9 putting a lot of effort into that.

10 And with that, I will turn it over to John.

11 MR. KATZ: Thank you, Commissioner.

12 Mark, I will make you happy. This question, at
13 least I think first, is probably for Linda and John.
14 Someone mentioned--I think it was Linda--the 2008 meeting
15 that folks had here, and Ann and I were at that; I don't
16 remember who else was there--and at that meeting we were
17 very pleased because the conservation community and the
18 industry had reached some agreements regarding the
19 desirability of and the ability to work with non-dam small
20 hydro.

21 And at that point, as I think you said, Linda,
22 you put on the table more conventional hydro and what you
23 were going to do about that. And we were very hopeful,
24 after having exhausted our brains trying to come up with
25 good ideas, that those of you who were out there on the

1 ground would be able to come up with some helpful
2 suggestions. And I'm wondering whether there's been any
3 progress in your discussions, and whether you can give us
4 any hopes that perhaps you will be able to come up with some
5 ideas that the conservation community and industry can agree
6 on with regard to small hydro?

7 MS. CHURCH CIOCCI: I'll start off. John can
8 jump in.

9 We have just actually begun discussions right now
10 working with the conservation community, and that includes
11 American Rivers who has certainly been a large part of that,
12 National Heritage Institute. We've recently brought in the
13 Nature Conservancy.

14 Our hope--I mean, I am very hopeful that we can
15 work towards some resolution of issues. Because we believe
16 small hydropower is such a critical part of the pathway
17 going forward.

18 What we have talked about is that if we can
19 double hydropower, and we still double environmental
20 protection in that process, then that is something that we
21 both agree with that we would certainly move forward.

22 How we get there? Obviously the devil is in the
23 detail. We have put all sorts of ideas on the table. In
24 fact, we had a very good discussion yesterday afternoon, and
25 it runs the gamut of looking at ways that we can prod the

1 federal system to speed up and look at its processes better,
2 while improving its own environmental performance, as well
3 as looking at river basin management and whether there is an
4 opportunity somehow within that comprehensive basin plan
5 where we can identify sites that can be speeded up while we
6 try to make and place some environmental protections perhaps
7 in other areas of the basin.

8 So we have had good discussion, but we are only
9 at the very early stages of it.

10 John, do you want to add anything to that?

11 MR. SEEBACH: I think Linda covered that pretty
12 well. I think we realize that if we're going to break
13 through some of these things that we need to do it
14 together.

15 I had this epiphany yesterday after listening to
16 some folks from the industry talk about the 2005 Amendments
17 to the Federal Power Act. The sense was that they weren't
18 really happy with what they had gotten, and I thought, wow,
19 we really felt like we got beat there.

20 So I think there is this sense that that way of
21 thinking, that pushing back and forth, doesn't really result
22 in the kind of change that we are going to need to address
23 these things.

24 We have worked together on the inclusion of
25 hydropower and renewal energy benefits, and we are committed

1 to thinking through some of these things together. I can't
2 promise we'll solve it, but we will certainly try.

3 MR. KATZ: Thank you. I had one other question,
4 I suppose, for the four agency representatives and John,
5 which was: I heard Mark talking about moving more
6 activities to post-license application filing, and possibly
7 to post-construction, more study activities, and I just
8 wonder is that a non-starter for you folks? Or do you think
9 that that might be possible under certain circumstances?
10 And if so, which circumstances?

11 MS. McLAUGHLIN: I'll try to address that.

12 I would be concerned with the 408 aspect that I
13 talked about where the Chief has to approve the plans. I am
14 not sure how much information we could wait on, or data
15 gathering we could wait until post-construction for that
16 side of the house.

17 For Regulatory, again provided we know what the
18 impacts are associated with the construction of the
19 facility. We wouldn't be able to permit something not
20 knowing, not having like 100 percent of the information. So
21 that is something we will probably have to look at when we
22 develop our guidance on the 408.

23 MR. SEEBACH: I think it makes us nervous in
24 large part because our standing ends at license issuance in
25 a lot of ways. So our ability to affect the determination

1 that leads to the issuance of a license and to request
2 rehearing on that license is pretty clear to us, and our
3 ability to affect the course of mitigation measures that are
4 designed after a license is issued is significantly reduced
5 just because of the way the Commission's regulations work.

6 So it does make us nervous. That's not to say
7 that some things cannot be managed adaptively, but I think
8 there needs to be a recognition that putting things off
9 until after the license is issued doesn't necessarily mean
10 that those things will be solved. It might just mean that
11 the decision is deferred and becomes more difficult later.

12 MR. KATZ: Ann, did you have a question?

13 MS. MILES: I did. I wondered, Mark also
14 mentioned extrapolating from one site to another if you're
15 using a similar technology, and perhaps similar resource
16 setting.

17 I would like to know the agencies' sense of that.

18 MS. McLAUGHLIN: I certainly think that is one
19 way to go about it. I mean, there's no sense in reinventing
20 the wheel. But I just want to caution that there are
21 instances where FERC has already issued a license, and we,
22 the Corps, has to then back up and go through a lengthy NEPA
23 process in order to satisfy some of those type of issues
24 that maybe you didn't have to have but we do.

25 So I would not want to put an applicant, or a

1 project proponent in the situation where they have their
2 FERC license in hand and then we say, well, that doesn't
3 cover everything that we need; we still have to go through
4 this 408 process, or 404 process, and we might have to do a
5 whole new EIS.

6 So I would be a little nervous about that, too.
7 But certainly using existing data to the extent that it
8 applies, I don't see any harm in doing something like that.

9 MR. HOMOLKA: I think if the information and the
10 data is applicable to another site, then that is something
11 we should consider using, as long as we can get it onto the
12 project record and it is useful for siting as evidence, for
13 example, for providing recommendations on terms and
14 conditions.

15 I think we also--there's some caution to doing
16 that. You have to ensure that it is applicable. I know
17 where some studies have been taken from other locations and
18 applied to the new project, and a different dam has a
19 different head to it, has different species of fish, and the
20 study referenced mortality passage to the dam, and actually
21 that's really more of a case-by-case consideration rather
22 than something that you can grab from another location and
23 apply it to where you're looking at now.

24 MR. SEEBACH: I don't see any reason why
25 descriptive information that's identical, given two separate

1 projects, wouldn't be applicable to both projects.

2 I think our concern would be just in the
3 analysis, and whether or not it is adequately taking in the
4 site-specific concerns.

5 MS. GRADER: Yes. I don't think that we would
6 categorically not consider that, but it definitely would be
7 on a case-by-case basis, evaluating what the information is
8 and where it is trying to be extrapolated to.

9 MR. KATZ: We've got time for one more question,
10 and Ann has it.

11 MS. MILES: Thank you.

12 I think, Mark, you mentioned, or maybe Linda,
13 too, that a lot of the new developers are people who aren't
14 so familiar with FERC, or aren't used to playing in the
15 regulatory scheme, and maybe even working with the other
16 agencies and NGOs.

17 I am wondering if you might have suggestions for
18 things, or what would the most important thing be for us to
19 do to make sure people understand what the process is.
20 Given the existing process that we have right now, is there
21 something that we could do to help?

22 MS. CHURCH CIOCCI: I will start off. Maybe Mark
23 might want to add some things to this. But certainly, as I
24 mentioned, the small hydro handbook is very important,
25 getting that out and getting it out as early as possible. I

1 think that will help developers who don't have a lot of
2 experience with the FERC process.

3 One of the things I think that would also be very
4 helpful is reaching out to local communities. There are a
5 number of small communities around the United States that
6 have called us and say: We have an existing dam within our
7 community that at one time may have had a purpose as a
8 textile mill, or for some other reason it had been built.
9 And they see that now as a non-power structure there's an
10 opportunity to power it.

11 They don't have a clue how to start. So I think
12 reaching out to small communities maybe through some of
13 their organizations, either state or national, and trying to
14 begin doing some workshops to educate them may be useful.

15 I think there were times--you know, there's been
16 previous times when the FERC has gone out and actually done
17 workshops in regions. You are very good at that. And I
18 think that would certainly be very helpful in terms of
19 trying to get people more educated.

20 Working, obviously, with our individual groups is
21 helpful in educating and make sure that people are aware.
22 We refer people to you quite often and will continue to do
23 that, but I think that there are ways of doing workshops and
24 bringing people in that don't normally have any exposure to
25 FERC. It is obviously not an easy process to get to know,

1 and I think the more we can educate people the better.

2 MR. STOVER: Yes, I agree entirely. I don't have
3 much to add. I think if it's possible, and FERC has the
4 resources, it might be helpful if a FERC staffer could be
5 present at an initial consultation meeting. I know that
6 could be a bit of a stretch. That's a lot of meetings.
7 It's a lot of staff time for you guys. But often we'll have
8 meetings and we'll get questions from stakeholders: Well,
9 you know, what is the FERC process? What's FERC's role?
10 And while we can answer those questions, or refer them to,
11 you know, call so-and-so at FERC, or get on the web site,
12 sometimes, since they don't really know who we are, there
13 may not be the level of trust that makes them comfortable.
14 So having a FERC staffer in the room who can answer process
15 questions, or what is required, or what are the steps I
16 think could be really helpful.

17 But like Linda said, having more workshops.
18 Getting out to the communities. The Corps a few weeks ago
19 had a workshop in Cincinnati where Kamel Sadeki basically
20 locked a bunch of developers and all the hydro district
21 coordinators in a room and said, talk to each other. Try to
22 figure out how we can do this better. That was a very
23 helpful meeting. I hope we have more of those.

24 I think if FERC can do those--and also conduct
25 those types of meetings with the agencies at the field

1 level, at the regional level, and in Washington, D.C. I
2 think everybody just needs to communicate a little bit more.

3 MS. MILES: Thank you.

4 I just wanted to plug, too, our Small Hydro
5 Hotline. We do have both a email address and Mike
6 Spencer--who is here, I believe--does answer questions and
7 works pretty much with small hydro people who want to
8 understand it on a one-on-one basis. So we encourage you to
9 use that.

10 But thanks for your suggestions.

11 MR. KATZ: Jeff, did you have a question?

12 MR. WRIGHT: Yes. I just had one quick question.
13 I want to go back a little bit--and the Commissioner hit on
14 it a bit--about kind of background information, what have
15 you, early consultation, and the departments and the NGOs
16 hit on this--in that, a project proponent knows what
17 agencies he needs to talk to, and I think as Melissa said if
18 they do their homework they look at issuances, they look at
19 the conditions they're going to see and face.

20 Is this something--I'll ask the agencies and
21 John, and Mark and Linda you can join in, too--is this
22 something, and noting that small hydro wants to use the TLP
23 process, is there something FERC needs to do to mandate more
24 early consultation? Should this be incumbent upon the
25 project developer? How do you see this, trying to force

1 this so that when an application or a preliminary permit
2 comes in, and then leading to the application, we're kind of
3 hitting the road running instead of, you know, agencies are
4 kind of behind the eight ball.

5 Let's start with Kim.

6 MS. McLAUGHLIN: I am not necessarily an advocate
7 of mandating that sort of thing. I think that is part of
8 the whole Preliminary Permit Process, as I understood it, if
9 they're willing to do their homework and stick with it.

10 I would say, you know, definitely encouraging
11 them, because they wouldn't want to find out at the last
12 minute that the Corps is not going to let them use their
13 facility. I mean, that's sort of the risk of doing
14 business, or at least that's how we have told other types of
15 developers. But I don't know if I would be an advocate of
16 actually mandating that through some sort of legislative
17 fix, but that's just my opinion.

18 MR. HOMOLKA: I think that the current process
19 really does kind of mandate or requires some early
20 consultation with the agencies. Maybe it's just that the
21 developers don't have an understanding of what's necessarily
22 required. Maybe your outreach efforts would help that.

23 I know in Oregon we have a Small Hydro Working
24 Group that, at least within the State, would get interested
25 people together to try and assist them in moving forward.

1 And the Energy Trust of Oregon has actually developed a set
2 of guidebooks for the state process, as well as the FERC
3 process that may be helpful.

4 But that is separate from your FERC process. I
5 think just maybe some outreach. We've kind of run into the
6 same thing on wave energy development; that we have a new
7 technology, and entirely new stakeholders are getting
8 involved in this, and they don't necessarily have the
9 background in working with the FERC process.

10 So it has taken quite a bit of outreach from the
11 developers to go out to a lot of these towns on the coast
12 and inform them of how this process works, and I think it
13 has paid off a lot.

14 MR. SEEBACH: I think mandating is probably--just
15 the thought of a FERC-mandated phone call to my extension
16 every time a preliminary permit comes across the transom--

17 (Laughter.)

18 MR. SEEBACH: --is pretty terrifying. But I
19 think where FERC can help, especially with new developers,
20 is directing them towards groups that are going to care
21 about issues that may be affected by their projects.

22 What actually might be helpful is to sort of
23 maintain a regional list or database of groups that have
24 identified themselves as caring about hydropower projects,
25 either through intervening in a project, filing comments on

1 a project, and making that available to developers so they
2 don't have to reinvent the wheel, they can at least have a
3 starting place to identify some of those groups, that would
4 be very helpful.

5 MS. CHURCH CIOCCI: Well I think I agree with the
6 other panelists that mandating may not be the answer to
7 this. I think that any developer who is well educated in
8 the process and is smart will understand the true value of
9 early consultation and will do it because they are motivated
10 by success.

11 So ultimately I think that is the reason why they
12 would do it. I don't think that it would hurt at all to
13 have FERC, as John says, suggest to developers and possible
14 groups that may have an interest in a particular project,
15 but I think that a smart developer will do his own homework
16 and get that done early.

17 MS. GRADER: I guess I would agree. I don't see
18 a need to mandate it, but I do agree that it would be good
19 to get that information out there to the applicants as early
20 as possible.

21 I think that what's driving these preliminary
22 consultations and early initiation of consultation in our
23 region is there are grant monies available to do feasibility
24 studies for renewable energy projects. And so applicants
25 that are interested, if they get those grant monies, then

1 MR. KATZ: Thank you very much for coming back on
2 time. We're getting ready to get started.

3 Am I correct that Arnold Printup from the St.
4 Regis Mohawk is not with us?

5 (No response.)

6 MR. KATZ: That was my understanding. Is Arnold
7 not with us? Okay, he is not.

8 All right, let's get started with the second
9 panel. The first member of the second panel is Brent Smith,
10 who is the Chief Operating Officer of Symbiotics, which has
11 been very active in a number of areas--I think more out
12 West? Is that correct? Than elsewhere?

13 MR. SMITH: Yes.

14 MR. KATZ: In pursuing projects at the Commission
15 over the last few years.

16 Then we have Bob Deibel, who is the Hydro
17 Program--the National Hydro Power Program Manager for the
18 Forest Service, and he has the distinction of having worked
19 for all of our favorite agency at one point in the past.

20 Jeff Lyng is the Renewable Energy Policy Manager
21 for the Colorado Governor's Energy Office.

22 And Bill Little has also worked with us a lot
23 over the years. He is now Associate Counsel, Office of the
24 General Counsel at the New York State Department of
25 Environmental Conservation, and he has worked with

1 Commission Staff on a number of projects over the years.

2 Brent, why don't you start, please.

3 MR. SMITH: Good afternoon, Commissioner Moeller.
4 My name is Brent Smith. I am the Chief Operating Officer of
5 Symbiotics.

6 I appreciate the opportunity of coming before you
7 this afternoon and expressing a few concerns over the
8 licensing process. Even though I'm on the second panel here
9 this afternoon, I think most of my comments will have to do
10 with the Pre-application Process, and maybe a comment or two
11 about the Post-application.

12 Symbiotics was essentially developed in 2001. We
13 have been actively pursuing projects--run-of-the-rivers,
14 primarily--on federally owned facilities through the Nation,
15 but primarily in the West.

16 We currently have about 36 active projects within
17 the FERC today, with an additional 12 closed-loop pump
18 storage projects, which we've started pursuing about a year
19 and a half ago.

20 As we all know, there are ongoing concerns about
21 meeting the future energy demands. I think not only is
22 there a concern in the future about the energy demands, but
23 there is also a concern in the future about the stability of
24 the grid as more of these projects come on from the
25 renewable sector, not just hydropower but wind and others.

1 So we have a number of large, closed-loop pump storage
2 projects that are also in the licensing process.

3 You know, I find--I'm going to be different than
4 some here at the panel today--I find that the process is not
5 that bad off. We found over the years in our licensing--
6 I've been at licensing projects since the '80s, primarily in
7 the traditional licensing process.

8 In the last four years, the Integrated Licensing
9 Process has become the default. I think a concern that we
10 have had to date, not only in the Integrated Licensing
11 Process but also the Traditional, is the three-year period
12 for a Preliminary Permit.

13 Now, having the Integrated Licensing Process as
14 the default process, in and of itself is a three-and-a-half
15 year process. FERC is only allowed to issue a Preliminary
16 Permit for a three-year period. Thus, that exposes the
17 applicant then to a competing application after 36 months if
18 he doesn't have an application in to the FERC.

19 From the private sector that's a great concern.
20 It does indeed distract some of the private investment
21 groups from investing money, partially because of the
22 uncertainty of FERC, the process itself, but the risk of
23 losing those dollars at the end of a three-year period to a
24 municipality that chose to compete.

25 So I think that is one of our primary concerns.

1 We did have a handout back on the table that maybe gives a
2 couple of suggested solutions to that. I don't know, you
3 know, whether that's an option, but I think that's one of
4 our primary concerns today.

5 The other is of course the increased licensing
6 costs, due to the ILP as being the default process for
7 original projects. So I think the ILP process and the
8 development of that process was a good thing. In fact, I
9 looked forward to the ILP process when it first came in to
10 play. Having been in the traditional process for many years
11 and the time that it took to get to the end, I looked
12 forward to what may be a more streamlined process.

13 But as it turns out, I think the process has been
14 very useful in the relicensing of projects that existed. It
15 does pose some challenges to licensing of new projects.

16 I think as the first panel discussed some of the
17 communications issues, how to bring information to the
18 agencies early, how to keep those lines of communication
19 open, are improving.

20 As we all know, there was very limited
21 development of projects in the '90s. A lot of people had to
22 relearn the process after 2000, as a lot of people had not
23 been involved in projects, just primarily relicensing.

24 So there has been a large influx of licensing of
25 new projects. I think as time goes on, that seems to be

1 smoothing itself out, because everybody is starting to
2 better understand the process, and working together to speed
3 that process up and work together.

4 Symbiotics's perspective is that we feel that
5 there are a number of things that could be done, but I think
6 there are some small things that could be done.

7 One of those is the three-year period.

8 The other is to not have the ILP process as the
9 default process.

10 We have had three license issuances to Symbiotics
11 in the last year and a half. We have a fourth pending. We
12 hope to see that this year. One of those first licenses out
13 is now under construction, and we have projects clear back
14 to the Preliminary Permit stage.

15 But as we have a number of projects currently in
16 the ILP process, and some of the stumbling blocks that we
17 ran into that process, we feel that the Commission should
18 not make the ILP process the default process.

19 Symbiotics has kind of internally made the
20 decision that all projects in the future we will request
21 FERC for the traditional process because the ILP process
22 creates some problems. Primarily, you have no way of making
23 the 36 months, and no way to get an application there.
24 Whereas, in the TLP process you do have an opportunity to
25 file a license application that may be deficient and the

1 time to fulfill the needs there.

2 Lastly, I think one of the other concerns we have
3 is some of the untimely responses from resource agencies
4 that have the mandatory conditioning authority. We have
5 projects that we just received a license for last year, and
6 one that is pending and hope to receive shortly, where we've
7 seen biological opinions take two to three years.

8 We have been unable to do anything to encourage
9 that to move along quicker. So sadly to say, we have
10 successfully come out the other end since 2001 with a few
11 projects licensed. It's probably not a lot to pat ourselves
12 on the back for when it took seven or eight years to get
13 there.

14 So, though we feel good that we got there, we
15 feel that a seven- to eight-year process really does take
16 away the interest from the private sector to invest dollars
17 into these projects.

18 So with that said, I'll await questions.

19 MR. KATZ: Thank you very much.

20 Bob?

21 MR. DEIBEL: Thank you, Commissioner Moeller, for
22 the opportunity to speak. I do want to follow up on John.
23 Twenty years ago when I left FERC I was a little different.
24 I had brown hair and the Colorado sun has bleached it since
25 that time, so it's interesting to be back.

1 (Laughter.)

2 MR. DEIBEL: But thank you for the opportunity to
3 participate in this year's Technical Conference. As noted,
4 I currently serve as the National Hydro Power Program
5 Manager and National In-Stream Flow Coordinator for the U.S.
6 Forest Service.

7 In these roles, I provide national oversight,
8 guidance, and support to agency staff in our Washington
9 office, nine regional offices, and 156 National Forests, and
10 I serve as the primary contact to FERC Staff regarding Hydro
11 Electric matters.

12 I do want to add that I think the communication
13 between FERC and the Forest Service is going fairly well
14 from my perspective.

15 But the Forest Service is a decentralized agency,
16 and as such we have, as I mentioned, the nine regional
17 offices. In order to facilitate communication and
18 consistency in case processing we have set up I think nine
19 regional teams so people know where to go and to contact.

20 I am participating on this panel to focus on the
21 information needs that the Forest Service may need to ensure
22 the necessary protection in utilization of the forests on
23 the Federal Reservation under the Federal Power Act.

24 What I would like to add, there are some
25 following general considerations that affects the Forest

1 Service's determination of the information needs in
2 processing an application and developing project-specific
3 mitigation. Some of these are going to be consistent
4 with the themes that have been mentioned by the earlier
5 panel.

6 The first thing is the project setting. There
7 are site-specific conditions:

8 The resource complexity or degree of potential
9 controversy;

10 The project proposal, whether it's an existing or
11 a new footprint, or the amount of construction that may be
12 needed;

13 And the willingness of the parties to reach
14 concurrence on the scope and intensity of studies with the
15 ideal of negotiating a settlement agreement.

16 The other thing that affects our participation
17 are the FERC-administered regulatory timelines. The Forest
18 Service and its staff are well aware of the importance of
19 meeting FERC-imposed and administered due dates.

20 The other one of the key things that we are aware
21 of is the Substantial Evidence Standard to support a 4(e)
22 condition. Based on the Bangor Decision, we all know that
23 if it isn't in the record it doesn't count.

24 Then the other thing that influences us is the
25 potential petitions for a trial-type hearing. So we need to

1 have the information tied back to the Substantial Evidence
2 Standard in order to defend our--support our 4(e)
3 conditions.

4 I also believe there are alternative, less
5 intensive methods to determine project-specific mitigation
6 that can be applied. But as one moves into less site-
7 specific studies, a caution must be noted. There are
8 tradeoffs in applying these less-intensive methods as they
9 are typically more environmentally sensitive and they
10 limit the amount of negotiating space that can occur in a
11 given proceeding. But in terms of facilitating and
12 expediting projects, I would like to share an example of
13 how these considerations are directly applied by the
14 Forest Service.

15 The Afton Project is located on the Bridger Teton
16 National Forest in Wyoming. FERC Staff contacted Forest
17 Service Regional staff to inquire about expediting and
18 processing 4(e) conditions, and I believe this related to
19 getting a grant under the ARRA for the licensee.

20 The proposal was to add a turbine to an existing
21 flow-line and storage tank of an existing culinary water
22 supply already under a Forest Service authorization. The
23 proposed project would not alter operations, divert
24 additional flow, nor require new roads or major
25 infrastructure to activate the license.

1 After reviewing the proposal and the resource
2 context for the Afton Project, the Forest Service consented
3 to expediting the issuance of its 4(e) conditions under the
4 traditional licensing process.

5 According to the record, FERC tendered the
6 application on May 6th, 2009, and issued a Minor License on
7 October 9th, 2009, five months from start to finish. So the
8 Forest Service can facilitate that again upon site-specific
9 conditions.

10 Those conditions in Afton are instructive as to
11 how someone may approach a licensing if they want to
12 expedite a case. There were no new diversions of water, no
13 additional road construction or major ground disturbing the
14 activities, and there was an effort by all parties to work
15 together and communicate that included FERC, the licensee,
16 and Forest Service staff.

17 Obviously, as the degree of resource controversy
18 or complexity increases, then the Forest Service will
19 continue to work within Forest Service regulatory timelines,
20 and the inclusion of the trial-type hearing via the Energy
21 Policy Act of 2005 Amendments to the Federal Power Act has
22 bolstered my agency's push to request more intensive, site-
23 specific studies to develop, and support, and defend our
24 4(e) conditions. As stated previously, that ties back to the
25 Substantial Evidence Standard.

1 So the information requests that the Forest
2 Service deems necessary tied back to the Substantial
3 Evidence Standard equivalent to defend our conditions in a
4 trial-type hearing, if necessary, and targeting the
5 protection and utilization of the Reservation.

6 As mentioned earlier, I do believe less onerous
7 options can apply, depending on the case and the project
8 setting. Settlement agreements are obviously preferable for
9 all parties.

10 The settlement agreement should also address the
11 sufficiency of information to make determinations, without
12 waiving anybody's authorities, but it gives agencies or
13 entities some coverage on how they may proceed in the
14 absence of doing more intensive studies. And I think that
15 is really important.

16 Then the last thing that I'll say is, earlier on
17 the other panel they talked about more broad studies, and
18 using studies from one case to another, and I think there
19 are less intensive methods. I think there are opportunities
20 to build upon existing information, but that takes agreement
21 and concurrence by all the parties, and those are approaches
22 I think folks can look toward in the future in tiering off
23 each other.

24 But I think the--and I think it was mentioned by
25 Steve in his opening--the tone and tenor of a meeting is

1 really important. And if it is highly complex and
2 potentially contentious, the more we are going to recoil and
3 ask for more site-specific studies. And so I think there
4 are a lot of examples out there with other cases where the
5 industry and other agencies can look to where there's been a
6 more cooperative tone in developing settlement agreements.
7 And would note to Commissioner Moeller, up in the Northwest
8 such as Portland General Electric. We've developed some
9 really good, cooperative settlement agreements.

10 And with that, I will look forward to your
11 questions.

12 MR. LYNG: Good afternoon, Commissioner Moeller
13 and staff members, my name is Jeff Lyng. I serve as the
14 Renewable Energy Policy Manager at the Colorado Governor's
15 Energy Office.

16 I want to thank you for the opportunity to
17 present a state government perspective on small hydro
18 permitting.

19 Most of my comments will stem from and expound
20 upon this one-page memo that I have circulated to you, and
21 hopefully you have a copy. I am going to try to hit the
22 high points.

23 Steve in his opening comments talked about the
24 increased demand for distributed generation, and that is
25 certainly something that we are seeing in the State of

1 Colorado. We are developing a policy to expand the State's
2 portfolio standard specifically in the area of distributed
3 generation.

4 Furthermore, we are developing policies to
5 actually incentivize these systems, from solar, wind,
6 biomass, small hydro, and others. So I think we are seeing
7 just the beginning in terms of the demand for small hydro in
8 the State of Colorado, and certainly we will see more.

9 I wanted to comment on the Commissioner's
10 reference to small hydro as a local energy resource. I can
11 say very much that the Ritter Administration views
12 distributed generation and small hydro as a form of DG as
13 very much a local energy resources. As I mentioned, the
14 administration is very much committed to furthering DG
15 technologies.

16 That said, it has been our experience that the
17 complexity and the cost of the FERC exemption process for
18 small hydro is an impediment to actual project development.
19 Over the past 27 years, only 22 exemptions for projects
20 under 5 megawatts have been granted in the State. Many of
21 the applicants for exemption have used the services of
22 highly specialized regulatory and legal staff accustomed to
23 working with FERC, and usually as part of large engineering
24 firms.

25 What I am here to convey to you is that Colorado

1 wants to do better. Governor Ritter's new energy economy
2 has instilled in me and many of us in the State of Colorado
3 with a sense of urgency and a bias toward action that we
4 want to do better than we have over the last 27 years with
5 22 projects.

6 One recent federal survey has estimated that the
7 potential for small hydro and micro-hydro development in
8 Colorado is upwards of 700 megawatts across 200 sites. More
9 detailed work by our own Small Hydro Working Group in the
10 State suggests that that number is fairly conservative.

11 Examples of these projects. These are very small
12 projects. I want to convey that to you. For example, a 40
13 kW facility on a municipal waste water pipeline. A 10 kW
14 turbine between two irrigation ditches on a ranch. On their
15 own, such potential users are not typically equipped to file
16 for a conduit or a 5 megawatt exemption, nor do they
17 typically have the time or the money to do so.

18 What we have seen often is that, due to the fact
19 that there is a process, or any process for that matter, for
20 exemption, oftentimes ranchers for example are more inclined
21 to install a wind turbine, or a solar array. So they move
22 away from the small hydro process despite the fact that
23 there may be potential there.

24 So I am here to present a possible solution, and
25 we look forward to ongoing meetings with Ann Miles and her

1 staff and others, tomorrow and in the coming weeks and
2 months, on potentially partnering with FERC and other
3 interested states on a pilot project to streamline the
4 exemption process for very small projects.

5 It is our office's suggestion that the field for
6 consideration be further narrowed to projects that utilize
7 existing infrastructure, existing water pipelines,
8 irrigation canals, and existing dams, and that those
9 projects may, but not necessarily, require additional
10 diversions from streams.

11 So an example of such a category might be hydro
12 projects that are 100 kW nameplate capacity or less on
13 existing raw or wastewater pipelines, as an example.

14 Essentially we want to find ways to take some of
15 the burden of very small projects, the application process,
16 off of FERC and also generate more applications into the
17 process in general.

18 So some examples of how we might streamline this
19 process include:

20 One, creating a one-step simplified application;

21 Two, integrating the review process and
22 shortening the comment period for state and federal
23 agencies;

24 Three, aligning the information requirements to
25 be commensurate with the scale of the project;

1 Four, utilizing off-the-shelf software for
2 drawings and maps. This is an interesting one. You know,
3 the typical farmer and rancher might look at the drawing
4 requirement for a small hydro exemption and it sort of turns
5 them off to the entire process. So we think this is a very
6 easy example of how we can drive potential project owners
7 and developers to use streamlined software.

8 And finally, establishing a target review time
9 for the FERC upon completion of what I'm calling a
10 "pre-screening process" by the State of Colorado, or any
11 other participating state.

12 I would like to stress that it is our intention
13 that this pilot would likely involve the delegation of
14 process, or a portion of the process, without compromising
15 the FERC's fundamental permitting authority. So we are
16 really intending to offer our help in accelerating the
17 process for very small projects.

18 In terms of funding, which is sometimes the most
19 vexing issue and great ideas sometimes stop when there's no
20 funding--that's been our experience certainly--the timing is
21 very good in that we have allocated American Recovery and
22 Reinvestment Act funds through the State Energy Program for
23 a project that we're calling "The Renewable Energy
24 Development Team," and specifically we have monies allocated
25 to hire consultants, to review the best projects within

1 small hydro and other DG categories.

2 So we could essentially deploy those monies and
3 allocate them toward simplifying this process, reviewing the
4 best applications, ensuring that poor projects don't make it
5 into the review, and that we're essentially sending you the
6 best small hydro projects from the State of Colorado.

7 Ann, I think this gets to the consultation that
8 you were referring to in your answer in the first session,
9 that when projects have the right team of consultants
10 working with them they are likely to succeed. But to bring
11 you back to the example that I used of the rancher who is in
12 it for himself and may not be able to navigate the process,
13 we are essentially proposing to provide that consultation
14 for the projects that we think have the most promise.

15 We are offering that this pilot might run for
16 calendar year 2010 and 2011, which is sort of in line with
17 the timing for Recovery Act money, or until our funding runs
18 out, whichever comes first.

19 So just to wrap up, I would like to summarize
20 that the demand for small hydro in Colorado is big and
21 getting bigger. We are specifically working on policies to
22 promote distributed generation. Small hydro, in my opinion,
23 of the four or five major renewable resources, is what I
24 like to call the block that's furthest back that we need to
25 push forward the most. It is sort of the least developed.

1 It is our understanding and feeling that, if and
2 when a national portfolio standard is passed, it's possible
3 and probable that that standard may have a multiplier for
4 distributed generation.

5 And so what we might be seeing in Colorado, is
6 sort of a predecessor to the rest of the country, in terms
7 of compliance with a portfolio standard and increased uptake
8 and interest in EG.

9 Finally, we appreciate the consideration of this
10 proposal by the FERC, as we collectively seek to responsibly
11 develop our nation's small hydro resources. Thanks.

12 CHAIRMAN WELLINGHOFF: Bill?

13 MR. LITTLE: My agency and other agencies in New
14 York State, have benefitted tremendously from the assistance
15 and guidance of Commission Staff for nearly two decades.

16 To give you a sense of the context of where New
17 York comes from, in small hydro, New York is presently
18 operating under the Regional Greenhouse Gas Initiative, a
19 second phase of a renewable portfolio standard, an Executive
20 Order that encourages renewable energy, and also the
21 anticipated release later this month, of a state energy
22 plan, which would do the same.

23 So, renewable energy is, of course, high on our
24 list of chief concerns, both from an energy planning point
25 of view, an energy independence point of view, and a

1 regulatory point of view. We deal in my office with wind,
2 solar, biofuels, landfill gas, the whole gamut of all of
3 these approaches, and have also recently benefitted from the
4 experience and a lot of positive energy around the
5 hydrokinetic siting pilot program.

6 I think some of those experiences apply here. I
7 think we've -- of course, I benefit from the fact that
8 everybody else before me, has laid a lot of groundwork here,
9 and there's been -- I think it's been identified, that the
10 low-hanging fruit really exists with existing structures,
11 dams and conduits and whatnot. In constructing new dams in
12 New York, its river systems would present a number of
13 environmental concerns that point out the fact that there
14 are few remaining untouched riverain stretches.

15 This also points out the fact that we have a
16 significant number of hydropower facilities, large and
17 small, and that presents a number of great opportunities for
18 us. Given that background, we're experiencing a small boom
19 in hydro expansions and upgrades.

20 There are potentially 26 new megawatts on the
21 Hudson River at one particular site, about four in the
22 restoration of a site near Albany, the New York City
23 Watershed System is going to be looked into, and I believe a
24 preliminary permit has been filed to that effect, and there
25 are other nascent, small hydro proposals such as seasonal

1 units that might be attached to canal units and gates, and
2 we frequently get inquiries about conduit exemptions and
3 some of the things of the nature that Jeff was just talking
4 about.

5 To our knowledge, they're not supported by any
6 particular renewable portfolio incentive, but they still
7 keep coming in the door.

8 We're encouraged to take a forward-looking
9 approach for small hydro generation, to further diversify
10 the technology. You've heard the term, "pico turbines"
11 today, and we're hearing it, as well. It expands our
12 diversity and increases our energy independence, which are,
13 again, big features of our policies.

14 Taking somewhat from Bob's perspective as a
15 regulatory agency and the agency that issues water quality
16 certificates, we have approached such proposals from a
17 statutory perspective, and we still feel that embracing the
18 collaborative approach, is the key to whatever approach you
19 take to licensing or exemptions.

20 For purposes of deliberating over water quality
21 certificates or the various proposals that might come before
22 the Commission, whether it continues with the ILP and
23 default, or encourages TLPs, where they can be, the key
24 really begins with the collaborative approach, and I think
25 that that may also be something that has -- could be

1 featured as a continuing process, more past the usual
2 consultation phase, into the NEPA process.

3 We've talked about things internally about many
4 of the aspects raised today about concerns for existing
5 rare, threatened, and endangered species, fear of the
6 absence of fish passage considerations. In the clear
7 protection of our water quality standards, those things need
8 to be coming through the door and featured for, I would say,
9 potentially model license and water quality certificate
10 conditions.

11 In the best-case scenario, with a practiced
12 applicant and a developer, because we've had so many
13 relicensing cases, I think we would be willing to entertain,
14 conceptually, looking toward some model approaches to where
15 we have some of these best-case scenarios with, you know,
16 the guarantee of run-of-river, known technology and things
17 of that like.

18 That being said, we're likely to avoid anything
19 that puts us between a regulatory rock and a compliance hard
20 place, and the default mode is always to treat one person
21 the same as the next, so the elimination of unknowns,
22 whatever that is on a case-by-case basis, is really critical
23 to any effort to expedite.

24 And, among other things, that implicates, you
25 know, the nature and scope of studies supporting a license

1 or even the state's participation in the exemption process.
2 Our decisionmaking is done somewhat under a gun, with the
3 water quality certificate one-year timeframe, and so knowing
4 that, developers need to kind of participate with us and
5 extend collaboration into a forecasting process where we
6 know what to expect as we approach that one-year deadline.

7 I think I'll stop there, except to say that the
8 theme that I've heard today from both panels, seems to be
9 that expedition needs to equal and improvement of the review
10 process, if it's going to shorten it. Agencies need a
11 record and developers need insight on how to enhance that
12 record at the same point in time.

13 So we would be encouraged to work with the other
14 agencies and the other participants here today, to try to,
15 you know, bring those concepts together. Thank you.

16 MR. KATZ: Thank you. Before we get started
17 with questions, I see our Chairman has managed to break
18 free. Mr. Chairman, if you have any kind of introductory
19 statement you'd like to make, that's fine. We've just
20 finished the second panel and we're about to ask them
21 questions.

22 You can listen and weigh in, or jump right in.

23 CHAIRMAN WELLINGHOFF: Thank you, John. I know I
24 wanted to just apologize for being late. I was up on the
25 Hill testifying before Chairman Markey's Committee on our

1 jurisdiction, the jurisdiction of CFTC, which was
2 interesting, talking about never being at a Committee
3 hearing before, where everybody was on my side, which is
4 nice.

5 (Laughter.)

6 CHAIRMAN WELLINGHOFF: It was actually very
7 refreshing. Republicans and Democrats alike, they were all
8 -- you know, they are all supportive of the position we
9 have.

10 But I wanted to make sure that, what I time I had
11 left, to come into this, because I think this is an
12 extremely important conference. Small hydro and incremental
13 hydro is something that I'm personally interested in, and I
14 know that my Staff in Energy Projects, knows my interest,
15 and I talked to them about that when I first came to FERC,
16 about enabling small hydro projects and doing whatever we
17 can to ensure that we can break down the regulatory barriers
18 and make sure that we can get these projects done as easily
19 and quickly as possible, but also ensure that we meet all
20 the environmental requirements and all the needs of the
21 other stakeholders that may have interests, but ultimately
22 ensure that these are not burdensome to people, that there
23 are opportunities to get these projects done.

24 So, with that, I'll just let you all continue,
25 but thank you.

1 MR. KATZ: Well, I will let you know that, in
2 your absence, Jeff Lyng expressed Colorado's interests
3 repeatedly, with one of your favorite phrases, "distributed
4 generation," so you should be well disposed towards him.

5 (Laughter.)

6 MR. KATZ: Commissioner Moeller, if you'd like to
7 get us started with questions?

8 COMMISSIONER MOELLER: Thank you, John Katz,
9 thank you, Mr. Chairman. We'll fill you in on the last two
10 and half hours.

11 I think they have been productive, and we had a
12 good first panel and also a good second panel.

13 I have individual questions for each of you, but
14 I'll start on the opposite side. Bill, you mentioned a lot
15 of different projects you're seeing in New York.

16 Can you elaborate a little bit more in terms of
17 conduit exemptions, various projects. There's been a lot of
18 interest, but does a lot of it fall away immediately, or,
19 just elaborate a little bit more on the extensive interest
20 that you discussed.

21 MR. LITTLE: Sure. What we're seeing, is
22 particularly on two levels. As I mentioned, there are some
23 inquiries about the conduit-level development, and I think
24 they may be falling off somewhat, because of the maze of
25 processes that appear out there to the uninitiated.

1 If we get a phone call, you know, that all
2 filters into basically one person, and that individual tries
3 to develop a little expertise over the phone with these
4 individuals, and it becomes difficult for them, if, say,
5 it's a rancher or someone like that, a farmer, or someone
6 who has, let's say, less acumen than the City of New York,
7 who is pursuing this sort of thing, it looks quite ominous.

8 And what was said on the earlier panel about
9 revisiting the Handbook, of course, would be critical to
10 this, and I think it needs to be skewed, in, maybe an
11 appendix for the totally uninitiated and for those who
12 basically want to be -- net metering is one of the buzz
13 terms for our Public Service Commission, and for those who
14 are interested in trying to develop that potential, they
15 need to have quick and easy access.

16 I'll move to the other side of the coin, and that
17 is that the other development that we're seeing, has to do
18 with mostly existing facilities, with upgrades or -- and in
19 some cases, they're tripling or quadrupling their potential,
20 their capacity, which is, you know, something that,
21 although, as a regulatory agency, you know, we don't
22 promote, from our policy point of view.

23 You know, we're happy to entertain, in an
24 application -- and that's happening in three cases that come
25 to mind, and, as I mentioned before, you know, there's

1 tremendous potential in the New York City watershed system.
2 Where that ends up going, I can't say, but there is also --
3 you know, we have a relicensing schedule that stretches out
4 and out and out and out, but the -- what I'm looking forward
5 to there, sort of as a third aspect of this whole
6 discussion, is that relicensing would also contemplate the
7 addition of microturbines for capacity and head that hasn't
8 been maximized previously.

9 So, we -- you know, the Class of '93 is all
10 tidied up now and there's another class coming through in
11 several years. We think that's a great opportunity for
12 this.

13 COMMISSIONER MOELLER: Okay. Well, perhaps the
14 appendix could include a case study. You know, the Afton
15 project was one which is really pretty hard to beat, in
16 terms of everybody getting together in a pretty short
17 timeline, motivated by money, but motivation regardless, it
18 was successful.

19 And so those are good suggestions, thank you.

20 Jeff, kind of a similar question, in terms of
21 what you see out there in Colorado. I think there's -- from
22 my couple of trips out there in the past calendar year, I've
23 heard talk of small hydro, which, frankly, surprised me a
24 little bit.

25 But it sounds like there's a lot of enthusiasm,

1 but where does the wheat get separated from the chaff?

2 MR. LYNNG: That's a great question, and, thank
3 you. I think that question can maybe be bifurcated into
4 kind of two answers:

5 One, there's the projects that we never know
6 about, because when, to use my rancher example again, when
7 that rancher determines or finds out that there is any sort
8 of permitting process or anything more than they might have
9 to do for a photovoltaic array or a small wind turbine, it
10 sort of stops there, right?

11 And then there are other projects that are
12 significantly larger, and, I say "significantly," but they
13 still might all be less than one megawatt, that are
14 municipal pressure-reducing-valve-type projects, wastewater
15 projects, existing diversions, conduits, things of that
16 nature, where the municipality contacts our office.

17 They might be interested in applying for clean
18 renewable energy bond or something of that nature, and their
19 actual staff and people who are employed to do that sort of
20 thing behind it -- our Small Hydro Working Group has a list
21 of 15 projects that total, in capacity, about 4.5 megawatts.
22 They range from very small projects of 50 KW, up to, I
23 think, 500 KW, for whom the permitting process is the
24 barrier.

25 They would go forward, were it not for an onerous

1 permitting process or an exemption process, so I can speak
2 specifically to our knowledge of those 15 projects that our
3 working group has, knows, and there's a contact for and
4 they're real projects and someone's actually been out and
5 vetted them and many of them have their own feasibility
6 studies that could go right now perhaps into a pilot.

7 But I think the potential is about to crack open
8 with new policies, and, particularly, incentives that drive
9 projects into a power purchase agreement, or we could even
10 use the phrase, "feed in tariff for incentivizing small
11 hydro," similar to the way Colorado is currently
12 incentivizing commercial solar applications.

13 I think the demand would burgeon, when there's
14 any sort of incentive. Presently, we have no incentives, so
15 it's incumbent upon a developer to negotiate a power
16 purchase agreement with a utility, for example, and shoulder
17 the entire development process themselves.

18 So, I think the answer to the question is, for
19 the very, very small projects, we don't have a great handle
20 on that, because oftentimes, the fact that there is any sort
21 of process, turns off the residential or small commercial
22 developer, but we do know that we've got this cadre of 4.5
23 to five megawatts of total projects that are ready to go
24 now, if they had a little bit of assistance from the state.

25 I think that pre-screening assistance from the

1 state, is extremely important in ensuring that -- the FERC
2 Staff are getting kind of the cream of projects, of DG
3 projects from each of the states.

4 COMMISSIONER MOELLER: Okay, thank you. Bob, I
5 think we're always fortunate when an alumnus of the Agency
6 moves somewhere else within the Federal Government, so I
7 think we're fortunate that you have that experience.

8 In your, I guess, experience, is there more
9 consultation that we need to be doing between the two
10 agencies? You do mention that challenge of a decentralized
11 agency, and, again, as earlier, I want commend the Secretary
12 of Agriculture for kind of recognizing that federal policies
13 out of the Secretary's office, can make a big difference as
14 to whether these kinds of resources or transmission lines,
15 actually get constructed, when renewable resources are
16 dependent on them going through federal lands.

17 But if you have other suggestions, I certainly
18 would like to hear them.

19 MR. DEIBEL: Well, I think, in terms of
20 consultation, it's even difficult for me. I'm one person,
21 I'm lucky to be located in Ft. Collins, Colorado, and we've
22 got, like I said, over 150-some National Forests on 200
23 million acres.

24 So, just the fact that we've had these regional
25 teams -- and I think they've been a success in terms of

1 being a contact point, providing some consistency in
2 processing, and as the Forest plans differ across the
3 country, from the Northwest to the Southeast, I mean, those
4 are kind of our guiding documents.

5 Having that kind of point of contact, I think, is
6 important. That's one thing that I could do in the
7 communications I have with -- that I started about a month
8 after Ann Miles, and so it's good to have this open line of
9 communication.

10 I can keep providing that information to the
11 project managers. I think I know most of the branch chiefs,
12 and I think the communication is really important, and I
13 think, you know, through education, we try to have training
14 and have meetings. Those are getting more and more
15 difficult, due to budgets.

16 But we try to provide that consistency of
17 information requests, conducting oversight, but in terms of
18 -- I just think we can provide some of those contacts.

19 The one nice thing that -- just in reaction to
20 the panel this morning, is that there's a benefit to the
21 decentralized agency, too. When we get a preliminary
22 permit, that's kind of setting up a communication with our
23 local Ranger District, with the proponent and the applicant.

24 I think that's important to start developing that
25 good-neighbor policy, so everything's up front, what may be

1 needed, what may be looked for, and, given the Forest plan,
2 standards, and guide, and I think there's an advantage to
3 having a decentralized agency, especially as you get out to
4 these smaller rural areas, developing relationships with the
5 District Rangers.

6 COMMISSIONER MOELLER: Okay, well said. Brent,
7 you've been at this awhile. As you said, again, greetings
8 to a fellow Pacific Northwesterner.

9 Your comments were on, regarding the three-year
10 kind of conflict as what you see, but what's your sense for
11 where -- what's going to really promote this industry,
12 specific to what you're doing, more? Is it going to be
13 regulatory certainty, or is it going to be kind of more
14 legislative tweaks that maybe put you on more of an even
15 ground with other renewable resources?

16 MR. SMITH: Well, I actually think it's both, but
17 I do believe it's more of the latter. I think we need to be
18 on more of an even ground.

19 In some respects, I think hydro, whether it's
20 small or large, but, primarily small hydro, as we're talking
21 about today, is at a disadvantage. It has a process that is
22 very large, very cumbersome.

23 Though we in this room understand this process
24 and have -- and we're successful in working within it, and I
25 think there's some minor tweaks that could help the process

1 that we have, but, on the outside, there's a lot of people
2 that don't understand this process.

3 We not only develop projects on our own, but we
4 are also a consultant to irrigation districts, to
5 cooperatives, to the Town of Afton on the project in
6 Wyoming. The Swift Creek Project sat idle there for some
7 35 years, after it washed out, and we refurbished that
8 project, the upper project last year and the lower one this
9 year, and then, of course, moved into the Culinary Project
10 that, in my mind, was a record time issuance of a license,
11 without a doubt.

12 But I think it takes it all. Not only is the
13 regulatory process very large, but it's manageable. It's
14 been quiet in the '90s.

15 People are coming back up to speed, the agencies
16 and the special interest groups have been involved in
17 relicensing and now they're having to deal with new project
18 licenses, and there is a difference.

19 While relicensing, these projects continue to
20 operate, they continue to have a cash flow to them. They go
21 through this process, they get extended, you know, licenses,
22 for one year at a time.

23 A new project developer doesn't have that. We
24 have no revenue stream, we're confronted with a very large
25 uncertainty out there as to the outcome, though we feel

1 pretty confident, at some point through the process, that
2 the outcome will be.

3 But it's still a very large and expensive
4 process. By the time we get to the end of the day, who
5 knows what the energy rate may be, whether there is any
6 federal incentive left out there for hydropower, where other
7 renewable resources have a much shorter timeframe to get
8 constructed, we don't.

9 You know, we've operated projects now for 15
10 years for a coop up on Idaho on the Henry's Fork. That
11 project, from the point at which it looked at a feasibility
12 study to construct it, was 12 years.

13 It couldn't have been built by the private
14 sector. It was just too expensive.

15 As it turned out, it turned out to be a positive
16 thing for the Henry's Fork, which is a trout fishery in the
17 Northwest, as is the Chester Project, which we licensed, got
18 the license in July of 2008, which is under construction
19 now.

20 So I think it's a little of both. I don't think
21 the process is that far off, it's just that everybody is now
22 getting back to the table and relearning that process. The
23 new ILP process, through some new works in it, is some good,
24 some bad, so I think that the process, given a little bit of
25 tweaking, will work itself out.

1 I think the collaborative effort is very
2 important. We have a relationship up in our area, on the
3 Henry's Fork, from Island Park Project, which probably
4 allowed a good cooperative licensing approach to the Chester
5 Project, though it took eight years.

6 We moved to Oregon and we're new to the area, and
7 so you have to build that relationship and build that
8 communication. I think we've been successful in doing that,
9 but it's a learning process on both sides of the aisle.

10 But I think, from a legislative perspective,
11 there needs to be some incentives out there that brings this
12 to a level playing field.

13 Hydro is very expensive -- most things are -- but
14 it's very expensive right now to get them constructed and to
15 make them viable, without some of the incentive potentials
16 that are out there.

17 And given what's out there right now, I don't
18 know if there's any projects that can meet those deadlines.

19 COMMISSIONER MOELLER: And, a final quick
20 question, just for you, referencing some of my earlier
21 comment at the beginning of the Conference, what is your
22 impression of why we haven't seen more conduit development,
23 just based on your experience?

24 MR. SMITH: Knowledge and uncertainty. We have a
25 lot of inquiries from irrigation districts, to go in and put

1 facilities on their canals, on their drops, on their
2 headworks, on their diversions, whatever the case may be.

3 But they don't understand this process, and, in
4 some cases, they're frustrated by it. When they look at the
5 process, I'm not so sure it's frustration; in some respects,
6 it's almost fear of entering into this huge process that's
7 out there.

8 Typically, you're talking about the agricultural
9 community. They're very much afraid of giving up some of
10 those old grandfathered rights that they have, and one of
11 those primarily being screenings of canals, so things that
12 will be imposed upon them in projects, they have a hard time
13 with that; they have a really hard time giving that up.

14 And on top of that, they're expensive. In some
15 cases, we find districts that are financial capable to do
16 these things, in other cases, the agricultural community
17 just cannot support it.

18 COMMISSIONER MOELLER: Well, we have a fair
19 amount of development of that in Washington State, but,
20 again, it seems like there's an opportunity there for
21 someone, somewhere, to promote.

22 At some point, I'm going to have to step out and
23 speak to some graduate students from the Pacific Northwest,
24 but, other than that, I'll try to stay here until the end of
25 the day.

1 Mr. Chairman, John?

2 MR. KATZ: Mr. Chairman, do you have anything?

3 CHAIRMAN WELLINGHOFF: Well, I just have one
4 area. I don't know how far I'll go with it, and I'm going
5 to ask you a question, first, John.

6 Because Jeff mentioned this potential and I want
7 to explore it a little bit further, about pressure letdown
8 in municipal systems. Do we have jurisdiction over that, I
9 assume? Or do we?

10 MR. KATZ: Yes. I mean, it depends on other
11 factors, but, yes, typically, yes.

12 CHAIRMAN WELLINGHOFF: Right, because I know, for
13 example, the Las Vegas Valley Water District, I believe, in
14 fact, has installed some pressure letdown devices, and I
15 don't know if we licensed those, or if we exempt those, or
16 what processes we use.

17 MR. KATZ: It depends to some extent, because, if
18 it was, for example, groundwater and it didn't go into a
19 river, then it could be done without FERC jurisdiction, but
20 if it involved navigable waters or one of the other
21 criteria, we often will have jurisdiction.

22 CHAIRMAN WELLINGHOFF: But oftentimes these are
23 just within pipes, as I understand it, right? I mean,
24 within pipes in the municipal water system?

25 MR. KATZ: Right, but I'm saying that it depends

1 on where the water comes from.

2 CHAIRMAN WELLINGHOFF: Okay.

3 MR. KATZ: I mean, if the water came from the
4 Colorado River, for example, and is going back into the
5 Colorado River, we probably would have jurisdiction.

6 If it was groundwater, which, in some cases, it
7 is, and it was not going back into a navigable waterway,
8 then we might not have jurisdiction.

9 CHAIRMAN WELLINGHOFF: What if it's a mix of
10 groundwater and --

11 (Laughter.)

12 CHAIRMAN WELLINGHOFF: I mean, that's what it
13 would be in Las Vegas, you'd have wells and you'd also have
14 Colorado River water, as well.

15 MR. KATZ: Well, if it's a mix, then we would
16 have jurisdiction. It's not separate, but --

17 CHAIRMAN WELLINGHOFF: Thank you, John.

18 MR. LYNG: We don't have any mixed water in
19 Colorado.

20 (Laughter.)

21 CHAIRMAN WELLINGHOFF: But let me ask you,
22 though, are there a lot of municipalities who are exploring
23 that in Colorado, like the City of Denver? I don't know if
24 there's a water authority that --

25 Mr. LYNG: There is a water authority in Denver,

1 there are municipalities that are exploring this. There are
2 many municipalities across the Front Range and all of
3 Colorado, that have this potential. Many of them don't know
4 about it or don't have staffs that are even thinking about
5 this.

6 CHAIRMAN WELLINGHOFF: A lot of them are pumping
7 from, you know -- and they have to pump up high, and then
8 at that point, with the pressure letdown, they can
9 ultimately recover the power out of it.

10 MR. LYNG: Yes, and by way of example, in the
11 last few years, we relicensed a project for the City of
12 Denver on the reservoir which is part of their water supply
13 system. They've got a small hydro, which -- are they still
14 thinking about expanding it, Ann?

15 MS. MILES: Yes.

16 MR. LYNG: Which they're thinking about
17 expanding, so there are instances like that.

18 CHAIRMAN WELLINGHOFF: Okay. I mean, do you have
19 any, like, estimate of the potential in Colorado for just
20 that segment?

21 MR. LYNG: I don't have those figures for you
22 right now. I did quote a figure from an Idaho National Lab
23 study, in my opening remarks, that there is 700 megawatts of
24 potential at 200 sites in the State of Colorado, and our
25 Small Hydro Working Group has really determined that that's

1 a fairly conservative number.

2 Off the top of my head, I don't know what
3 percentage of those projects are pressure-reducing valve or
4 municipal water systems, but that's certainly -- and I
5 should note that this is not anything that's unique to the
6 State of Colorado. Certainly, every municipality that pumps
7 water to an elevation, across the country, may have some
8 potential to retrofit a PRV with a turbine unit.

9 I don't have figures off the top of my head or
10 here in front of me, but I will survey our Small Hydro
11 Working Group and get an idea of the potential there.

12 CHAIRMAN WELLINGHOFF: And, Bill, from the
13 standpoint of New York, is this something that New York
14 looks at, as well, or are you familiar with this at all?

15 MR. LITTLE: Yeah, we have seen a fair amount of
16 interest, part of it in relicensing. My town has a
17 facility in a reservoir, and, as I mentioned, the City of
18 New York, but these are larger systems.

19 I don't know whether we're ready to estimate that
20 on the horizon, there might be smaller systems, people
21 taking interest in smaller systems. But I think the
22 capacity would be there, but the knowledge and the
23 expertise, would not be readily at hand.

24 I actually think the inquiries we're getting, are
25 more private than municipal, but I would maintain that there

1 are opportunities there. The City of Albany has a system
2 that's privately run, so we keep seeing them kind of crop
3 up, as we look through the fleet, if you will.

4 But I don't think that that begins to really
5 maximize the capacity; it's more a question of will and
6 awareness, than the financing.

7 CHAIRMAN WELLINGHOFF: Getting the information
8 out and getting the case studies out, so people know this is
9 possible, feasible, and what the costs are and all of the
10 non-cost barriers as well.

11 MR. LITTLE: Yeah, it's an awareness and also,
12 of course, in this day and age, it's going to be the funding
13 and the expertise. I think, in New York State, given its
14 history, there's more of a focus on biogas, landfill gas,
15 things of that nature, because there are already systems in
16 place.

17 I don't know that the municipalities all think
18 they have systems in place, but they may.

19 CHAIRMAN WELLINGHOFF: Okay, thank you; thank
20 you, John.

21 MR. KATZ: Brent mentioned or made a suggestion
22 that the integrated licensing process, the ILP, no longer be
23 the default process, and I see lots of folks out there who
24 worked on the ILP, including Linda and Julie Kyle, and Nancy
25 Skanke was back there somewhere, and John Clements, who,

1 when he wore the white hat, actually wrote the ILP
2 rulemaking.

3 I guess I have two questions, and one for Brent,
4 is whether he's had a problem when he came in and asked for
5 a waiver, which is what the regulations provide for the
6 Staff to allow them to use the TLP, if he's had problems
7 with that.

8 The second question, I guess, at least for Bob
9 and Bill -- I don't remember if you were involved or not --
10 to some extent, there was almost like a regulatory compact
11 that, if this huge rulemaking was done, that the Commission
12 would use it as much of the time as possible, and I'm
13 wondering what the reaction folks think there would be among
14 the agencies, if the Commission went another way? So,
15 Brent, you first and then Bob, and, if you've got anything
16 on that, Bill, I'd appreciate it.

17 MR. SMITH: No, we haven't had any problem when
18 requesting to go to the TLP. I guess our recommendation
19 would be, is, does there have to be a default process? It
20 would be when the applicant then files their PAD and their
21 Notice of Intent, why don't they at that point in time,
22 request of the FERC, what process they want to use, instead
23 of the defense as to how to get out of the ILP. Just,
24 here's our Notice of Intent, here's our PAD, and here's the
25 process which we'd like to use.

1 MR. KATZ: Bob, do you have any reaction as to
2 how folks out there in the hustings would feel about that,
3 if the Commission changed the process?

4 MR. DEIBEL: I don't know if the Field Staff
5 would change the -- you know, recommend a change to the
6 process, per se. I think it -- no matter what process you
7 use, the communication and the tone and tenor of the meeting
8 and having that at the meetings, are really important,
9 because, like we say, when Afton was a traditional, that
10 thing moved through the process.

11 We've had Mystic, which is, you know, one of the
12 -- I guess one of the poster children of the ILP. I've just
13 not heard a lot of complaints about the ILP, per se, but,
14 again, I think some of the other folks talked about this and
15 most of our experience has been in relicensing, where you
16 have a view of the future, because you know what's coming.

17 The difference is, in these new projects, they
18 show up and you don't kind of get that honeymoon to move on
19 up forward, so I -- but I've not heard direct contacts
20 saying, no, I don't ever agree or push back on the
21 traditional licensing process.

22 And I am not aware of where we've sent in a
23 letter, asking FERC to deny one process or the other.

24 MR. LITTLE: I'd have to agree with Bob. I think
25 we've had only a few approaches to switch, and employ the

1 TLP, in which case, you know, we scratch our heads and try
2 to find a way to accommodate, and it's usually been the
3 case.

4 We were in favor of the ILP and participated in
5 those proceedings, because, at the time, it was mimicking
6 some other experiences of our agency and the Public Service
7 Commission with siting other facilities, and all the front-
8 loading that is involved in that, was tremendously
9 beneficial to us.

10 And I think that I would like to hear more about
11 what Brent is proposing, if there's some accommodation of
12 that still, that the -- I'm not speaking for Department
13 staff at this point, and I'd like to poll them on this, but
14 I think that there's, you know, a certain accommodation that
15 could be made.

16 We ought to discuss how the data loading should
17 be done, if there is going to be, you know, a two-path track
18 that can be elected, rather than, you know, having to go
19 through a process that's now present.

20 MR. KATZ: Thank you. Are there any further
21 Staff questions? Jeff?

22 MR. WRIGHT: Brent, you talked about incentives,
23 and maybe that's a tweak that needs to be made. What I'm
24 guessing, from what I'm hearing, is, what was in EPA Act 2005,
25 really didn't cut it for hydro.

1 Specifically, what incentives would put you on
2 that, say, equal footing with wind, solar, et cetera?

3 MR. SMITH: Well, the general answer would just
4 be financial incentives. I mean, you passed an energy bill
5 in 2005, money never gets appropriated for the 1.8 cents, so
6 those dollars aren't really out there.

7 You see some of the stimulus money has some
8 incentives in that. They put timeframes on those, which
9 none of these projects are even going to meet.

10 We do see good incentive packages in Oregon at
11 the state level, but we also see those starting to dry up,
12 because the states are in financial trouble, so they have a
13 hard time providing those. I think we'll continue to see
14 more of that dry up.

15 So it's all financial. I think it's going to
16 have -- the majority of that is going to have to come from
17 the federal level, and it's going to have to be legislative
18 to do it.

19 MR. WRIGHT: Like direct grants, if you will,
20 rather than --

21 MR. SMITH: Well, we wouldn't be opposed to
22 direct grants.

23 (Laughter.)

24 MR. SMITH: But I don't know if that's
25 necessarily the way that it's going to be. I just think an

1 incentive needs to be out there.

2 If a portion of that is grant, great, but I don't
3 believe that it has to be grants. But if there is a portion
4 of that, great.

5 MR. WRIGHT: But it sounds like it needs to have
6 a timing factor, too, that matches up with how you --

7 MR. SMITH: Absolutely. We're talking about
8 projects, and, from the time you start thinking about a
9 project, till it's actually online, is probably, best case,
10 six to seven years, if you had a great opportunity, with the
11 exception of the Culinary Project.

12 But a larger project with a new license, is
13 looking at six or seven years, and you need enough
14 timeframe. It's hard for an investor -- to attract an
15 investment into a project like this, without uncertainty out
16 there and timeframes that they can see, with no timeframes
17 to the construction of a project.

18 MS. MILES: I had one thing, and, Brent, you also
19 mentioned this, which is the challenge of getting things
20 done, the permitting from all the various agencies done at
21 the same time, so, Endangered Species Act, 4(e) conditions,
22 water quality certification.

23 I know a large part of the ILP was to try to get
24 schedules that everyone is on, so we are doing things
25 simultaneously, rather than sequentially.

1 But I wonder if you had any suggestions for other
2 things, because, still, some of our processes, we will
3 complete it and still be waiting on other things, and I
4 wonder if any of you have suggestions for how we can get
5 those things to mesh better, the timing?

6 MR. SMITH: I don't know exactly how to
7 accomplish that. From the development perspective, from the
8 developer's side, we see a reasonable amount of contention
9 between federal agencies, FERC being one of those, with,
10 say, NIMS or some of the other federal agencies.

11 I don't know how you fix -- I mean, I don't think
12 there's any problem with discussing the two projects we're
13 talking about, and that is Verena and Applegate. But we sat
14 and waited for a biological opinion and Oregon, for two to
15 three years, and we're still -- well, we did finally get the
16 Applegate's bio at the end of June. We haven't got a
17 license issued, but they were both in excess of two years.

18 We tried every effort we could, to try to
19 encourage NIMS to issue that bio up through the political
20 chain and we could not accomplish that. I don't know how we
21 fix that. I don't know if it's fixable.

22 The only way, maybe, to fix it, is legislation,
23 and I don't know if we'll ever get there.

24 So, I don't know the fix to that, and it doesn't
25 matter whether it's ILP or TLP. And, you know, I would like

1 to say one last thing about our comment about the ILP
2 process.

3 Part of our driving -- part of the reason that
4 we're uncomfortable with the ILP, is driven by the three-
5 year timeframe. If you could fix the three-year timeframe,
6 maybe the ILP process can fit within that.

7 But the traditional allows a last effort to
8 protect the investment, and, that, I think, is what
9 discourages us the most about the ILP process.

10 MR. DEIBEL: And I'll just say that, you know, I
11 mentioned in my remarks, that we were very aware of FERC-
12 administered timelines, and I do know about the scrambles to
13 get letters out at the end. I mean, it's a big push, and if
14 you -- you know, we talked about communication, and if we're
15 not meeting due dates -- and I'm not aware we're not -- you
16 know, pick up the phone and call me or, you know, some of
17 the other contacts.

18 But I know we really respect those, and, you
19 know, having worked here, we understand the regulatory
20 issues, and that was part of the agreement, which is to have
21 certainty in a process, and we know the ramifications of not
22 meeting deadlines.

23 So, if we're not doing that, let me know.

24 MR. LITTLE: I can't really sweeten that pot any
25 more. I think he's said it for our agency, as well; that

1 we're under a deadline ourselves, and it may not be the same
2 as the Commission's, but we have to respect that and try to
3 maintain -- Bob did a good job before of talking about the
4 collaborative process and maintaining that, and the quality
5 of that really will determine the quality of the entire
6 process.

7 So, to the extent it appears that anyone in a
8 particular agency, is meeting the mark that way, there's
9 always a chain of command to go to. I think that that's one
10 thing that usually works, but it may not always work.

11 And, again, as Brent said, it doesn't matter
12 whether it's TLP or ILP in that respect; it's about, you
13 know, the two-way relationship and making sure that needs
14 are respected and deadlines are met, and that's -- you know,
15 it's just a qualitative measure there that can't be replaced
16 by anything else.

17 MR. KATZ: Are there any further questions? If
18 not, this is the time that we set aside for comments from
19 the audience.

20 Again, speak when one of the FERC staffers comes
21 by and hands you a microphone, and make sure you identify
22 yourself and your organization, and please try to keep your
23 remarks or questions to a minute or two. If you all will
24 raise your hands, we will get to you.

25 Are there any questions?

1 MR. HALL: Thank you very much. These are
2 comments, I guess, rather than questions.

3 My name is Doug Hall. I'm with the Idaho
4 National Laboratory.

5 Just a couple of things: First of all, I would
6 like to strongly encourage the production of this Small
7 Hydro Guide to Licensing, which apparently is being thought
8 about now.

9 But, as has been indicated here, I think there
10 are many municipalities and individuals who could definitely
11 benefit from a document that would be user-friendly and
12 perhaps take some of the scare factor out of facing
13 licensing.

14 The present document that is available from FERC,
15 is not very user-friendly, and sort of has a written-by-a-
16 lawyer flavor to it, and so I would encourage you, when you
17 do this document, that you validate it.

18 You know, consider the audience that put this
19 before some small hydro developers and allow them guide you
20 as to whether or not this communicates with them.

21 The other thing I would say, is, perhaps in a
22 separate document or as the introduction to that document, I
23 think it would be very helpful to try and get some buy-in
24 with regard to the un-level playing field with regard to
25 renewable energy, as if in the introduction, if was possible

1 to explain why it is that water energy resources, unlike
2 wind or solar resources, require this level of rigor in the
3 licensing process.

4 I think this might defuse some animosity and some
5 aversion to this process, if it could be justified on the
6 basis of the specialty of this resource.

7 The last comment that I'd like to make, is, in
8 our public dialogue, you know, we seem to distort real
9 energy quantities, and I would encourage you, when we're
10 having discussions about energy, and in your discussions
11 with potential licensees or with Congressionals or with the
12 public, we need to get away from capacity as the standard
13 for discussion in our public dialogue.

14 We have to have sort of truth in energy, and
15 truth in energy needs to have a discussion in terms of
16 either annual hourage power or annual generation, but there
17 is far too much distortion in the public dialogue, using
18 capacity as the measure of energy. Thank you very much.

19 MR. KATZ: All right, thank you for your
20 comments. I suspect the document was probably real clear
21 when it left the lawyers' hands, and probably rightly so.

22 Can we go over to this side? You've got someone
23 in the back?

24 (Pause, to correct microphone problems.)

25 MS. SCHNEIDER: Okay, great. My name is Gia

1 Schneider, and I'm the CEO of a company called Natel Energy.
2 We're commercializing a new low-head hydropower technology,
3 and our specific focus is actually on dams or drops,
4 basically any setting with head that is greater than five
5 but less than 20 feet, so we have kind of a very, very
6 specific focus on low-head.

7 I think it's great that you've gathered this
8 forum here together. Without repeating a lot of the
9 statements that have been made already, this is an area,
10 obviously, of growing -- where there's a lot of growing
11 interest, a lot of opportunity, a lot of potential, and
12 discussing the issues, particularly around licensing, is
13 absolutely critical.

14 We right now have a very specific focus, actually
15 in the manmade conduit and channel space. We have a first
16 project that is coming online with an irrigation district in
17 Arizona, and we just started installation, actually on
18 Monday of this week.

19 That went through an exemption process. The
20 exemption application was filed -- just as a bit of
21 background for folks in the room, that exemption was filed
22 in January of this year, the application was filed back in
23 January.

24 We did a lot of outreach, actually, to
25 stakeholders, talked with Arizona Fish and Wildlife, talked

1 with local archeological folks, got -- there were no issues
2 with the project, and folks pretty readily put forward
3 letters to that effect.

4 And so the application actually went pretty
5 smoothly. The public comment period closed in mid-April of
6 this year, and there were no public comments raised, and so
7 at that point, things seemed -- we felt things were kind of
8 moving along fairly well.

9 Unfortunately, we then hit a period where we
10 didn't hear anything further in the process, until, you
11 know, May came by, June, July, and August, and we'd been,
12 you know, kind of going back and forth with the FERC Staff.

13 I would have to say that the Staff, in the
14 conduit exemption, the team did a wonderful job. They were
15 super responsive.

16 We had lots of good back-and-forth dialogue, but
17 I think the exemption itself was finally issued in
18 September, and I think that raises -- or this particular
19 project is an example where it is -- there is minimal, if
20 not any additional incremental environmental impact; it's a
21 fairly small site, and this particular case, you know,
22 helping to prove out a new technology that could help bring
23 a lot of this potential in irrigation districts, online.

24 And we waited an additional four months, just
25 kind of waiting for action. So, this is where I think that

1 there are certain things that could be done in terms of the
2 efficiency of the process, without requiring major
3 regulatory changes.

4 I think the other thing that we'd additionally
5 point out, is that the definition of the conduit exemption
6 itself, is actually a little bit awkward. When you start to
7 go out and talk with irrigation district managers and look
8 at where the potential is actually in their canal systems,
9 the energy generation potential is generally where they've
10 got diversions or drop structures.

11 It's not necessarily in the long-running canals,
12 because those canals are designed to move water and the
13 drops are where, you know, they're currently dissipating
14 energy to help make sure that the water flows in those
15 canals, meet the design constraints of those canals.

16 And the conduit -- the way the exemption is
17 worded, really makes it quite difficult. You have to be
18 very careful in terms of how you look at sites, and I think
19 it actually probably artificially constricts the number of
20 sites within the irrigation districts, state specifically
21 that it can actually go forward under the exemption process,
22 and come online.

23 And then, you know, further, these are, you know,
24 individually, small sites, yes, but, in aggregate, they
25 start to add up. One district we're talking with in

1 Arizona, has -- we've identified and selected about 18 sites
2 -- actually, exactly 18 sites.

3 These are just serially marching down one of
4 their main canals, and they total up to about 3.5 megawatts,
5 so it's something where there's a road that runs right down
6 alongside that canal and a transmission line that runs right
7 down alongside that canal.

8 So a lot of the things that we're focused on, are
9 opportunities where there are pretty low-hanging fruit,
10 they're close to roads, close to transmission lines, at
11 existing infrastructure in irrigation districts.

12 You've got a lot of good operational capacity in
13 those districts to manage and bring these units online, and
14 this is something which I think would be a great area to
15 focus on, helping to bring some new distributed baseload
16 energy onto the grid, relatively quickly. Thanks.

17 MR. KATZ: Thank you. I hate for you to have to
18 be the only one, but if you can head up front? Is this mike
19 working now? Great.

20 MR. STRANDBERG: Thank you. Can you hear me?
21 Yes.

22 Thank you, Commissioners, for convening this
23 workshop. My name is Jim Strandberg. I'm with the Alaska
24 Energy Authority, the State of Alaska, and I wanted to offer
25 just a few comments from the Alaska perspective.

1 The Alaska Energy Authority is a grantor, a
2 banker, a technical resource for hydro developers within the
3 State of Alaska, and, of course, we are profoundly hydro-
4 rich, particularly in south-central and southeastern Alaska.
5 First, I want to sincerely thank the FERC for taking the
6 time and effort to consult with its constituency on how to
7 streamline this key part of developing energy
8 infrastructure.

9 Because Alaska is a profoundly underdeveloped
10 part of the United States -- and I want to stress to
11 everybody that we are a part of the United States -- there
12 is an opportunity, realistically, to do it right for hydro
13 development.

14 And, in particular, the thrust of my comment --
15 and I'll keep it very short -- many of our projects are on
16 federal land, where there is significant national interest.
17 For this reason, we particularly welcome the comments by Mr.
18 Seebach and Mr. Deibel, on the real potential for developing
19 hydro projects responsibly, with minimum impact, through a
20 collaborative process.

21 FERC's firm but fair hand in licensing, with a
22 neutral ground early consultation approach, we strongly
23 support, and it should clearly be emphasized and continued.

24 And I'm certainly available for any questions
25 from the Alaska perspective.

1 MR. KATZ: Thank you very much.;

2 COMMISSIONER MOELLER: Well, Jim, I want to thank
3 you for being gracious with your time when I was up there in
4 Anchorage in September. I think your energy plan that you
5 gave me, and is prominently displayed in my office, is one
6 of the best documents I have ever seen, in terms of breaking
7 down the potential for different resources.

8 You know, people have to realize that Alaska
9 burns a lot of diesel in remote locations, at extremely high
10 prices, to keep people with electricity. And there is great
11 potential for hydro that may not pencil out in other parts
12 of the country, and is often lake tap, so there are no fish
13 issues involved.

14 You're talking about resurrecting a smaller
15 version of Sisitna (ph.), which doesn't have anadromous
16 fish issues. There's a lot of exciting things that you're
17 doing up there, Jim, and I appreciate you coming today.

18 MS. SALMON: Hi, my name is Jane Pater Salmon,
19 and I'm from Blue Consulting. We're based in Colorado, but
20 I have the opportunity to do quite a bit of work in the
21 State of Oregon.

22 You heard earlier from Ken Homolka that Energy
23 Trust of Oregon put together a set of guide books for
24 permitting small hydro projects in Oregon, but I want to
25 make it clear that there are a set of guide books for

1 permitting small hydro projects at the federal level, as
2 well.

3 Energy Trust sponsored these, and my company was
4 the one that put these together, so they are targeted at the
5 types of project developers that has been such an area of
6 focus today, those for in-conduit facilities, existing
7 infrastructure, with a special focus on municipalities and
8 irrigation districts, which are really popular in Oregon --
9 not popular, but prevalent, I guess.

10 And I so I do have a couple of copies of these,
11 if anybody wants to have a look at them, or else they're
12 available on Energy Trust's website, and, also, a couple of
13 the FERC staff members here today. We'd really appreciate
14 your input on these and review of them.

15 So there is some awareness about them at FERC
16 already, but just to bring it to your attention, and it's
17 for other folks who are looking for a starting place for
18 what's been talked about today.

19 MR. JOHNSON: Hi, my name is Curt Johnson. I am
20 a small hydro developer in western Colorado, Telluride
21 Energy. I wanted to pick up on something that Chairman
22 Wellinghoff said, that I thought was very important, talking
23 about the pressure-reducing valves on municipal water
24 treatment systems.

25 Do any FERC members think that ought to be

1 appropriately an issue of federal jurisdiction? I mean, I
2 think --

3 MR. KATZ: As I said, it really -- it's a complex
4 legal question. It depends if the water does not come from
5 navigable waters of the United States and doesn't go back in
6 there. Then it would not be subject to FERC jurisdiction,
7 but there are some instances, for example, in which people
8 want to be subject to FERC jurisdiction, maybe because it's
9 one-stop shopping or whatever, so there is some instances
10 where things can be voluntarily licensed, other instances in
11 which they are required to be licensed.

12 We're glad to talk to anyone who has those
13 questions. OEP has very experienced staff working on that,
14 and I've got some people on my staff, and we're always happy
15 to answer questions, if anyone has specific ones.

16 MR. JOHNSON: So most water supply systems in
17 western Colorado's small towns, basically pay to run their
18 water systems 500 feet up the hill --

19 MR. KATZ: Did the mike stop working?

20 (Pause, to fix microphone.)

21 MR. JOHNSON: So, the point simply is that there
22 are lots and lots of small systems that, arguably, ought not
23 to be under the jurisdiction of the FERC. To give you an
24 example, I just recently wrote a grant application for
25 Silverton, Colorado, which is near where I live, a small

1 community of 500 people. There is an existing pipeline that
2 was built in the '20s, which comes down, we've got a static
3 head of 130 PSI, it's going to be a very small system, 8 KW.

4 It is something that would be under FERC
5 jurisdiction, and require a conduit exemption application.
6 It's an existing facility. We're simply taking currently
7 wasted energy and generating power with essentially no
8 incremental environmental impact of any kind.

9 So, it's baffling that this is something that is
10 currently under the jurisdiction of FERC. I just completed
11 an 1.5-inch USDA grant application, which had letters from
12 BLM and virtually everybody else you can imagine, in support
13 of the project, and I was very grateful to have received the
14 grant from the USDA, to support project development.

15 It would be nice if you might have a simple
16 expedited system for such projects, where you could just,
17 you know, upload PDFs of all of these documents, have a
18 quick staff review that would determine that, in fact, it
19 did have no sort of impact of any kind that was under FERC
20 jurisdiction, and get the approval very quickly.

21 So, I know there are lots and lots of little
22 projects like that, that would be greatly accelerated, were
23 FERC to allow something like that to happen.

24 MR. KATZ: I think that's certainly something
25 worth looking into. I'll just let you know that FERC's

1 jurisdiction was established by Congress, and there's not a
2 provision that says that FERC can decide it doesn't want
3 jurisdiction over something, so if you're looking at generic
4 things, you know, that's a Congressional fix that needs to
5 happen, because FERC doesn't have the ability to say -- I
6 mean, your theory might make sense, but if the law requires
7 FERC to have jurisdiction, FERC doesn't have the ability to
8 say, well, we'll forego jurisdiction.

9 But that's a very useful point. Thank you.

10 MR. JOHNSON: And one other sort of ancillary
11 perhaps related precedent: I used to work in the solar
12 industry, and, you know, 20 years ago, one of the
13 impediments to lots of distributed rooftop PV, was that
14 local utilities viewed it as kind of tantamount to signing
15 an interconnect agreement with a coal plant, and there was
16 not wide understanding of how to massively adopt these small
17 systems.

18 So, after long years of lobbying, we now have
19 proliferation of net metering requirements, simplified
20 interconnection agreements for small PV systems, so it
21 basically happens as a matter of course.

22 So, obviously, the analogy here, is, thinking in
23 that mindset, as it applies to the small hydro industry, I
24 think, could be enormously helpful. Thank you.

25 MR. KATZ: Thank you very much. Do we have

1 further comments? Yes?

2 MR. SINCLAIR: My name is David Sinclair. I am
3 the President of Advanced Hydro Solutions. We're developers
4 of four projects, one of which has -- we have applied for
5 our license last July and we've got three others in the
6 process.

7 Of those four projects, we took the ILP for our
8 process, because it was default, and in one, we chose the
9 TLP, and, in doing that, we chose it, as Brent would
10 suggest, because we saw that there was considerable agency -
11 - local agency support, and that we could undertake this in
12 a collaborative fashion.

13 We have recognized, though, that when you go out
14 and you have these kumbaya meetings with the local agencies,
15 not everybody is as cooperative as you might expect or
16 desire. Therefore, the ILP provides the developer,
17 actually, with protection, because of the adjudicating that
18 the FERC does on issues, whether it be study plan
19 determination, et cetera, and we do like and enjoy that,
20 particularly when we're in an environment that isn't
21 necessarily moving as smoothly.

22 MR. KATZ: Thank you for your perspective. Do we
23 have --

24 MR. SINCLAIR: Oh, in addition to that, the other
25 side of that, of course, is scary, when you run out of a

1 preliminary permit and you have to go get another one.

2 MR. KATZ: Thank you. Are there further
3 comments? I see one in the front.

4 MR. JACOBSON: I'm Eric Jacobson. I'm a licensee
5 on a number of plants in Colorado, and, as such, I'm kind of
6 a lightning rod for small hydro development in Colorado.

7 What Mr. Johnson and Mr. Lyng haven't pointed
8 out, is that being kind of a libertarian state, there's a
9 lot of what is locally called "the guerilla hydro in
10 Colorado."

11 I've been doing an internal calculation as to how
12 many guerilla plants there are, versus licensed hydro plants
13 in the western section of the state, and there's
14 approximately four times as many unlicensed, no permits
15 whatsoever.

16 On the smallest scale, a guy went up and put a
17 two-inch hose down to a Harris turbine, through an inverter
18 and makes his meter go backwards; on the larger scale,
19 there's one 200-kilowatt and at least two 100-kilowatt hydro
20 plants that don't have a permit under the sun.

21 And these people are all somewhat involved with
22 the Small Hydro Working Group in Colorado. My suggestion,
23 throughout, has been, per Mr. Hocking's handout, is, where
24 does FERC's hydropower jurisdiction come from? It's the
25 navigable waterways, lands of the United States, surplus

1 water from a federal dam, or Commerce Clause issues, and
2 most of these don't hit any of those qualifiers, and so my
3 personal suggestion on this, is to expand the Declarations
4 of Intent that are covered in the Federal Power Act of 1921,
5 and at least have consistency in the Declarations of Intent.

6 There have been a number of Declarations of
7 Intent that have gone through the Commission, in some cases
8 that seem to be clearly jurisdictional, have surprisingly
9 enough, been declared nonjurisdictional by FERC, and others
10 that were so simple that they seemed to be a case of why
11 should it be jurisdictional, then they're found to be.

12 So I think consistency on Declarations of Intent
13 and wider usage of them, especially in these small ones --
14 the Staff comment a minute ago, was that FERC's hands are
15 tied by the law.

16 Well, of course, FERC used to issue categorical
17 exemptions for small projects and in specialized
18 circumstances, and that section of the law hasn't been used
19 either, and so my further suggestion would be to pull out
20 categorical exemptions and polish that up a little bit, to
21 give legitimacy or a legitimate track for these ultra-small
22 projects that are simply going guerilla right now, and I
23 think that would ultimately be better for the environment.

24 It would bring them under some sort of
25 regulatory, or at least knowing they exist, umbrella,

1 whereas, right now, they just go out and do it.

2 So, in conclusion, categorical exemptions and
3 giving some consistency to Declarations of Intent.

4 MR. KATZ: Thanks. FERC Staff, these are not
5 matters, usually, Mr. Chairman, that come before the
6 Commission. They are done at the FERC Staff level, and we
7 do strive for consistency, but it's helpful to remind us
8 that we need to meet that goal.

9 As to the categorical exemptions, just by way of
10 background, the Commission did start a program to exempt
11 certain small hydro projects from FERC jurisdiction, but,
12 unfortunately, the courts told us they weren't buying any,
13 so that was overturned judicially. That was in the '80s.

14 CHAIRMAN WELLINGHOFF: So our categorical
15 exemptions that we did, have now been stopped by the courts,
16 the courts have told us that we cannot do categorical?

17 MR. KATZ: That's correct, at least for that
18 category. Now, whether there is something further we can
19 look at, I don't know, but, yes, the Commission had a very
20 specific program, trying to let out very small hydro, and
21 the courts -- basically, I think it's what you heard from
22 the panelists, going on the proposition that small size is
23 not necessarily small impact, so the court overturned that.

24 MR. NOVEMBER: Thank you. My name is Mark
25 November, and I'm with Technology Mountain. We're

1 representing new technology that could be very useful in the
2 hydro market.

3 This forum and what we're doing today, seems very
4 useful to the industry.

5 One of my questions and comments, is that with
6 regard to those that are interested in 100-kilowatt or
7 smaller projects, who want to take advantage of brand-new
8 technologies that reduce the cost tremendously, but then
9 look at the cost to get a license through this regulatory
10 process, they're not likely to move forward, because of
11 cost, even though they are very appreciative to see new
12 technologies at a much lower cost.

13 So how do we bring these types of technologies
14 forward here in the United States? I've presented this
15 technology to a number of investment groups here in the
16 United States, and they recommend that we take it to
17 countries outside of the United States, which makes no sense
18 to me, because the technology has been developed by
19 Americans here, and we would certainly want it to be able to
20 create enormous amounts of additional jobs here.

21 So I just wonder if maybe there is a way for
22 small, 100-kilowatt and less projects to be able to still
23 participate in the process, fulfill the laws with regard to
24 environmental concerns, but also not be able to, you know,
25 pay \$500,000 to hire consultants and lawyers and all the

1 paperwork that's involved, not to mention the long lead
2 times that are involved.

3 So I don't have any solutions to offer, other
4 than I'm just raising the questions. Thank you.

5 MR. KATZ: Thank you. We appreciate it. I think
6 part of the purpose or the goals of this workshop, is to see
7 whether we can develop the consensus that's necessary among
8 developers, state and federal agencies, local communities,
9 non-environmental, governments, to allow a simpler process,
10 and we'll see whether we get that consensus.

11 Anything further?

12 MR. BACKSTROM: Hi, Mike Backstrom with Southern
13 California Edison Company. I have a question for
14 clarification, which is whether the streamlining processes
15 we've been talking about today, and the efforts to improve
16 that, would equally apply to requests and amendments to an
17 existing license, or if they are only meant to apply to a
18 process for a new license?

19 MR. KATZ: I don't see any reason why they
20 couldn't work for amendments. I'm not familiar with
21 Southern California Edison's small hydro program, but --

22 (Laughter.)

23 MR. KATZ: But we do regulate your big ones. Are
24 there any further comments?

25 (No response.)

1 MR. KATZ: If not, Mr. Chairman, do you have any
2 closing remarks?

3 CHAIRMAN WELLINGHOFF: Well, I just want to thank
4 everybody for participating. I learned a tremendous amount
5 from the very short time that I've been here.

6 As John said, I mean, one of the purposes of this
7 Conference, is to take all of your remarks and find out if
8 we can arrive at some consensus of means to simplify the
9 process, to reduce costs, to reduce regulatory burdens, and
10 to see if we can, you know, get lower down the chain on the
11 size of projects that actually can be economically
12 developed.

13 We can take down the regulatory burden, to the
14 extent that more and more projects, in fact, can be
15 developed, and that's certainly my intent and my interest in
16 this Conference.

17 I know that Commissioner Moeller has the similar
18 interest, so we'll be looking at all of your comments and
19 the transcript of the testimony today, and going through it
20 with Staff and seeing what we can do. Thank you all very
21 much.

22 MR. KATZ: Thank you very much for coming,
23 particularly the panelists, but also those of you who
24 commented. I think that those of us here who work in hydro,
25 often feel as though we're often a little corner and it's

1 very heartening to know that there are others who care about
2 hydro.

3 You know, one of the things that makes us feel
4 good when we look in the mirror in the morning, is knowing
5 that we're working on clean, renewable energy, and it's good
6 to see there's a community out there that's trying to
7 develop a way to do it in a responsible manner.

8 So, again, thank you very much.

9 (Whereupon, at 4:32 p.m., the Technical
10 Conference was concluded.)

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