BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

IN THE MATTER OF:
JOINT BOARD ON SECURITY:
CONSTRAINED ECONOMIC DISPATCH:

Hyatt Regency on Capitol Hill
400 New Jersey Avenue, N.W.
Washington, D.C.

Monday, February 13, 2006

The above-entitled matter came on for a conference, pursuant to notice, at 9:50 a.m.

PRESIDING:
NORA BROWNELL, Commissioner
COMMISSIONER BROWNELL: Welcome, Chairman Bill Flynn and invisible Vice Chairman Paul Afonso. Thank you for being here by phone.

Are you calling from home or did you actually get out this morning?

MR. AFONSO: We're delayed, but I will get out. Thank you for making the phone available for us.

COMMISSIONER BROWNELL: We certainly appreciate your leadership and are glad that you could be here.

I'm going to just do some opening remarks, largely about what we're going to do here today and about process.

I thank all my colleagues for being here. I know you have many demands on your time.

As you know, we were charged with establishing a Joint Board by Congress to look at economic dispatch and to look at what's working and what we might do better, and for the states to make recommendations to the FERC, who will then present our reports to Congress. I emphasize that because I think it's important to recognize that this is a state-driven process. So I will be asking my vice-chairs to take the lead after today in drafting the recommendations and the gist of the report.

There was an effort by our staff to provide you
with a summary of what they learned at the earlier meeting and any comments that we might have received in the intervening months since November.

I appreciate very much the work of John Reese in New York and Ron LeCompte, who spent a lot of time working with our staff to draft. After today we'll turn that over to our vice-chairs for further refinement and drafting. We'll offer whatever support we might do. But I think that it's important that the leadership be taken on.

This morning what we'll do is have a quick summary by Hari Singh from our staff of what you have received. Then we'll go over the recommendations to see what people have to add or expand, or in some cases I think there have been some suggestions that some of these recommendations could be consolidated.

Then we'll move on to whatever extra recommendations people have. We had several yesterday that were very good. And at that point -- and I'm reading my notes here because I messed this up yesterday -- we will have some period of comment. We'll work out the details and keep you posted on that. But if you have any additions when you return after today, any data requests particularly, we need to get those in quickly so that we can begin to move forward.

I would remind everyone simply of this: There is
a particular directive from congress here. The top is economic dispatch. I think there's some thought: Wouldn't it be fun to go back and revisit every issue that has been decided over the last ten years. That may be good sport, and I encourage anyone who wishes to engage in it to go right ahead. But that's not what Congress asked us to do.

To the extent that there are recommendations outside of economic dispatch, we can make them. And yesterday it was decided that whatever doesn't meet the economic dispatch test will go in a special category of further issues that someone might wish to explore.

I think I would ask you to keep that focus and discipline so we can get to the task. I think it's a great opportunity not only to show that the federal and state jurisdictional entities can work together, but I think also we have a laboratory. We're not in theory any more -- you are in the actual labs where these are being tested. And I think it's a great opportunity to refine and make better and engage in incremental improvements.

With that, I thank you for your involvement. I'm going to turn it over to Vice-Chair Flynn and Mr. Afonso.

MR. FLYNN: Thank you very much.

I'm going to be very quick. I'm going to save all my energy for the followup, all the work that the states have to do here afterwards, as Nora actually put it.
I want to thank everybody for coming today, especially my colleagues. I do want to point out one person, and that's the president of the New York ISO, Mark Lynch, who is with us today.

Thanks for coming, Mark.

I'll just turn it over to Paul and we'll get going.

MR. AFONSO: Thank you. I'll be brief so you won't have any background noise here.

Let me thank my colleagues from the New England area for their help, in particular Gordon Van Welie and his colleagues at the ISO. I think we're on our way to a very good product.

Let me thank the FERC for some of the concepts they've already put on the table for us to consider. I think we'll take the opportunity to learn today and get down to business and draft up some good positions and reports up to the FERC.

Thank you, Bill.

Thank you, Madam Chair, for your help in plugging me in today. And hopefully we'll go down the stretch.

Thank you all.

COMMISSIONER BROWNELL: Thanks, Paul.

Hari, if you would come up to the table.

Hari Singh is going to give us a quick summary.
I know you have all memorized the report on your way here in between dockets that you have to deal with.

Hari, if you would just give us an idea, just once again review for everybody how this report was developed.

MR. SINGH: Thank you, Commissioner.

The report basically has three sections. It gives an introduction of economic dispatch and reviews economic dispatch. It has two parts to it: There is the day-ahead commitment and there is the real-time dispatch function in it.

The second part of the report talks about how economic dispatch is done in the region, in the Northeast and the New York ISO and ISO New England. So it kind of sums up actually the input we received, the formation of the New York Power Pool, NEPOOL, and how things evolved over the years.

This is kind of a unique part of the country because of all the regions that we look at this is where economic dispatch has the longest history, if you will.

The third part of the report is really the critical one. This is based on the transcript of the first meeting. All the presentations that were made at the meeting and the comments we received afterwards, and also comments made at the meeting, there is no effort in the
report I think to add to what was in the record. It's based entirely on what was in the record. And it summarizes issues that were found in the record, and also certain observations.

So there were three general observations. One of them was what are the benefits of economic dispatch. There was not a precise measure found in the record but there were various figures. $100 billion a year. Mr. Lynch from the New York ISO has offered that up. And there were a number of other figures mentioned in the transcript.

The second was what are the benefits of the markets in general. Even though the focus of the meeting was on benefits of economic dispatch, there was a lot of discussion in the record on benefits of markets. So that's another issue.

And the third issue that we found was efficient versus economic dispatch. This was something that came up from the DOE report. It relates to dispatch based on offer prices which may not give you the same result that you would have if you did dispatch based on heat rates. So there was some concern by some participants on that issue.

In terms of the recommendations on economic dispatch, the ones that are in the report and in the record are as follows: Should there be a wider geographic scope in the northeast? It really comes down to we have economic
dispatch in New England and we have economic dispatch in New York. But should it be broadened to cover both, and possibly even across the interties with external regions. If you look in the transcript the specific discussion comes down to a proposal called virtual regional dispatch and the alternative of making changes on things like the granularity of scheduling, changing it from one hour to perhaps 15 minutes. There was a reference to a proposal called ITS. The participants in the meeting had different views on this. Some -- for example, National Grid -- favored regional dispatch and thought it was a good idea. Others thought that this should be left to market participants. And there were also some concerns expressed on costs and implementation.

The second issue was on uniform price auction. Some people raised concerns that high gas prices had, under the construct of single price auctions, resulted in a lot of wealth transfer. And this part of the transcript then went back into the argument we had at the beginning of restructuring: Do you save money by doing pay as bid? Are you better off doing uniform price auctions? The result of it was because people seemed to think there would be a big benefit changing, that there would be a lot of complexity.

COMMISSIONER BROWNELL: Hari, were there not some studies into the record by Gordon Van Welie that had been
done addressing this issue, and they are a part of the
docket?

MR. SINGH: They are a part of the docket. They
are also available on the FERC website, the study that was
done after the California power crisis to examine the same
issue.

There was concern about improvements in modeling
of operation and transmission constraints. This related to
the security constrained part of security constrained
economic dispatch. This is the area where it seems from a
technical perspective there is a lot of focus on how can you
better model generating operating constraints, the ramp
rates and so on between commitment and dispatch, how can you
better model transmission constraints.

There were concerns expressed in the meeting on
uplift in New England in particular, and also in New York.
And uplift usually comes when you don't model the
transmission constraints in the dispatch software, but then
you manually dispatch units afterwards to deal with specific
constraints. When you do that you reflect this in the
market price. So you have to pay them out of the market.

Another issue was demand response. The
transcript indicated that this is already being done,
particularly in New England. And there was a concern
expressed on improvements that could be realized in market
transparency. This came from the assumed benefits of markets. One of them is that they're transparent.

Bid data is released with a six-month time lag and some participants wanted it to be shortened. In particular the participants that supported this were National Grid, as I recall, and also the demand side, NSTAR. The buyer said that they would benefit as well for a shorter period of time, as in the case of NSTAR. The transcript indicated a reference to a one-month time lag. ISO New England -- specifically Gordon Van Welie -- indicated that this is something that would be taken up in committees in ISO New England.

COMMISSIONER BROWNELL: Can I interrupt one second?

For anyone who is speaking, we literally need to lean into the mike, as awkward as that may seem, because people can't hear.

Hari, I have a question on the bid data. Six months versus whatever. My recollection is that there was also some discussion by New England that they would be willing to consider that. Is that correct?

MR. SINGH: Yes. That is in the transcript as well.

COMMISSIONER BROWNELL: What did they say? And how did the FERC respond? I don't want to speak for them.
MR. SINGH: I don't recall if we actually said anything on it. But Gordon Van Welie said they would be receptive to such a proposal and it should be brought up in the Committee structure.

COMMISSIONER BROWNELL: In the Committee structure there or perhaps -- This has been a big issue for the states, as I go around the country. It might be something that people want to consider as a recommendation.

MR. SINGH: Definitely. That's why we put it up in the Staff report.

There was also concern about better utilizing the interconnection with external areas. So while there was a lot of focus on perhaps more efficient economic dispatch by going over the seams between New York and New England, there were also external areas with Quebec and with PJM.

One of the concerns of the people from National Grid was there is the possibility for including the coordination with Canada. For example, if you reduce the flow to New York by three megawatts you gain a little bit more on the import capability to New England. To work out a solution like this involves the agreement of multiple parties. It's an issue that people have been looking at in the past. And people have looked at it some more.

Finally, there were concerns expressed on the way capacity markets have been working or not working. And
while this doesn't relate directly with economic dispatch per se, but it was an issue that was brought up so we put it in.

In addition to the issues that were raised in this first meeting there were also certain issues mentioned in the DOE report on economic dispatch that they felt should be considered. They are also included in this report.

Thank you.

COMMISSIONER BROWNELL: Thank you, Hari. Stay, because I just want to be sure -- Let's put this in two parts.

Are there any questions on the body of the report as it exists? And then we'll review the actual recommendations themselves. But while Hari is here, do we have any questions for him?

(No response.)

COMMISSIONER BROWNELL: Okay, Hari. You're getting off Scot-free. Thank you very much.

Now I'm going to turn it over to my vice-chair, the gallant Mr. Flynn, to go over the recommendations one by one to see if anyone has any comments. Or if you love them all, we've got a couple of hours that we're free. We can go sledding up on Capitol Hill and lots of interesting activities.

MR. FLYNN: That sounds better for me, coming
from New York where there was a lot of snow over the weekend.

Let's go through the first one here. The first one is further improvements in market transparency. I'll read this verbatim here for everybody:

"A proposal was made to allow market bid data to be released with a less than six-month lag. It was supported by at least one other party. ISO New England stated it was open to suggestions on making market bid data available with a shorter lag time and that this should be pursued through the appropriate committee process."

Any comments?

(No response.)

MR. FLYNN: Going once; going twice.

Well, I've been given -- It doesn't say anything about ISO -- the New York ISO. But unless I'm corrected, I believe they have the same stance as New England does. Is that correct?

MR. LYNCH: That is correct.

MR. FLYNN: That is a correct remark. Okay. Great.
The second recommendation is the wider geographic scope of economic dispatch. Some participants recommended further improvements in regional economic dispatch through improvements in transaction scheduling across regional interfaces by market participants on a shorter time frame than is available currently, while others favored a stronger integration using a virtual regional dispatch model.

Any comments other than the ones already cited in the record?

(No response.)

MR. FLYNN: Once. Twice. Two for two.

COMMISSIONER BROWNELL: Where were you guys yesterday?

Wow.

(Laughter.)

COMMISSIONER BROWNELL: We could have used you in PJM and MISO. I guess you've been spending so much quality time together on other issues.

(Laughter.)

MR. FLYNN: At the risk of jinxing myself, I'll just make a quick comment about that.

I've been on the Commission for a little over two years now. Whether it's issues like this or others, I can tell you from the New England states and our Commission, to the New England ISO and the New York ISO, the relationship, the communications, the respect, I can't imagine it being much
better. We have a wonderful working relationship. Many
times we agree to disagree. But it's always done in a
professional manner. And I think that may be reflected in
some of the non-responses here today.

So now that I've jinxed myself, John Goldberg will have
something to say.

(Laughter.)

MR. GOLDBERG: New England and New York are much
further ahead than most of the rest of the country.
Probably the reason we don't have as much to say is because
much of this is already in effect and we're talking about
minor refinements as opposed to major changes in the states.

COMMISSIONER BROWNELL: Then I think we ought to have a
mentoring program for some of the other states.

(Laughter.)

COMMISSIONER BROWNELL: God forbid that anyone who
wants to use the experience that other people have already
been through. You know, we have to reinvent it because it's
so much fun to go through the stakeholder process. But that
may be my recommendation to this report.

MR. FLYNN: We'll be more than happy.

The third recommendation: Improvements in modeling of
unit operational constraints and transmission constraints in
economic dispatch. Several participants noted the need to
better reflect security constraints in the security
constrained economic dispatch.

Nora, you have a check here. Would you like to make a comment?

COMMISSIONER BROWNELL: Yes. I remember this as being kind of an interesting discussion that there were in fact, even with experience, a number of instances in which manual overrides of the system were being used and having potentially a distortion area effect on the economic dispatch models. I don't have a recommendation for the solution. But I think this recommendation probably needs further study.

And maybe that is the recommendation: That we need a better analysis of what might be going on. That rang a bell with me when I reviewed this and remembered our meeting in Boston.

MR. FLYNN: Thank you.

Anyone else?

(No response.)

MR. FLYNN: Okay. The fourth: Incorporation of demand response into economic dispatch. Some participants called for better integration of demand response into economic dispatch and for state regulators and RTOs to work together on this.

Any comments?

MR. GOLDBERG: Demand response is something everybody
in New England feels very strongly about. It's something we do want to see worked on more in every aspect.

MR. FLYNN: I second that motion in terms of New York's interests. There's a great interest not only at the Commission but the ISO, and quite frankly, stakeholders as a whole, in demand response. We, too, value this very much moving forward.

COMMISSIONER BROWNELL: Bill, could you describe how New York -- I often hear references to New York's early efforts to harmonize the retail program into the wholesale tariffs so that rather than having a menu of programs that were somewhat isolated on the wholesale market you somehow harmonized those.

MR. FLYNN: I've got an expert here. You applauded John Reese's efforts so he's got to live up to your expectations.

(Laughter.)

MR. FLYNN: John, here's the test.

MR. REESE: Now I'm in real trouble.

One of the things that was done with the New York ISO before the opening of the markets was to work with the utilities on existing demand response programs and ensure they were structured so they took advantage of the wholesale price. We had filings from the utilities early on. We set them up so that the price signals were consistent with the
real-time and day-ahead price signals. And as efficiency programs over the last six, seven years, new programs have been created or they've been revised. We've taken the retail demand programs and structured them so that they're driven by wholesale price signals.

Most recently one of the things that was going on -- and FERC has been involved in this as well -- is a move to in fact bring ancillary services into the demand response program. A large number of the industrial customers have actually been drivers in bringing retail and wholesale together as they cross those lines.

And I think probably the key is sort of constant recognition as we drive toward retail competition that retail competition, the ESCOs providing services are sensitive to how the wholesale market works. They're part of the voice in the wholesale market and the ISO committee. We work with the ISO in doing that. So I think it's that collaboration from inception that has made those programs the most responsive.

COMMISSIONER BROWNELL: Thank you.

MR. FLYNN: Anyone else?

Thanks, Jack.

(No response.)

MR. FLYNN: Paul, can you hear me?

COMMISSIONER BROWNELL: Oh, my God. We probably lost
power an hour ago.

MR. FLYNN: Paul, are you out there?

(No response.)

MR. FLYNN: The day is looking up.

(Laughter.)

MR. FLYNN: The fifth item: Better utilization of the interconnections with external areas. Some participants called for better coordination between neighboring areas to improve the utilization of interfaces with Quebec. I personally could not agree with this recommendation more.

What I would ask is if there is somebody on the Staff who can answer me for this: Give me some examples where there is the need for improvement with our external areas, most notably our Canadian colleagues. Does anyone from Staff want to take a stab at that?

COMMISSIONER BROWNELL: Bud and Hari, where did this come from in the comments?

You need to step up to the microphone.

MR. SINGH: There were comments made by Michael Kelly from National Grid in particular. It related to the increase in transfer capability that could occur between New England and Quebec, and to see if there are any flows back to New York. There are constraints that become binding further downstream in PJM and New York if the flows are increased into New England.
You cannot just increase the flow to New England without coordinating with the other sites. This involves multiple parties. I'm not an expert on that particular area. But there are studies that are available on the web. And Michael pointed to some in the record as well. And I think the comments that were made by the ISO New England were that, yes, it's a good idea.

And people were going in two directions. One is you make more investment to fix the underlying constraint. And then, of course, you resolve the problem. That's one way to go. The other way is until that can happen can you work out ways that can do the coordination a little bit better. It comes down to basically somebody loses a little, somebody gains a little. But overall everyone's better off.

So that's pretty much what I know.

COMMISSIONER BROWNELL: Hari, if I understand correctly, this is really perhaps a two-part recommendation, should people choose to pursue it. That is to ask Quebec and the New England ISO what the plan is and what the costs and benefits are to fixing the underlying constraint. Then Part B, to ask both of those parties what specific steps they are taking in the interim to manage differently to address that further.

The group might wish to ask some dates by which those will be resolved. And you could do a data request during
the interim to see if you can get something reflected in the
record. It may well be that things are already underway.

MR. SINGH: I think that's a very fair way to put it
because the focus, at least from Michael, is to try to study
the problem on a faster track. It's not that you do one
thing or another, but to look at it with a little more
urgency.

I don't know if Mark has a comment.

COMMISSIONER BROWNELL: Mark, please come up.

It's Mark Lynch from the New York ISO.

MR. LYNCH: The only comment I would make, when we get
to Part B of your scenario here, I think the New York ISO
has to be involved in that coordination effort. I know
we've already gone back and started to look at this. And I
think you have to look at it from a very holistic
standpoint, what you're doing on the interface between
Quebec and also between New England and New York, and also
the other tie lines across New York to New England because
it is somewhat of a circular flow there.

But I think when you get into Part B other than looking
at Hydro Quebec and New England, what they can do to
alleviate the constraint, when you get into actually
studying it, looking at how you can mitigate the flows from
all the connection points, the New York ISO has to be
involved.
COMMISSIONER BROWNELL: We can add you to the list of data requests for the planning process.

MR. LYNCH: Yes.

COMMISSIONER BROWNELL: In the interim, respecting the fact that Quebec is a sovereign province, we should also contact colleagues there and see if they can come up with something.

MR. GOLDBERG: I hesitate to speak for ISO New England -- and I won't -- I suspect they'd like to be involved also.

COMMISSIONER BROWNELL: Indeed. ISO New England Katherine Kerrigan was supposed to be here. But we're giving them a snow pass.

MR. FLYNN: Just for the record, I base my interest in this on what we went through in the blackout of 2003. I know it's a little offbeat here, but the level of coordination that went on between the New England ISO, the New York ISO and the Canadian colleagues on that issue, they have done -- at least in New York -- an increased effort on coordinating up in there with what goes on on their structure with what goes on in the New York ISO. I can't speak for the New England ISO. But I can only imagine that they would be more than happy to be involved in a study of this nature in a more quick fashion than waiting a long period of time.

I would very much appreciate reaching out to them. I
don't know who the appropriate party is. I guess you, since you've already given us the assignment of doing the followup work; and I'm assuming that it's us.

COMMISSIONER BROWNELL: That would be, should it be a recommendation you choose to adopt since it's your report. Sharon.

MS. REISHUS: I've not been involved in the report itself. Is there some reason why the Maritimes were not discussed in the context of this?

MR. FLYNN: I don't know. Not that I'm aware of. I don't think they were mentioned in the record. That doesn't mean -- Would you like to give a thought on that?

MS. REISHUS: I don't think it's the same set of issue that Hydro Quebec has. I know there are coordination issues involved with the Canadians. They should probably be part of that process.

MR. FLYNN: That's a great idea.

Refining capacity markets. Some participants called for refinements to capacity markets in order to promote new investment. Any comments?

COMMISSIONER BROWNELL: Could I suggest that there are some efforts underway to do just that.

And while that might seem a good idea, I don't want to, one, undermine whatever efforts are going underway and, two, get myself and my staff in trouble on ex partes. So if we
could just move along on that.

MR. FLYNN: I'll just do a quick add on this.

We're going to do a panel on this issue tomorrow afternoon at 3:30, which I'll be moderating. And we have four or five panelists. There should be a lively discussion. I have no idea where the room is. So if you want to see some jousting on this issue, it may happen at that panel tomorrow at 3:30.

COMMISSIONER BROWNELL: I would also just like to make a request of my friend Jack Goldberg, who, among many people -- but I've given him so much grief over the past six months he might want to write a book about the experience of going underground to come to some measure.

I would also suggest for people who are looking at this issue, there was a discussion yesterday in the International Committee about the capacity market model in Greece that has been very successful, and that we not limit ourselves to the confines of our own country because there are, believe it or not, other places in the world who are developing markets and who in some cases are ahead of us.

MR. GOLDBERG: The only thing I would say about writing the book is it would be a biography of Judge Brenner.

MR. AFONSO: Kudos to Jack Goldberg on this whole thing. I'll end it at that.

COMMISSIONER BROWNELL: Okay.
You're here. Have you been hearing us, Paul?

MR. AFONSO: Yes. I've been on. I've been on mute. I can only been on mute for a little bit.

(Laughter.)

MR. AFONSO: But I've got it all. Thank you.

COMMISSIONER BROWNELL: We kind of thought you were buried under an avalanche or something.

MR. AFONSO: Some would hope; but not quite.

MR. FLYNN: The next recommendation is re-examining uniform price auctions. Some participants called for re-examining the use of uniform price auctions that allow gas-fired generators to set the price for coal and nuclear plant.

Any comments?

(No response.)

COMMISSIONER BROWNELL: I would simply add that this was discussed yesterday at some length. It was determined, I believe -- I don't want to speak -- but there were a number of people who felt this was one of those if you want to explore it, fine; but it was beyond the scope of the task that Congress gave us; and that, secondly, there was some significant evidence -- some of which we put in the record and we invited people to add anything. But I would just give you that observation from yesterday.

MR. FLYNN: Anyone else?
MR. FLYNN: The next recommendation, review dispatch practices. Review selected dispatch entities, including some investor-owned utilities, to determine how they conduct economic dispatch. These reviews could document the rationale for all deviations from pure least-cost merit order dispatch and distinguish entity-specific and regional business practices from regulatory environmental and reliability-driven constraints.

Anyone?

MR. FLYNN: Next: Standardize contract terms. Recommended that FERC and DOE explore electric power association, also known as EPSA, and Edison Electric Institute, otherwise known as EEI, proposals for more standard contract terms and encourage stakeholders to undertake these efforts.

Any comment on that?

COMMISSIONER BROWNELL: I certainly can't speak for my colleagues. But I would suggest that we're happy to do that, maybe if it merits convening either a small working group or a technical conference, and maybe make a recommendation back to the regions, if that's desirable.

MR. FLYNN: If you're waiting for me, I would take you up on your offer.
COMMISSIONER BROWNELL: So if our chairman throws me off the bridge because we're EPActing full-force, I'll get back to you.

MR. FLYNN: Or you could have him call me.

Review dispatch tools. Review common economic dispatch technology tools. These tools include software and data to be used to implement economic dispatch as well as the underlying algorithms and assumptions.

I have a question here. How would we go about doing that review?

COMMISSIONER BROWNELL: My own view is you'd have to ask the ISOs to do that, maybe using DOE as an arbiter or getting some independent contractor who is familiar with that.

My recollection of the discussion was that there may be different algorithms being used in the ISOs, and that in and of itself may be causing some barriers to entry. I remember asking Gordon if we should perhaps standardize -- knowing absolutely nothing about this, if somehow we should look at standardize this. He agreed that that might be a good idea.

But my suggestion would be to charge the ISOs to perhaps come up with some recommendations. Whether or not DOE is the appropriate resource, we can certainly ask them.

MR. FLYNN: I, too, like you, know little about this, if anything. But my thoughts on this are if you have the
ISOs review it, this is the type of review that they look at it and they say 'we've reviewed it; we already knew it; we knew what was in the software; it could be better but it is what it is,' as opposed to some more critical review that does possibly standardize things and that has constructive criticisms of the tools that they have in place right now.

Maybe there won't be -- a third party, whether it be DOE or an outside contractor, would make more sense to me than putting the ISOs in that spot of looking at themselves.

COMMISSIONER BROWNELL: I agree. It's never a good idea to have the children give themselves homework assignments.

(Laughter.)

MR. FLYNN: And it's not fair to them. If we ask them to do that then they're open to immediate criticism for whatever they find. So I don't know exactly what that vehicle would be to do it. But I think that would be the better way to go.

I do believe, just in talking with Mark and the leadership out at the New York ISO, I have grown to much more respect the software that they use in conducting their business. It's an area that people kind of take for granted when it should be right up there on the priority board.

COMMISSIONER BROWNELL: I agree.

Software is the biggest single driver of costs. I
think that history will show that having not set out for standardization -- God forbid, I'm not going to talk about SMDs -- that in some cases we built proprietary systems or amended off the shelf systems in a way that may not be maximizing the benefit, and also may be making transparency and measurements a little bit more difficult. I don't think that's necessarily the purpose, although there are some who say that have all been captive to a few vendors. And whether that's true or not, I think it does bear looking at.

My suggestion is we could ask DOE -- either make the recommendations and in the interim ask DOE what the best independent resource would be and whether they could be involved. I still think this is one of those hidden things. I don't know if anybody on our Staff -- like Hari, who actually understands this -- has any thoughts on this.

MR. SINGH: The last three recommendations were from the DOE report. But when we went to the transcript there was, by Gordon Van Welie, for example, that there are new technologies that the ISO New England has been evaluating, like mixed integer program, that PJM recently implemented. It supposedly does a better job than what was being used before. Gordon said this is in the R&D phase. They're looking at it from a longer term time horizon.

I think those are the kinds of examples of improvements in algorithms that if you had somebody else look at it they
could give you an objective feedback.

MR. FLYNN: Great.

So it seems like some of the homework has already been done. So that's great. Thank you.

COMMISSIONER BROWNELL: I know that I volunteered for nothing because the word algorithm is in it.

(Laughter.)

MR. GETZ: I think there's another one of those issues.

Harking back to Commissioner Brownell's opening remarks, we need to kind of exercise some discipline about how deeply we're going to delve into some of these issues. I think we've got a very narrow charge under the Act. And if you look at some of what was said in the DOE report, they're entering this issue at the level of are non-utility generators being treated appropriately.

In New England and New York we have a highly developed security constrained economic dispatch. So I think some areas clearly are areas where refinements are possible. But these are the areas we're talking about now.

I think they're all very valid recommendations. But I think they are issues more to explore than to resolve. I would just be hesitant about expending a lot of effort in delving too deeply. And, of course, these are all areas that are largely being explored already by New England and New York ISOs as participants.
COMMISSIONER BROWNELL: I agree with you, Chairman Getz.

As I mentioned yesterday, the Committee concluded that they would divide their report into different parts: One where they had very firm recommendations or experiences. Then part two, which was things that need further exploration. I think you could probably build on the experience to say this is underway but we think this needs to get looked at. So it doesn't necessarily mean that this group has to undertake it. But I think Congress is also looking for the what-next.

But I agree with you. The discipline -- trust me -- this group should have been there yesterday.

MR. FLYNN: Hari.

MR. SINGH: I just want to add quickly -- Alison just alerted me that in the DOE report this particular recommendation was not focused on the Northeast. This is a more general.

One area that perhaps could be more important would be things like the effects of load forecasts that has perhaps a greater impact on the results than what particular algorithm is used.

MR. FLYNN: Thank you Alison and Hari.

That concludes the recommendations portion of our program. I'm going to turn it back over to you.
COMMISSIONER BROWNELL: Great. Thank you.

Are there any additional recommendations that any of
the members wish to make that perhaps we didn't discuss
fully in Boston or that you've subsequently thought about?

(No response.)

COMMISSIONER BROWNELL: Paul, do you have any
additional recommendations you'd like us to consider?

MR. AFONSO: No. I think the list is a good one and we
can work off that. Thank you.

COMMISSIONER BROWNELL: Great. Okay.

Sledding on the Hill is an option.

Once again, just to follow up, we will now turn this
over to our vice-chairs and the states to coordinate
refinements, drafting. We offer whatever support you need
from us. We look forward to working with you. We will work
out processes for additional comments and reviews. We will,
obviously, as we publish a final report, have a comment
period, I believe, for others to make sure we've covered the
universe.

I would just emphasize to the extent that we had
discussion here today that would lead you to think we need
more data in order to meet the tight timelines -- our
chairman would like this done by May 3rd -- we need to be
disciplined and also recognize that if we're relying on
reports or data from the ISOs, they have their day jobs to
do, as do we. So we don't want to burden them with last-
minute data requests.

MR. FLYNN: I've just been advised that if people are
wondering why we haven't been stating the length of the
comment period, that still needs to be coordinated with the
other boards and it has to be consistent. At the
appropriate time we'll advise everybody how long that period
is going to be, after it's agreed upon by the other boards.

COMMISSIONER BROWNELL: But if we assume that earlier
is better than later, everybody can do that because you've
got some free time now.

(Laughter.)

COMMISSIONER BROWNELL: Everyone can go out and work on
that right now.

(Laughter.)

COMMISSIONER BROWNELL: This is the industry that has
perfected the art of the last day of the comment period
entry. And it just makes it that much more difficult for
the drafters and the reviewers.

I would encourage everyone to pile on early if you
intend to pile on at all.

MR. FLYNN: Thank you.

COMMISSIONER BROWNELL: With that, thank you, everyone,
for your attention and your focus and the hard work that you
did.
Paul, do you have any closing comments?

MR. AFONSO: No, other than I've got too much noise here. But again thank you. And I again apologize that I couldn't be with you. But thank you.

COMMISSIONER BROWNELL: Thank you.

Bill, thank you.

(Whereupon, at 10:50 a.m., the hearing in the above-entitled matter was adjourned.)