FEDERAL ENERGY REGULATORY COMMISSION

Thursday, March 19, 2015

Commission Meeting Room

888 First Street, N.E.

Washington, D.C.20426

The Commission met in Open Session pursuant to notice at 10:00 a.m., when were present:

COMMISSIONERS:

CHERYL A. LaFLEUR, Chairman

PHILIP D, MOELLER, Commissioner

TONY CLARK, Commissioner

NORMAN C. BAY, Commissioner

COLETTE D. HONORABLE, Commissioner

FERC STAFF:

BARBARA BOSE, Secretary

LARRY GASTEIGER, Acting Director Office of Enforcement

JAY ARNOLD QUINN, Director Office of Energy and Innovation

MICHAEL BARDEE, Director, OER

JOSEPH McCLELLAND, Dir Office of Energy Infrastructure Security

DAVID MORENOFF, General Counsel

JAMIE SIMLER, Director Office of Energy Market Regulation

ANNE MILES, Office of Energy Projects

TED GARARDEN, OAL

A P P E A R A N C E S:

OPEN ACCESS AND PRIORITY RIGHTS ON INTERCONNECTION CUSTOMER'S INTERCONNECTION FACILITIES (RM14-11-000)
PRESENTERS
Becky Robinson, OEPI
Brian Gish, OGC
Gabriel Aguilera, OEMR

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (RR15-4-000)
PRESENTERS
Olutayo Oyelade, OER
Jonathan First, OGC

OAL CONTRIBUTIONS TO THE WORK OF THE COMMISSION (AS15-8-000)
PRESENTERS
Diane Schratweiser, OAL
Andrew Schulte, OAL
Christopher Skorksi, OAL
Meagon McComb,OAL

2014 STATE OF THE MARKETS (AD06-3-000)

PRESENTERS

R. Omar Cabrales, OE

James Burchill, OE

Ryan Stertz, OE

ITEMS FOR DISCUSSION AND VOTE

CONSENT ELECTRIC

E2, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15 AND E20

CONSENT HYDRO

H1 and H2

CONSENT CERTIFICATES

C1, C2 and C3

DISCUSSION ITEMS

E1, E3, A4 and A3

STRUCK ITEMS

None.

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P R O C E E D I N G S

THE SECRETARY: The purpose of the Federal Energy Regulatory Commission's open meeting is for the Commission to consider the matters that have been duly posted in accordance with the government and the Sunshine Act.

Members of the public are invited to observe which includes attending, listening, and taking notes.

But it does not include participating in the meeting or addressing the Commission.

Actions that purposely interfere or attempt to interfere with the commencement or conducting of the meeting or inhibit the audience's ability to observe or listen to the meeting including attempts by the audience members to address the Commission while the meeting is in progress are not permitted.

Any person engaging in such a behavior will be asked to leave the building.

Anyone who refuses to leave voluntarily will be escorted from the building.

Additional documents presented to the Chairman, Commissioners, or staff during the meeting will not become part of the official record or any Commission proceeding nor will they require further action by the Commission.

If you wish to comment on an ongoing proceeding before the commission please visit our website for more information.

Thank you for your cooperation.

(Whereupon there was a disturbance not recorded as part of this official record.)

CHAIRMAN LaFLEUR: The audience has been noticed for the open meeting of the Federal Energy Regulatory Commission to consider the matters that have been duly posted in accordance with the government and the Sunshine Act. Please join me in the Pledge of Allegiance.

(After the Pledge, there followed another disturbance and on resuming on the record.)

CHAIRMAN LaFLEUR: Thank you for your patience. We are getting started a couple minutes late, but we do have a very full agenda this morning.

The Commission has issued 74 notational items since the February open meeting, and February is a short month, so I recognize that that is a lot of work and I want to thank all of my colleagues and staff for their efforts.

Not only do we have a full discussion agenda today, but a number of important items on the consent agenda.

In today's items, the Commission addresses a number of proceedings related to the New York ISO market.

Civil proceedings concerning utilities formula protocols and hydro certificate items.

I want to particularly note that we are issuing two more Order 1000 compliance orders including the second round of regional rehearing of the ISO New England Compliance which will be the last of our second regional orders of all of the regions.

Today's order affirms the Commission's prior finding in the first round of regional order that ISO New England must remove certain right-of-first refusal provisions from its governing documents and that the mobile Sierra Doctrine does not preclude the removal of these provisions.

Although we do not reach consensus on that aspect of the order, I want to thank my colleagues for their work on it.

Before we return to the consent agenda, I want to take a moment to recognize one of the truly outstanding employees at the Commission and that is Anton Porter, the Commission's executive director who is responsible for many of the day-to-day behind-the-scenes work that keeps everything we do running.

I do not have time to enumerate all of Anton's accomplishments, but just a few.

Due to through all of the cliffs and crises of the federal budget of the last few years, we are one of the few agencies that has never had to furlough an employee, missed a day of work, and our employees have never missed a paycheck even during the sequestration because Anton managed to make it all come out okay.

He has overseen our ongoing efforts to ensure the security of the agency and its employees including working with our wonderful security staff, Federal Protective Services, and the DC police.

He had a lead role in the Commission's response to the Department of Energy Inspector General inquiry due to his oversight of both security and classification protocols as well as information technology including the ongoing development of efforts to respond to the Inspector General inquiry by changing our processes.

In the last several months everyone knows we had a lot of retirements and changes in senior staff and Anton and his team have worked on that process and the most thankless task of all, Anton is spearheading the Commission's organization efforts which will take place over the coming years.

Anton is basically the chief operating officer of

the Commission. He is unflappable, a pleasure to work with, and he has been a wonderful asset, so it is my honor to call him forward to receive the Exemplar Public Service Award.

How can you follow that? That is all I have, so I will turn it over to Commissioner Moeller.

COMMISSIONER MOELLER: I don't have any comments. Thank you.

COMMISSIONER CLARK: Congratulations Anton, of course, well-deserved. Just a staff announcement I am making today.

I will be losing one of the first advisors that I hired when I came on the Commission shortly.

Nick Tackett who has been with me almost from day one on the Commission here is my technical adviser and he is going to be moving to the Office of Energy Projects, OEP, in the front office working on hydro applications.

Now a little bit of background on Nick. People may assume, most of you who have worked with him, and know Nick, that he has maybe it's a Ph.D. or a Master's degree in economics behind him because he is so smart on economic regulation and on market type issues that it might actually come to surprise people that this is not his first love.

He actually has a degree in ecology and biology and environmental sciences and, in fact, I went back, I was looking this morning and I found Nick's original resumes that he submitted when I was hiring him and I actually wrote on there Econ? Engineering?

I recall talking to Phil who he had been on detail with prior to serving in my office, I said, "Everybody tells me these great things about him," that he is kind of a genius on PJM tariff, but I notice these degrees in biology and ecology, and I said, "Does this all match up?" and he said, "Trust me, he will be great. Don't worry about him."

He was right and he has been great from day one. He has been a tremendous asset to my office and I would say also to the 11th floor. He is one of those key folks who just is always right in the middle of negotiations between the offices and oftentimes is one of those folks who can bring people together.

Nonetheless, he is in a very good position in OEP and became available to him as we were talking in the last few months, he said, "Really, ecology and biology, it's my first love. It's what I was trying to do. It's what I really enjoy doing."

It amazes me that someone could find fish more interesting than the PJM tariff, but apparently it's

true.

Nick is going to be with me through the end of the month, but before the next meeting will be moving down there.

Congratulations to Nick and thank you for all the work you have done.

At the same time, I would like to welcome up Nick's replacement who is going to be joining us on detail.

John Miller is currently a market analyst with the Division of Analytics and Surveillance. He has been here at the Commission for a few years. He has got degrees in history and economics from the London School and prior to that is it Penn State?

GW. That's right. We have so many Penn Staters walking around this building, I just assumed they are all from there.

So from GW. John prior to that was in the industry was in the private sector was an industry market analyst, so he brings a deep knowledge of the markets as well and I look forward to working with John.

Thank you.

CHAIRMAN LaFLEUR: Thank you, Tony. Commissioner Bay.

COMMISSIONER BAY: I too wish to congratulate Anton Porter for his outstanding work as the director of OED and for receiving a very well deserved award.

COMMISSIONER HONORABLE: Thank you and good morning. I too would like to echo the sentiments expressed regarding our fine executive director Anton Porter.

When people ask me how has my transition been, I would say that it has been spectacular and quite frankly better than I could have ever expected.

Certainly in part due to kindness and hospitality of the Chairman and my colleagues on the Commission but due in very very large part to the man that we are acknowledging today and commending for his fine service.

Executive Director Porter is the consummate professional. He works with the spirit of excellence and he will handle any task no matter how great or small.

It has been just a pleasure to work with you, director, and I join my colleagues in commending you today.

Also I want to congratulate Nick and I agree that we have certainly seen his impact on the 11th floor and will be greatly missed and welcome John.

With regard to administrative matters in my suite,

I have mentioned to you that I hired Eman Honig, so I am putting him on the spot. Stand up Eman so they can see you.

Eman, he has been in and around, but I do not think that I have announced his arrival during an open meeting.

Eman is from Arkansas so he is a fellow Razorback and he comes from the Arkansas Attorney General's Office where he worked as a consumer utility rate advocate.

He will keep me firmly at my roots and all things consumer.

Thank you, Eman.

Also of note. One joke that I made he went to both Tulane and Duke and I know that I have really grown to hire Duke graduates.

Welcome, Eman, he has jumped right in and it has really been great to have him.

I would like to also mention to you another spectacular hire if I might say so myself, Lott Thormeyer will join us on March 30th from NARUC, the National Association of Regulatory Utility Commissioners where he has been director of Communications and he has worked there for eight years.

I have known him for about seven of those years

and I have worked very closely with him both with regard to my tenure as a state commissioner and last year as president of NARUC, and so I told Commissioner Clark, I took a page out of his book and looked toward NARUC for help.

He will handle both scheduling and also communications from my suite. I hope that you will welcome Robin.

Thank you.

CHAIRMAN LaFLEUR: We have a makeup call here.

COMMISSIONER MOELLER: I do not want to be one who does not say something good about Anton Porter because he not only is consistently pleasant and hard working but also cool under pressure and greatly deserves this award.

Thanks to all of you who do make our lives a tad easier and saying goodbye to Nick who we will miss.

He has been a great American working for the American public on the 11th floor, a little bit for me, but a lot for Commissioner Clark and welcome the new additions that we look forward to working with over the next few months and years.

CHAIRMAN LaFLEUR: Thank you. Madame Secretary, I think we can move on to the Consent Agenda.

THE SECRETARY: Good morning, Madame Chairman,

good morning Commissioners.

Since the issuance of the Sunshine Act Notice on March 12, 2015, no items have been struck from this morning's agenda.

Your consent agenda is as follows.

Electric Items. E2, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15 and E20.

Hydro Items, H1 and H2.

Certificate Items, C1, C2 and C3.

As required by law, Commissioner Honorable is not participating in consent Item E5.

As to E4, Commissioner Moeller is dissenting in part with a separate statement.

As to E4, Commissioner Clark is dissenting in part with a separate statement.

As to E20, Commissioner Bay is concurring in part and dissenting in part with a separate statement.

We will now take a vote on this morning's consent agenda items.

The vote begins with Commissioner Honorable.

COMMISSIONER HONORABLE: Thank you, Madame Secretary. Noting my recusal on E5, I vote aye.

COMMISSIONER BAY: Noting my partial concurrence and dissent in E20, I vote aye.

COMMISSIONER CLARK: Noting my dissent in part on E4, I

vote aye.

COMMISSIONER MOELLER: Noting my dissent in part on E4, I vote aye.

CHAIRMAN LaFLEUR: I vote aye. So we can move to the discussion agenda.

THE SECRETARY: Thank you, Madame Chairman. The first item for discussion and presentation this morning is E1 concerning a draft final rule on open access and priority rights on Interconnection Customers Interconnection Facilities.

There will be a presentation by Becky Robinson from the Office of Energy Policy and Innovation.

She is accompanied by Brian Gish from the Office of the General Counsel and Gabriel Aguilera from the Office of Energy Market Regulation.

MS. ROBINSON: Good morning, Chairman and Commissioners. E1 is a draft final rule on open access and priority rights on Interconnection Customers Interconnection Facilities.

These facilities are often referred to as generator lead lines or generator tie lines and are generally constructed to enable one or more generating facilities to transmit power to the integrated transmission grid.

Interconnection customers with these facilities

often request certain transmission tariff waivers and the Commission routinely grants such waivers.

However, in a series of recent cases issues have arisen regarding the extent to which if at all third parties should be able to have open access for transmission on these facilities.

In these cases the Commission has required the Interconnection Customer to provide open access transmission service over its facilities, but has also given Interconnection Customer an opportunity to reserve excess capacity on these facilities for its own future use provided it adequately demonstrate its plans to use such capacity.

While the Commission has processed scores of requests for transmission tariff waivers in recent years on these facilities a third party has only requested service and this required Interconnection Customer to file a tariff in only four instances total.

Following a notice of proposed rulemaking in May of last year as well as a technical conference, a notice of inquiry and informal industry outreach the draft final rule finds that the Commission's policies of treating Interconnection Customers Interconnection Facilities the same as other transmission facilities for OATT purposes including the requirement to file an

open access transmission tariff following a third-party requests creates an undue burden for the Interconnection Customer without a corresponding enhancement of access given the Interconnection Customers typical ability to establish priority rights.

As such the draft final rule finds that the Commission requirements for achieving not unduly discriminatory access over Interconnection Customers Interconnection Facilities should be reformed to reduce regulatory burdens and promote developmental generating facilities while continuing to ensure open access to transmission facilities by eligible transmission customers.

The draft final rule largely adopts the proposed rule. The draft final rule would first give a blanket waiver of the open access transmission tariff open accessing time information system and standards of conduct requirements to any public utility that is subject to such requirements solely because it owns, controls, or operates Interconnection Customers Interconnection Facilities.

Second, the draft final rule finds that those seeking service over Interconnection Customers Interconnection Facilities may follow procedures applicable to requests for interconnection and

transmission service under Sections 210, 211 and 212 of the Federal Power Act.

And third, the draft final rule would establish a five-year safe harbor period during which there would be a rebuttable presumption that it is in the public interest for an entity subject to the blanket waiver to preserve use of any excess capacity on its Interconnection Customers Interconnection Facilities to serve its own or its affiliates future phase generator additions or expansions.

The draft final rule also modifies certain elements of the proposed rule by broadening the defined set of facilities to which the reforms apply establishing a means to extend the reforms to a broader defined entities clarifying that the reforms will apply to separate generation affiliates of public utility transmission providers modifying the date on which the safe harbor begins and removing the rebuttable presumption for expansion during the safe harbor.

This concludes our presentation of E1 and we are happy to answer any questions you may have.

CHAIRMAN LaFLEUR: Thank you so much, Becky, another fine Moeller alum, Brian and Gabe for your work on this order.

One of the things I say all the time is that the

Commission has an obligation to keep track of the trends that are happening in our work and when we see an opportunity to change a protocol to provide more regulatory certainty and regulatory efficiency we should do so and I think today's draft final rule is a good example of that.

This is a significant step forward to change the presumption so that we don't have dozens of long orders going out saying exactly the same thing that we grant a waiver from the old and come back if you want access.

We will still find a way to provide access but without having all of that repetitive bureaucracy.

I also appreciated the change that was made in the draft, to the rebuttable presumption where an applicant for transmission service seeks and is willing to pay for expansion of the lead line.

That is a good change and I am happy to support this order.

Colleagues?

COMMISSIONER MOELLER: Thank you Chairman LaFleur. I thank you for the team and thank you, Ms. Robinson, for your presentation.

It shows the value of NOPR when we have the time to do it because we propose something and we came back with several changes based on the technical conference

and the comments that were filed.

Do you care to elaborate a little bit more on the differences between the final rule and the proposed rule?

You did mention them briefly, but just how the process played out as we went through it.

MS. ROBINSON: Sure, and I will let my colleagues jump if they notice important things that I forget.

We do get a lot of comments in response to the NOPR and that was very helpful for us to sort through how to implement the changes that we had talked about.

The final rule largely follows that the proposed rule, but we did make some tweaks so there was an issue of we want the Sections 210 and 211 a way to provide access to third parties even though we are doing a blanket waiver and for Section 210 to apply, as I am looking at my lawyer, you have to be an electric utility which means you have to sell electricity and sometimes we see a generation develop, we see owners of these facilities and they use separate corporate structures so they don't always, the person who owns the lead line does not always sell electricity and on the final rule we were able to establish a means to apply their forms even to those entities which is nice when you feel like you find a way to get to a right

answer because we did not have a good reason for not applying it to them except that we want to ensure that there is a backstop.

COMMISSIONER CLARK: No questions for the team, but thanks for your work and I am happy to support today's order.

COMMISSIONER BAY: My thanks to the team as well. I am pleased to support the today's final rule.

In my view it reduces unnecessary regulatory burden and while supporting the development of new generation it has to tie into the integrated transmission grid.

Thank you.

COMMISSIONER HONORABLE: Thank you and for the reasons as stated by my colleagues I too am supportive of this order and very pleased of the work of the team in a way that allows our work to reflect what needs to occur in the industry both with regard to reducing burden and creating more efficient systems and also encouraging and supporting infrastructure development with the establishment of the five-year safe harbor rule.

Thank you.

CHAIRMAN LaFLEUR: Madame Secretary.

THE SECRETARY: We will now take a vote on this item. The vote begins with Commissioner Honorable.

COMMISSIONER HONORABLE: Aye.

COMMISSIONER BAY: Aye.

COMMISSIONER CLARK: Aye.

COMMISSIONER MOELLER: Aye.

CHAIRMAN LaFLEUR: Aye. Thank you.

THE SECRETARY: The next item for presentation and discussion this morning is Item E3 concerning a draft order addressing the Electric Reliability Organization Risk-Based Registration Initiative.

There will be a presentation by Olutayo Oyelade. He is accompanied by Jonathan First from the Office of the General Counsel and Olutayo is from the Office of Electrical Reliability.

MR. OYELADE: Good morning, Chairman and Commissioners.

Item E3 is a draft order approving in part and denied in part the North American Electric Reliability Corporation's, or NERC's Risk-based Registration Initiative which is intended to ensure that entities are registered and made subject to the reliability standards based on the risk they pose to reliability.

NERC explains that it is transforming its approaches to compliance and enforcement to be forward-looking with a focus on high reliability risk areas.

It states that the ERO compliance program and its stakeholders will benefit from the proposed registry changes as they appropriately focus resources on entities with greater potential impact on reliability.

Additionally, NERC explains that the proposed changes are consistent with the underlying goal of the definition of the Bulk Electric System which is to provide transparency and consistency in the identification of elements and facilities that make up the Bulk Electric System.

Under the Risk-based Registration Initiative, NERC proposes to modify the compliance registry process in four primary ways.

First, NERC proposes to remove load-serving entities, purchasing-selling entities, and interchange authorities as functional registration categories.

According to NERC the activities of these entities are commercial in nature and their removal from the registry poses little or no risk to reliability.

NERC further states that the entities have not caused or exacerbated events or system disturbances that jeopardize reliability of the grid.

Nearly all violations involving these entities posed a minimal actual risk to reliability and the vast majority posed a minimal potential risk.

Second, NERC raises the threshold for registering entities as distribution providers from 25 MW to 75 MW and to align the directly connected language with the definition of Bulk Electric Systems 75 MW threshold NVA threshold for certain generating resources.

NERC also proposes changes to the NERC rules of procedure that explicitly allowed NERC to provide a subset list of reliability standards to distribution providers that meet no other distribution provider registration criteria, but own, control, or operate underfrequency load-shedding protection systems needed to implement the required underfrequency load-shedding program that protects the Bulk Electric System.

Third, NERC's proposal would align five functional registration categories with the definition of the Bulk Electric System.

NERC explains that these revisions will assure consistency in the identification of elements and facilities that make up the Bulk Electric System.

Fourth, NERC proposes several additional procedural changes to its registration process, namely, one, the establishment of a materiality test for registration which delineates the procedures and criteria for evaluating whether an entity has a material impact on reliability.

Two, a process for review of certain registration, deactivation and deregistration decisions as well as certain requests for subset lists of reliability standards.

Three, the development of a common registration form to facilitate uniformity in the regional entity collection of the information from registration candidates.

And four, one-time attestations that allows entities to record that a specific reliability standard requirement is not applicable.

According to NERC, collectively this proposed procedural improvements provide additional clarity and transparency to the registration requirements, roles, and responsibilities.

While approving most aspects of NERC's Risk-based Registration proposals, the draft order denies without prejudice the proposed elimination of the load-serving entity function and directs NERC to submit a compliance filing to provide additional information regarding how certain load serving entities reliability tasks will be performed going forward.

In addition, the draft order directs NERC to include reliability standard PRC-005, which pertains to transmission and generation protection system

maintenance and testing as applicable to underfrequency load-shedding only distribution providers.

The draft order also requires NERC to provide additional information filing on the implementation of the program.

This concludes our presentation and we will be happy to take any questions.

CHAIRMAN LaFLEUR: Thank you, Olutayo and Jonathan. I am enough of a reliability geek that I am excited to have this highly technical order on the agenda this morning.

It really represents another significant step in the evolution of our work on the mandatory reliability standards.

It represents the next steps in the process that NERC has been driving of changing its focus to the highest risk threats to reliability so that it can put his money and his resources that will most help customers and streamline some of the lower-risk proceedings, but at the same time in builds in the transparency and accountability with the changes that we put into the order to make sure that we can do our job to make sure that compliance and enforcement is being properly carried out.

I note also that this is the latest chapter in the

long-running Bulk Electric Systems saga that has been going on for the last five years and now takes the importance step of conforming the registry, registered entities, to the new rules of what constitutes a bulk electric system.

I have a couple questions. It would be helpful if you could elaborate a little on the nature of the approximately 200 entities that will be released from registration under this order.

MR. OYELADE: Thank you, Chairman. Based on NERC's analyses, the 200 entities are largely those that have been determined by NERC as having little or no material impact on reliability based, one, on their size, and secondly, under the nature of tasks that they perform.

Specifically this would be distribution providers which certain load less that is less than 75 MW or entities that perform larger commercial functions such as purchase-selling entities.

CHAIRMAN LaFLEUR: My understanding is that there are a lot of municipal distribution companies that have had a minimal involvement in the bulk electric system will now be aided by this rule.

MR. OYELADE: For the most part, yes, the less than 75 MW distribution provided to small entities.

CHAIRMAN LaFLEUR: I am also interested if you can provide a little more detail on why we denied NERC's proposal with respect to the LSE, the load-serving entity function and ask them to submit more information on that.

MR. OYELADE: The proposed elimination of the load-serving entity function does not remove the need to provide certain reliability data.

Finding makes it unclear as to how those informations will be obtained in all cases if the load-serving entity function is eliminated.

For example, the filing notes that there are 14 load-serving entities that would be deactivated or deregistered because they are not registered for any other function in the NERC compliance registry.

Out of the fourteen, six of them are registered in TRE and the finding notes that those are subject to market rules that continue to place them under the obligation to provide the information needed.

But the remaining eight, it only makes a general statement as to how the information would actually be obtained going forward.

We have asked in the draft order that NERC actually provides additional information that actually closes some of those kind of gaps to identify

mechanisms for ensuring that the information that are needed for reliability would continue to be provided and by which entity as the load-serving entity functions are deactivated.

That is just one example.

CHAIRMAN LaFLEUR: Thank you. Thank you to you and to Director Mike Bardee for your careful work on not just this order, but the long process that led up to it.

Colleagues?

COMMISSIONER MOELLER: Let me associate my comments with yours that this is a significant step in the evolution of reliability that arguably started with the 1965 Black Out, the voluntary rules that were created in the late 1960s, the recognition that voluntary rules do not work anymore in the late 1990s and eventually through the 2005 Energy Policy Act, the direction that we should endorse on electric reliability organization.

It has not been that long that we have had mandatory rules since 2006, and so in that sense we have heard a lot about the burdensome nature of it.

I also point out that it has been relatively effective, but like any new creation it has its challenges and today we try and address some of those concerns with the balance of easing the regulatory

burden where appropriate but maintaining the fact that we still need to be on top of reliability issues in order to protect the American consumers.

I am happy to support today's order.

CHAIRMAN LaFLEUR: Thank you. We will not take a poll on where people were in the 1965 Black Out. It might be difficult for some of our Commissioners.

COMMISSIONER BAY: Thanks to the team for all your work on this over the pendency of the case.

Let me put this in the broader context of risk analysis in mitigation across many industries and it is pretty clear that this is the trend that most industries are moving towards whether it is the medical field or the transportation field in regard to airline safety or a whole host of other industries moving away from the "check the box," sort of audit compliance towards a more risk-based analysis in which most of the time and effort is focused on the big ticket items that really assure in this case reliability of the electric grid is the trend across industries and this is true here.

It is not an easy change to make, however, as we now say there is a great culture shift in addition to just the rules of the world that have to take place.

I commend not only our staff, the members the

team, Mike, you and your team, and others who have worked during the agency on it, but also for the efforts of NERC as they have gone about implementing this change in culture and the attendant rules that go along with it.

It is a big change, but it is a very important one and as the Chairman said it is one more step in the evolution towards a more risk-based analysis.

Thank you.

CHAIRMAN LaFLEUR: Thank you. And Commissioner Mr. Clark. Another Commissioner Bay, even though I called you Commissioner.

COMMISSIONER BAY: I want to thank the team for their hard work on this order, and second, I want to say that I am pleased to support risk-based registration for the reasons cited by the Chairman, Commissioner Moeller and Commissioner Clark.

It is important to note however that the Commission has now approved both the reliability assurance initiative, or RAI, and risk-based registration, or RBR.

The Commissioners has done this because of NERC's representation that both measures will enhance reliability.

In my view it is now incumbent upon NERC having

received the approval from FERC for both of these programs to show that reliability in fact is being enhanced.

That certainly is our hope and our expectation and I look forward to hearing from NERC going forward on whether the programs are working as intended and improving reliability.

Thank you.

CHAIRMAN LaFLEUR: Thank you. Commissioner Honorable?

COMMISSIONER HONORABLE: Thank you. I would like to thank the team for your hard work and I especially look forward to this work continuing.

It has been a very significant evolution in this work and I am really delighted to be a part of it and to support this order today.

Also I have long supported as Commissioner Clark, this work as it is occurring as we are evolving and getting smarter about these things in a number of industries.

We certainly have to in the energy sector. There is an old saying, "When you know better you do better."

And I think that as we are learning we are growing and becoming more efficient and smarter in a way that we carry out this work.

Then the way that NERC will carry out this work. Not in the way that would let anyone off the hook, but is very measured and practical and thoughtful by pursuing risk-based approaches.

I also am very supportive of the focus continuing on transparency which instills confidence and integrity in the process, so thank you very much.

CHAIRMAN LaFLEUR: Thank you, and Madame Secretary?

THE SECRETARY: We will now take a vote on this item and the vote begins with Commissioner Honorable.

COMMISSIONER HONORABLE: Aye.

COMMISSIONER BAY: Aye.

COMMISSIONER CLARK: Aye.

COMMISSIONER MOELLER: Aye.

CHAIRMAN LaFLEUR: Aye. Thank you.

THE SECRETARY: The next item for presentation this morning is Item A4, the Office of Administrative Litigation will provide briefing on its contributions in support of the Commission's overall goals and objectives.

There will be a presentation by Diane Schratwieser, Christopher Skorski and Andrew Schulte and Megan McComb from the Office of Administrative Litigation. There is a Power Point presentation on

this item.

MS. SCHRATWIESER: Good morning, Madame Chairman, Commissioners.

The Office of Administrative Litigation, or OAL, appreciates this opportunity to address the Commission about our work supporting the Commission's statutory obligation to assure just and reasonable rates and terms and conditions of service.

Virtually all of OAL's work is performed under the separation of the functions rule, so today's presentation will necessarily be general in nature and will not address substantive matters or individual cases.

OAL settles or litigates disputes that the Commission has set for hearing and or settlement procedures.

These usually involve tariff filings by utilities or pipelines or complaints by customers that raise complex issues about the rates utilities and pipelines charge or the terms and conditions of service provided to their customers.

We pursue outcomes that produce just and reasonable rates that are consistent with Commission policy and that fairly reflect the interests of all stakeholders.

We thank you for this opportunity to share with you and the public some information about our work and we look forward to your questions.

In 2014, the Commission set for hearing and or settlement procedures 52 electric cases, six natural gas pipeline cases, and five oil pipeline cases, 63 cases in all.

This slide focuses on the electric cases. Of the 52 new electric cases 15 were related to transmission service and rates, 9 to RTOs, 8 to requirement service or production, 8 ancillary services, 8 to complaints about the rate of return on equity, and for various other matters.

The gas pipeline cases primarily involve Natural Gas Act Section 4 rate filings.

Three of the five oil pipeline cases were complaint cases and the other two were rate filing investigations.

In addition to the 63 new cases assigned in 2014, OAL continued work on 63 cases that began in prior years.

As this slide shows electric cases comprise the majority of our cases.

Of the 126 active cases last year, 100 were electric cases, 14 were natural gas pipeline cases, and

12 were oil pipeline cases.

This slide shows the trend of new cases in recent years. For example, following the issuance of the Martha Coakley decision last year, we have experienced an increase in rate of return cases largely from complaints that have been set for hearing.

As you can see by this slide OAL staff consists of technical experts who conduct analyses and present evidence at hearings; trial attorneys skilled in administrative litigation, and litigation support and administrative staff.

When the Commission issues a hearing order, OAL assigns staff members to the case who have expertise in the specific topics addressed by the order.

This next slide illustrates the areas of expertise of our technical staff.

These areas include finance, depreciation, accounting, engineering, economics, cost of service, and cost allocation and rate design.

Many staff members are cross-trained in more than one discipline and the slide indicates the variety of issues we address in our cases.

I would now like to turn the presentation over to Chris Skorski to discuss how we go about our work.

MR. SKORSKI: Thank you, Diane.

One of OAL's main functions is to promote settlement of complicated disputes in ways consistent with Commission policy.

Settlements resolve cases more quickly than litigation, allow each party to gain from the process and conserve the resources of the parties and the Commission.

We analyze relevant data Commission precedent and apply our knowledge and negotiation skills to present staff recommendations and to help the parties who often are working with a settlement judge to reach agreement.

For parties with limited resources, OAL is a crucial source of information and expertise.

For sophisticated parties, OAL's independent analyses and advice provide a valuable aid to achieving settlements.

Typically, we help parties settle more than three quarters of the cases that the Commission sets for hearing and or settlement.

The Commission is responsible for ensuring that rates, terms, and conditions of jurisdictional service are just and reasonable and not unduly discriminatory or preferential.

Consistent with that responsibility the OAL's role is not to pursue the lowest rate in each case, but

rather a rate that fairly reflects the needs of both the company and its customers.

Commission approved settlements last year resulted in $338 million in savings for customers in 2014 alone.

These savings were comprised of $76 million of refunds or one time savings, and $262 million of forward-looking rate reductions or annual savings which will continue in 2015 and beyond.

Cumulatively, for the six years from 2009 through 2014, Commission approved settlements have resulted in a total of $6.5 billion in savings to wholesale customers.

This bar chart is a bit busy, but by following its collar key one can see the benefits occurring in each year including one-time savings in each year and continuing annual savings from previous years settlements that remain in effect during the subsequent year or years.

To put $6.5 billion figure into context rate reductions in settlements on average reduced filed rates by approximately 10%.

The settlement rates thus balance the companies' needs for adequate revenue to provide service to their customers with the customers' interests in avoiding excessive rates.

Not all cases settle. In such cases our role for making proposals and being a facilitator and resource for the parties to being a litigator advocating specific outcomes, outcomes that are guided by Commission policy and that fairly balance the companies' and the customers' interests.

In this role we engage in pretrial discovery, filed prepared direct testimony, then conduct cross-examination at the hearing.

We strive to apply Commission policy to the facts and circumstances of the case, build a complete hearing record and then file a third brief to assist the presiding judge and on exceptions the Commission.

The colored text in this slide highlights the stages of litigation in which OAL is active.

Ultimately, the Commission's decisions prove OAL's staff with further guidance to apply in future cases.

For the most part we separately from the Commission's advisory staff and the separation of function's requirements are carefully observed by all Commission staff members.

OAL's expertise is at times called on in other contexts. Where appropriate under the rules, OAL's staff expertise is available to assist the Commission.

This concludes OAL's presentation. We will be glad

to answer any questions you may have.

CHAIRMAN LaFLEUR: Thank you all and thank you everyone in the Office of Administrative Litigation and to Ted Gerarden who has joined us at the table for his leadership of the office.

Because the office of Administrative Litigation of necessity works in a somewhat separate sphere from the decisional work of the Commission we do not often have an opportunity to recognize your critical work in support of the Commission's mission and helping electric and gas customers and oil customers across the nation including in their pocketbook. I really appreciate the important work that you do both resolving material disputed issues of fact that we need to be resolved so we can make our decisions and also helping actually to achieve a negotiated settlement of contentious cases so that there can be certainty and people can move on.

I am interested in having you elaborate as you take stock of where you are. I saw the workload chart and so forth.

What do you think will be the biggest challenges that OAL will be facing in the coming year?

From the deck, Mr. Gerarden.

MR. GERARDEN: If I may? OAL's approach of

applying Commission policy to cases is set for hearing to arrive at results that are consistent with that policy, but it is being challenged by significant changes in the physical and financial environment in which utilities and pipelines operate.

This includes things like changes in the location of volumes of gas production and increased demand for gas as a generating fuel and changes in financial market conditions in merger or in acquisition activity.

Where a case presents unusual or difficult facts OAL sees its role as presenting testimony that will make recommendations as to how to best apply existing policy to those facts.

We do expect that with various changes that are happening in the industry, that future cases are going to be a good test of our ability to be creative in assisting the judges on the Commission.

There is another area that is a challenge for OAL also and that has to do with staffing, although we have recently begun hiring talented new staff, fully half of OAL's staff load is eligible for retirement, but we face a significant challenge in managing knowledge transfer as highly experienced and capable staff members retire particularly given the substantial caseload that we face now.

It is a priority in the office to work on knowledge transfer and anticipate these changes over time.

CHAIRMAN LaFLEUR: Thank you. I know that is a phenomenon across many industries as the baby boom retires, but given the work that you do and all the different specialties that it takes to do it, I appreciate your work to replenish and hire.

Also as the cases become more complex in the way you described, it is important that we continue to look at the disciplines that you have represented and what is needed.

COMMISSIONER MOELLER: Chairman LaFleur, thanks for calling this item for the presentation highlighting this as part of the agency that has a somewhat unique role and sometimes because you are located down the street you will be a little bit out of sight out of mind, but obviously very important excellent presentation from your team, and knowing the challenges of being a manager and the federal agency, in any federal agency, appreciates that you have kept us constantly informed of where the office is going and we look forward to your continuing to do that in the future.

Thank you.

COMMISSIONER CLARK: Thanks and no questions for the team, but thanks for calling this agenda up.

Ted, if it makes you feel any better you mentioned workforce challenges that you have got.

For those on the Commission we are all eligible for retirement at least once every five years, so I feel your pain.

With regard to the work of OAL, I am really glad that we were able to recognize, and the one thing I have learned over a number of years on the regulatory commission, a Commission's decision is only as good as the record that it has before us, and in the case of FERC where for the most part Commissioners are not sitting first chair and actually developing the record, we are very dependent on the work of OAL in these litigated administrative proceedings to develop a record so that we can issue a good decision.

I felt in my state Commission days if I had presided over a hearing and I ended up with a record that was just kind of a big mess, then you knew that the decision that was going to come out was probably going to be somewhat of a mess so I took it as a failure that we were not able to develop a better record.

My experience here at FERC has been that OAL does

an exceptional job of developing that record for us putting information on the record for us so that we can make sound decisions and appreciate all the work that you do in that context.

Thanks.

COMMISSIONER BAY: I appreciate Ted's leadership of OAL and OAL in my view is one of the unsung heroes of the Commission.

Every time the Commission sets a matter for hearing OAL staff becomes involved as a party to the proceeding and through your participation you help ensure that the public interest is furthered and that rates remain just and reasonable.

Thank you very much for what you do.

CHAIRMAN LaFLEUR: Someone who is contributing to turnover in OAL?

COMMISSIONER HONORABLE: You are stealing my thunder Madame Chair.

CHAIRMAN LaFLEUR: I apologize.

COMMISSIONER HONORABLE: To Commissioner Bay's comments I say amen. I am delighted to hear your presentation this morning and I am delighted in this open meeting acknowledge the wonderful work that you do and certainly with Ted at the helm.

I am such a huge fan with Ted's assent or

acquiescence, I stole one of your colleagues, Fred Wilson, who really has helped me gain a better perspective of the incredible work that you do as a former litigation attorney, I very much understand how labor intense it is and how it is imperative that you have to bring to the table your skills alongside all of the fabulous professionals that you have mentioned, engineers and accountants and depreciation specialists, that is such a beautiful occupation.

MR. GERARDEN: It is an exciting field.

COMMISSIONER HONORABLE: My point is that it takes us all and you all have done that very well.

I am delighted just to acknowledge your work today.

I also want to say, and Commissioner Clark referenced, and I come back to his state, the regulatory base and I miss that up close interaction with the give and take of this process.

It is important in the work that you are doing is important, so I just want to say that to you today as a pat on the back for a job very well done.

It is difficult to balance the particular issues raised, the Commission policy, what is the DC Circuit saying?

What is the Supreme Court saying? I recognize it.

Then we want to go and change our rule every now and then.

Thank you for the nimbleness and the agility with which you work and also the excellence with which you work.

I am also delighted Ted that you mention the issue of work force. It is certainly something that we have been challenged with as an industry, quite frankly on a number of sectors in this country and honestly all over the world.

But I am also pleased with your leadership. You have been very attuned to ensuring that there is a knowledge transfer, that the new team members are getting proper training and that is excellent.

I want to commend you on that as well.

My retirement date will be coming a little sooner than most of my colleagues, two and a half years, and now, take away two months from that.

Thank you all for the work that you do each and every day.

CHAIRMAN LaFLEUR: Thank you so much. We will move on to the next to the Greatest Hits Parade.

THE SECRETARY: Thank you, Madame Chairman. The last item for presentation this morning is Item A3 concerning the 2014 state of the markets report.

There will be a presentation by Omar Cabrales, James Burchill and Ryan Stertz from the Office of Enforcement Division of Energy Market Oversight.

MR. STERTZ: Good morning, Chairman and Commissioners. The Office of Enforcement Division of Energy Market Oversight is please to present the 2014 state of the markets report.

This report is staff's annual opportunity to share our assessment on natural gas, electric, and other energy markets developments during the past year to better inform the Commission and its understanding of current and future trends.

During the first quarter of 2014 extreme cold temperatures stressed the country's natural gas infrastructure and power markets.

U.S. natural gas prices reached record levels resulting in electricity price spikes and after dramatic starts in 2014 natural gas electricity prices were relatively low and stable for the remainder of the year.

Despite low prices through most of this year natural gas production continue to break records.

Oil prices plunged during the second half of 2014 which has implications for both oil and the gas industry activity in 2015 and beyond.

In 2014 there were significant developments in the organized markets with major changes in CAISO and SPP as well as the expansion of MISO.

Electricity markets continue to adjust to a change in generation mix as coal plants retire and new natural gas and renewable generation enter service.

[check] on natural gas prices at Henry Hub averaged $4.32 per million BTU in 2014, 16% higher than 2013.

Prices were on average 14% to 43% higher at key hubs throughout the country with the Chicago Citigate experiencing the highest increase.

Price spikes during the polar vortex events early in the year drove many of the increases with Transcozone Six non-New York reaching $123 per million BTU in January.

All the price begin to moderate in the spring, concerns about low storage inventories kept prices up until early summer.

Prices fell in the fall as storage covered and by late December the Henry Hub price was below $3.00.

The 43% increase in the average price of Chicago Citigate was a result of both high price levels during the harsh winter and the continued reliance on natural gas supplies from Canada.

Canadian prices were 31% higher in 2014 than in 2013 as they recovered from an oversupply condition in 2013.

In addition natural gas demand of the Midwest in 2014 was the highest on record up 3% from 2013.

In contrast the Northeast experienced some of the lowest year in year price increases as the region benefited from growing Marcellus shale supplies.

On the back of the coldest winter in over a decade average U.S. natural gas demand for 2014 reached a new record of 70.7 billion cubic feet per day.

Residential and commercial metric gas demand grew 3% in 2014 while industrial natural gas demand grew 2% as low prices of natural gas and natural gas liquids continue to fuel a renaissance in U.S. industry.

Despite record cold winter however natural gas demand for electricity generation decreased by .5 BCFD or 3% from 2013 levels as the result of the cooler than normal summer.

This chart shows the massive replenishment of natural gas inventories that took place in 2014.

The injection season began in the spring with 822 BCF of natural gas in storage thus the lowest level since 2003.

However, mild temperatures in the summer and fall

and the steady increases in the U.S. natural gas production resulted in market participants injecting almost 2.8 trillion cubic feet during the 2014 refill season nearly 10% above the previous high.

Inventories reached 3.6 TCF by November 1st, the traditional end of the injection season only 5% below the five year average.

By the end of the year inventories stood at 3.2 TCF, 8% above the 2013 levels.

Despite strong natural gas withdrawals early in January and February of this year inventories were 47% above the 2014 levels by March 6.

Assuming average withdrawals between now and the end of March inventories are poised to enter the injection season over half of BCF about the same time in 2014 putting downward pressure on prices going into the summer.

Natural gas production grew 5% in 2014 averaging 68.4 BCFD and breaking records set in 2013.

To shale formations, the Marcellus in Pennsylvania and the Eagle for the Texas accounted for a third of this production increase averaging 14 and 4 BCFD respectively.

Crude oil prices fell from $115 per barrel in mid-June to $53 at the end of December reducing

drilling activity in the latter half of 2014.

However natural gas production continue to climb. There is concern that prolonged low crude oil and natural gas prices could result in slower growth or even in decline in natural part gas production.

However year to date production has consistently remained above 71 BCFD and by the end of February it was on average 6.4% higher than in the first months of 2014.

Backlog of uncompleted wells could also help maintain production levels in the near future and as of the middle of January there were approximately 1,100 uncompleted wells in the Marcellus Region.

With the exception of a few moderate weather driven price spikes since the start of 2015, prices remained relatively low this past winter.

The forward curve at major trading points indicates market participants expect prices to remain low for the rest of 2015.

The exceptions are Boston and New York City where futures prices for December in 2015 through February 2016 averaged $11.61 and $9.00 per million British civil unit respectively due to continued pipeline constraints into these markets.

For the rest of 2015 the forward curve suggest

that natural gas rather than coal will be on the march as it was in 2012 which could lead to increased substitution of gas-fired generation for coal-fired generation this summer.

Falling oil prices made oil fired generation economic when compared to natural gas in New England and New York this past winter.

If oil prices remain at current levels we could continue to see increased use of oil for power generation.

This slide projects growth in natural gas production in the Marcellus and Utica shales in Pennsylvania, West Virginia, and Ohio.

The total Northeast production reached over 19 BCFD in the beginning of 2015 up from 10 BCFD since 2011.

The two lines show the growth in the proposed pipeline capacity. Pipeline expansions have not always kept pace with production growth leading to sub $2.00 prices in parts of the Marcellus Region.

Producers are responding to low prices by contracting for new pipeline capacity to carry incremental production to consumer markets.

The Northeast became a net exporter of natural gas for the first time last summer and future pipeline

expansions are targeting exports to Eastern Canada, the Midwest, the Southeast as well as the Gulf Coast.

As Marcellus gas makes its way into neighboring regions its impacts on markets and bases for relationships will broaden.

Last summer New York and Boston experienced prices below Henry Hub for the first time.

Market oversight expects that the Marcellus exports will moderate prices in other regions over the next few years.

Exports to Mexico reached 2 BCFD in 2014 up from 1.8 in 2013 supported by the growth in the Eagle Ford shale production in South Texas as well as by new pipeline infrastructure across the border.

Exports will likely continue to rise as Mexican power generation demand increases and as more pipeline capacity goes into service including the 2.1 BCFD net midstream Rio Grande pipeline scheduled to enter service in 2016.

Plans to export LNG from the U.S. continue to move forward and as of the end of 2014 eight projects have been approved with four under construction including those of Sabine Pass, expected to enter service in 2016 as well as at Freepoint, Cove Point, and Cameron LNG.

Meanwhile reliance on LNG imports continue to

decrease. Send outs from U.S. LNG's terminals averaged 100 million cubic a day in 2014, 67% below the 2013 levels while imports from Kanaport LNG into New England averaged 49 MMCFD, 52% of 2013.

Gross natural gas imports from Canada averaged 7.2 BCFD, however exports from the U.S. to Canada averaged 2.1. This makes net Canadian imports 5.2 BCFD.

Marcellus shale production continued to displace Canadian imports with flows from the North, East into Ontario reaching 350 MMCFD in August.

And now James Burchill will discuss the electric markets.

MR. BURCHILL: On March 1st the Southeast power pool transitioned to its new financially binding day to market.

The day to market launch included new features for SPP such as the day ahead market transmission congestion rights, price-based operating reserves procurement, and the consolidation of 16 balancing authorities.

In 2015, the RTO expects to expand its footprint with the addition of the Wapa Great Plains, Basin Electric, and Heartland Balancing areas.

On May 1st the California ISO revamped its real-time market replacing the hour ahead market use to

schedule on price imports and exports with a 15 minute market which prices and schedules internal generation as well as interchange.

This new construct provides more discreet pricing those four generators.

CALISO also revised the minimum price floor to encourage renewables to become more price sensitive to decrease output. When supply outstrips demand and price become negative.

Additionally, on November 1st, CALISO lost its energy imbalance market.

Finally, Entergy and five other balancing areas joined MISO at the end of 2013 and that new area now accounts for about 25% of MISO's total load.

The integration of Entergy adds a new dimension to the greater Southeastern power market because of the way interchange is priced.

Entities that ship power into, out of, or through the Entergy area, are now assessed congestion charges for the MISO portion.

Electricity average spot prices rose across the country in 2014 primarily driven by high prices in the first quarter.

Natural gas remained a major driver of electricity prices with regional prices reflecting in part

variations in natural gas prices.

The largest increases were in PJM where average on peak day ahead prices at the Western Hub rose 38% due to price spikes in the first quarter.

Prices in the Pacific Northwest where increased hydro-generation kept prices down were the lowest in the country.

CALISO also had the lowest price increases in the country with average on peak day ahead prices rising by 17%.

Prices remained modest in the Southeast throughout the year averaging $42 per megawatt hour at the enter Southern pricing point.

Nationally, total generating capacity increased 10.8 GW in 2014 compared to a net loss of 3 GW of mostly coal and nuclear units in the year before.

Substantial coal retirements began in 2012 and continued into 2014, however the 2014 decrease in net coal capacity was lower than that of the previous two years.

Greater coal retirements are expected in 2015 largely due to the April effective date of the mercury and air toxic standards requirements with natural gas providing the bulk of capacity replacements given its economic advantage.

The largest year on year change came from natural gas capacity additions which rose by 7.7 GW in 2014 compared to a gain of 1.9 GW in 2013.

Net wind installed capacity increased by 5 GW in 2014 driven in part by the renewal of the federal production tax credit.

Net utilities scale solar capacity additions which had grown dramatically from 2011 to 2013 plateaued in 2014 at nearly 4 GW.

Nationally, electricity demand remained flat compared to 2013.

Residential and commercial demand rose slightly driven in part by the extreme weather in the first quarter while industrial demand declined.

Energy efficiency measures and growth in behind the meter generation such as rooftop solar helped moderate the growth in electricity demand at utilities.

This pie chart shows all cleared futures traded on the Intercontinental Exchange for power outside of ERCOT in 2014.

Last year 96% of the financial trading of U.S. electricity products outside of ERCOT took place in an RTO hub up from 92% in 2013.

Most regions in the country experienced a slight decrease in financial trading volumes compared with

2013 with the exception of the New York ISO and PJM.

PJM financial products continue to be the most traded on ICE with 73% of the total financial trades involving a PJM product up from 68% in 2013.

The red line on this graph represents the sum of all domestic natural gas financial products in billion cubic feet traded on ICE including futures, swaps, and spreads at all hubs.

The majority of the volume approximately 90% in 2014 consists of trading in the NYMEX look-alike futures contract.

The yellow line represents the sum of all physical volumes traded on ICE at all hubs including spot and monthly transactions.

Natural gas trading volumes declined in 2014 for the fourth straight year.

Financial volumes on ICE declined 25% in step with the drop on the Chicago Mercantile Exchange.

Financial volumes continue to significantly outweigh physical volumes and were 30 times larger in 2014.

The sustained increase of natural gas production across the United States led to lower and more stable natural gas prices over the past several years.

Less volatile prices for its speculative trading

profits which caused companies, particularly large banks, to reduce or eliminate their trading exposure.

As a result, physical and financial trading has fallen significantly from its high in 2011.

Now Omar Cabrales will address the recent winter conditions.

MR. CABRALES: We will now provide a brief recap of how the energy markets fared in this current winter.

By many measures this winter rivaled last year's in terms of record low temperatures across much of the country meeting overall demand for electricity.

However, compared to last winter with its series of polar vortex events in early 2014 the wholesale power markets and natural gas pipeline system performed remarkably well.

As reflected by this map, extreme cold temperatures prevailed on February 20 and records were set in 72 cities including Washington, DC, Detroit, Cleveland, and Pittsburgh.

On that day PJM set a new winter peak record of approximately 144,000 MW given its previous record of about 142,000 MW set in January 2014.

The Southwest Power Pool also set a new winter peak record of 36,993 MW on January 8, on MISO, New York ISO, and ISO New England will experience peak

demand this winter that nearly matched last year's winter records.

Despite challenging winter conditions prices in the electricity markets remain moderate helped by stable natural gas prices and lower force outage rates.

This stands in contrast with last winter when outage rates were high, price spikes were common, and PJM and New York ISO both sought and received authority to waive their $1,000 per megawatt hour offer caps to ensure the generators would be able to recover their fuel costs.

Last winter many generators also complained that they were unable to secure sufficient natural gas supplies to operate their plants.

Notably, actions taken since last winter by the RTOs and market participants such as PJM's new cold weather preparation guidelines and the continuation of ISO New England's winter reliability problem program for a second winter appeared to have improved operational performance and the ability of units which helped to moderate prices.

For example, real-time prices at the PJM Western Hub were $400 per megawatt hour lower on PJM's peak day this winter than on last winter's peak day.

The drop in real time prices can also be

attributed to an improved force outage rate which PJM's outage rate dropping from 22% last winter to 12% this winter.

Across of the RTOs and ISOs no significant outages or major operational issues were reported and the bulk electrical system performed well despite changes to the resource supply mix.

In particular, ISO New England which finds itself in as stress operational state last year did not experience any significant reliability issues this winter despite the retirement of the Redmond Yankee Nuclear Station in late December which removed 615 MW of base load capacity from the grid.

As shown by the price differentials on this chart the contrast between last year and this year's winter cannot be understated.

While no single reason can explain why the wholesale power markets performed better this winter the relative improvements seen in terms of prices and operations are likely the result of several factors.

In addition to better weather preparation of assets and measures approved by the Commission such as New England's winter reliability program electric transmission and natural gas pipeline operators are now communicating more effectively during periods of stress

to improve coordination and the reliability of their systems.

Moreover, as discussed below record natural gas production, plentiful storage inventories, near pipeline infrastructure and low oil prices are factors that also contributed to this winter's moderate electricity prices and the improved performance of the electricity markets.

This chart highlights the declining uplift payments made to generators in PJM and ISO New England between last winter and this winter.

This make whole payments are made to generators to ensure that they are not running at a loss during critical periods.

While all uplift is legitimate cost this out of market compensation is often unpredictable for market participants particularly load serving entities.

In January and February 2014, PJM collected a record $667 million in uplift charges which is largely attributed to the high cost of fuel during the midst of the polar vortex.

However, PJM uplift charges during the same period in 2015 fell to $105 million largely because of moderate fuel prices and fewer constraints on the natural gas pipeline system.

Compared to last winter natural gas prices this winter have been lower and less volatile notwithstanding the fact that natural gas demand in January and February 2015 was 2% higher than for the same period in 2014.

Driving this increase was a 13% jump in gas used for power generation. Yet despite higher demand, natural gas prices and fewer and smaller spikes than 2014. The Henry Hub spot price averaged $2.91 per MBTU for January and February 2015 down 44% from the same period in 2014.

As the graph shows prices at major hubs throughout the country were lower than last year.

January and February prices in 2015 were below 2014 by an average of the 41% in both Boston and New York City, 46% in Southern California and 65% in Chicago.

Several factors accounted for the lower prices and lower peaks including increased production, near pipeline capacity moving supplies from producing to market areas fewer and less widespread pipeline disruptions and better gas electric coordination.

In addition, imports into the Northeast LNG terminals including: Cove Point in Maryland and Everett and Northeast Gateway near Boston averaged 94 billion

cubic feet this winter, 45% above the 2013 - 2014 winter.

Furthermore, this past winter the incidences of extreme cold weather came later in the season when storage inventories were several and market participants were less concerned about having sufficient supplies to see them through the spring.

Increased pipeline capacity to move natural gas into major Northeast demand centers, particularly New York City, was a major reason for the moderate price volatility the region experienced this past winter.

This table shows some of the pipeline projects that went into service in 2014 in the Northeast.

Operators put nearly 4 billion cubic feet a day of near pipeline capacity into service in the Marcellus and Utica Shale Regions with approximately 2.5 billion cubic feet of this new capacity serving Northeast demand and 1.5 billion cubic providing takeaway capacity for producers.

The Texas Eastern Steam 2014 expansion and the Transco Northeast Connector added new capacity to move supply into the New Jersey and New York markets.

Another factor helping to moderate prices was better gas electric coordination.

Gas electric coordination initiatives which FERC

began to actively encourage in 2011 led to concrete actions by participants in both industries.

These efforts have enhanced communications and understanding across industries and have reduced or eliminated some of the language barriers that up to recently were common.

We note that the Commission's efforts to remote gas electric coordination are continuing.

This concludes staff's prepared comments. A copy of this presentation will be posted on the Commission's website.

Thank you.

CHAIRMAN LaFLEUR: Thank you very much, Omar, James and Ryan, and thank you to everyone in the Division of Energy Market Oversight who worked on this.

I look forward to this report every year because it is one of the most informative presentations that we hear and I particularly appreciate your adding the segment on the performance of the markets and the infrastructure this past winter.

We know that last winter was a very difficult one for the markets and for customers with price spikes in both natural gas and electricity that are now reflected in retail bills across the country in those regions as a result of what happened last winter and I am very

encouraged to see the improved performance of the markets this winter that will in turn hopefully be reflected in moderated prices when those are reflected in the default procurement of utilities.

Some of the improvement this winter was due to the various efforts of the Commission that you highlight, but we are hardly declaring victory.

Your charts taken as a whole really showed a lot of the continued work that we need to do to make sure that the gas and electric markets are coordinated, that gas infrastructure continues to relieve constraints shown on the maps and that the electric markets attract the capital that is needed to protect reliability with so many changes happening and to support fuel assurance.

Those are all things obviously that we will have to continue to work on.

Looking at our work on the markets, something that we have been very focused on is factors that interfere with appropriate price formation in the energy markets and interfere with the transparency of the energy price such as uplift.

I want to focus in on the chart and I believe it is Slide 19 that showed the dramatic reduction of uplift charges from 2014 to 2015.

Can you expand a little bit more on what happened, what drove it to be so high last year and lower this year and what you expect to see in the coming year and what might shape that?

MR. STERTZ: Sure, Chairman. The first aspect of this, of course, is what we covered in the presentation which is that high and volatile gas prices are really a dramatic cause for the uplift we saw in 2014.

Obviously operator action due to the polar vortex and increased outage rate which we cover on others slides also come on this issue.

We do not want to say that it was a one-time occurrence, but obviously, 2014 was a very stressed period for the market.

We have no expectation that we will see a high return of those uplift charges going forward and it is largely attributable to the market design rule changes that we have seen since the polar vortex as well as the actions taken by market participants to lower their outage rates to be more responsive during cold weather events, and frankly, because of the financial incentives that a number of them have seen during these periods of high demand.

Collectively those will come together to lower uplift charges in the future. There is of course no

guarantee.

CHAIRMAN LaFLEUR: Thank you very much. If we could all predict the future none of us would have these jobs, but it is encouraging to see some progress in something that we are going to definitely need to continue to focus on.

COMMISSIONER MOELLER: Thank you, Chairman LaFleur. This is an excellent lively presentation. Thank you to the team, the Division of Energy Markets Oversight also known as DEMO under the excellent leadership of Mr. Jason Stanek.

We look forward a little bit more higher profile from DEMO going forward.

This gives us a chance to reflect in a yearly snapshot of all the things that have happened, and to focus, again, on the continuing amazing story of domestic natural gas production that has made our lives in one way much easier and also brings in other challenges.

Talking about the price formation, and thank you for bringing that up, Chairman LaFleur, one of the challenges we had that we have talked about a few times is when people had to go into the long weekends particularly the three-day weekends buying incredibly high price gas that they may or they may not have

actually needed.

And we talked about ICE, the Intercontinental Exchange putting out a new product this year. It split up the weekend package.

Can you elaborate a little bit more on how vibrant that product has been?

MR. BURCHILL: Yes, that is a great question and since its inception at the beginning of December we have been monitoring it pretty closely and it is something that we are going to continue to monitor, of course, but we still consider it to be kind of a niche product.

But there has been while not extensive there has been continued interest in these contracts.

COMMISSIONER MOELLER: Good. That is encouraging and at least it is there. We are going to have quite the same situation that prompted its need this year as it was for last year.

We talk about demand and the various sectors, residential, industrial and commercial, you pointed out overall there has been a 1% decrease in demand over the last year in the industrial space.

What I am afraid that masks is certain regional areas where demand is way up and that is consuming partly as the states have to grapple with

implementation of the Clean Power Plan if they are actually in an environment where industrial demand is growing.

Can you elaborate a little bit more on regional differences in industrial demand?

MR. BURCHILL: That is a good question, so obviously whenever we present the state of the markets one difficulty we have is that there is significant geographical variation between different markets and different conditions in those markets and when we aggregate that we lose at some resolution.

Industrial demand, the decrease in industrial demand we saw was actually driven by a substantial decrease in the Northeast.

Around the country we actually saw regional variation anywhere from -3% to +6% industrial growth, so as you mentioned, some regions in the country are actually experiencing significant growth in industrial electrical demand.

It is something that we are definitely going to do more analysis on in trying to determine characteristics for.

COMMISSIONER MOELLER: Right. Thank you. We will be very interested in that, again, given that compliance plans being due for 2020 can be probably made more

difficult if an economy is booming and industrial demand reflects that.

You also mentioned the integration of MISO South. We had talked a lot about the potential savings of that. Can you elaborate on what those numbers are coming in at?

MR. BURCHILL: Yes, actually, I cornered one of our analysts about this this morning.

We are lucky to have a recent MISO report, their value proposition. We have recently seen cost savings estimates to increase between $750 million to $930 million and this is up from their original estimate which was more than $530 million range.

The primary driver for those savings is in a deferred capacity investment, so obviously expanding the footprint has really helped them not only manage a number of energy in ancillary services products but also their overall demand as well.

COMMISSIONER MOELLER: Do you know what the time frame is on those savings, is that an annual or a five-year projection?

MR. BURCHILL: It is a projection and I am afraid I do not know the specific, but I will get it to you.

COMMISSIONER MOELLER: But significant and significantly greater than even projected initially?

MR. BURCHILL: That is correct.

COMMISSIONER MOELLER: Thank you very much for the presentation. We look forward to hearing more from you in the future.

CHAIRMAN LaFLEUR: Thank you. Commissioner Clark.

COMMISSIONER CLARK: Thank you for the presentation. It really was fascinating. What has driven home to me is just how unpredictable energy markets really are.

Had someone told me six months ago or even four months ago coming into this winter that the East Coast in our Eastern markets would have the winter that we have had, I would have had a pretty solid prediction on where I thought prices would have gone because of it, and in fact, they went just exactly opposite of where a lot of us would have predicted they went for a whole lot of factors, but really drives home the point that energy markets, the development of different energy resources really is highly unpredictable.

The other thing that it drives home to me is the work of the Commission really is important when you think about what happened with regard to some of the sighting cases that you noted that brought new resources into constrained areas of the country, that was a factor that resulted in a positive outcome for consumers.

A lot of the work that was done by ISO New England that the Commission approved with regard to winter reliability programs, and you mentioned those, the transparency issues in the market that we have been working on have all been helpful.

I take to heart Chairman LaFleur's commendation that we should not be immodest about some of these things as well.

Oftentimes when things go well I think Government probably gets a little bit too much of the credit, and when things go bad Government probably gets a little bit too much of the blame.

Understanding that it is unpredictable and we have to stay ahead of the curve and continue to do things that support proper market outcomes, and understanding that things could turn next winter, we should also take some heart that the work up to this point has been doing things that we had hoped it would in terms of positive outcome for consumers.

Thank you for the report.

COMMISSIONER BAY: I also thank staff for this very informative state of the markets report.

I agree with the chairman that it is very nice to see the difference in performance at prices in uplift between last winter and this winter and the arterials

and ISOs.

Here I want to pick up on a theme that Commissioner Clark sounded which is markets and their unpredictability.

Just a few months ago no one could have predicted that West Texas crude would drop below $50 a barrel and yet that is where we are today.

Do you have any sense for how the drop in oil prices will impact natural gas production or will it have any kind of impact?

MR. CABRALES: Commissioner, to this date we have not seen an impact yet.

As a matter of fact, we continue to set production records for natural gas.

I was looking at some data from North Dakota where in January they set that both oil and natural gas production records.

However, it is fair to say that if there is a continued decline in capital investments in exploration and production we will at some point see a leveling off if not a decline in production.

There are a lot of different projections by analysts that spend a lot of time on this issue.

There is difficulty because so much has changed in the way the industry goes about production in the last

few years.

We are seeing great improvements in efficiencies, so a number such as recount that people used to rely on to make these projections seem to have disconnected from what is going on.

Another thing that has changed is that as prices have fallen in the natural gas side, for example, we have seen producers get better at getting the product out of the ground.

Whereas three years ago people were saying that a break given price for Marcellus was $5.00 or $6.00 and now they say $3.

If we see something like that happening in oil we could continue to see strong production for a long time to come.

My personal opinion is that based on the current crisis prices we could begin to see a leveling off in production in the next couple of months and a decline sometime towards the end of the year, but that is just my personal opinion.

COMMISSIONER BAY: Thank you.

COMMISSIONER HONORABLE: Thank you. Thank you for the excellent and very thorough report and thank you to the staff, DEMO, it was described as.

All of these new acronyms, please, when you have

new Commissioners give them a legend or a key with all of them so that we can learn them all at once.

Most of all some of the highlights that I took away from the excellent presentation was just how dynamic the markets have become in a very very short period of time which I could only imagine how very busy you have been this year.

For me it has been seeing some of these things in the snapshots, for instance, the MISO Entergy integration and I am very pleased that Commissioner Moeller mentioned that.

I understood, and I was very pleased about the increase in the benefits obtained, I thought it was for the past year, I stand to be corrected.

It is still phenomenal.

It really speaks to the importance of markets in not only ensuring that we are able to provide the lowest cost resource thereby really serving consumers well.

Also providing proper signals to spur investment and also as we have seen as of late the ways in which the markets can be used as tools, for instance, in meeting the Clean Power Plans, in our last technical conference, we heard quite a bit about that and really the benefit of the markets.

And to acknowledge as my colleagues have that we have work to do and we still have challenges to overcome.

In your slide you referenced the extreme weather conditions and how those conditions have impacted the markets.

I wanted to ask you in particular about drought and how it may have impacted or will impact the markets going forward, for instance.

There is California's entering its fourth year of drought, certain portions of Texas, and Oklahoma and Nevada have been declared by the federal government as being in exceptional drought conditions.

How, in your estimation, or opinion will that impact the markets going forward?

MR. BURCHILL: That is a great question. The drought is something that is definitely on our mind.

Obviously water plays an important role in electricity not only because of hydro electrical generation, but also because of thermal generation and the clean requirements.

We have been monitoring the situation quite closely. To date, we have not seen any forced outage rates due to water availability.

What we have seen are a handful of cases of

generators requiring backup sources of water for cooling.

In California market oversight works very closely in collaboration with the California Energy Commission, the California Public Utilities Commission, the Government's Office and other state agencies to continue to monitor this going forward.

This past summer we were, I do not want to say lucky, but the market outcomes were favorable due to increased renewable generation and a mild summer which lowered demand overall.

So to date the market impacts have been relatively minor, but it is something that we are very cognizant of and we will continue to monitor going forward.

COMMISSIONER HONORABLE: Thank you. Keep up the great work.

CHAIRMAN LaFLEUR: Thank you all. Before I close out the meeting, I want to take a brief moment to note that this is the last meeting where I will be the chair.

It has been a tremendous honor for me to lead the Commission the past 16 months, and I deeply appreciate all of the support I have gotten from the team in my office, the people who work here, the wonderful FERC senior staff, for your outstanding and steady

leadership has kept our work moving across all fronts at a time when there have been a lot of changes in the Commission in the last couple of years.

Really, all FERC employees, and those outside who have supported me so much.

My term continues for four more weeks as we have a lot of cases to get out in those weeks and I look forward to working with you on those and beyond that do look forward to continuing to work with all of you with Chairman Bay and the rest of you as a Commissioner going forward.

COMMISSIONER MOELLER: I would like to congratulate you before you bang that gavel, Commissioner LaFleur, for your chairmanship.

I thank you for your hard work, dedication, your friendship.

Obviously you are supported by somebody named Bill over there too and I look forward to continuing to work with you. Congratulations.

COMMISSIONER CLARK: Let me add my word as well and seconded everything that Phil just said. Thank you for your leadership for this past year and a half now.

It is a tremendous workload and burden that falls upon the chair of any regulatory agency and ours is one of those.

Thank you for the years of service before especially for this last year and a half and look forward to continuing to work with you for the remainder of your term.

CHAIRMAN LaFLEUR: Thank you.

COMMISSIONER BAY: I also would like to thank the Chairman for her outstanding leadership and for her dedication.

As passionate as she is about Boston area sports teams, she is even more passionate about FERC and the work of FERC. It has been a great honor to serve with the Chairman as a Commissioner and also as a member of senior staff here at the Commission.

COMMISSIONER HONORABLE: Thank you, and to round out the accolades, I'm sure we are embarrassing you now.

Just accept it.

I still remember when we first met, Madame Chairman, at a NERUC meeting and from that moment that I met you you have been warm and receiving and I have greatly admired how hard you work.

I have told people, I have called Cheryl on Central Time, it was still late at 7:00, so at 8 o'clock, and she is sitting in her office and she has endeavored along with her team to do what needed to be done to run this agency and you have done so

excellently and it really is now such an honor and it is humbling to work with you and beside you and I look forward to doing so going forward, and as have my colleagues I am commending you on a job very well done.

Congratulations.

CHAIRMAN LaFLEUR: Thank you. (Applause.)

COMMISSIONER MOELLER: If Commissioners could give out awards, then we would give you one, but we are not authorized to do that.

CHAIRMAN LaFLEUR: Thank you all so much. I did purposely leave out the Bill because I was afraid I would get emotional, but I certainly sidestepped that land mine and I also continue to work for Bill even beyond April 15, 2019.

COMMISSIONER HONORABLE: I am glad that you mentioned Bill. I have met him as he has been such a strong supporter of yours even on the Hill and I'm glad that Bill is here today and I want to thank you too for the tremendous support you have given the Chairman.

CHAIRMAN LaFLEUR: Thank you so much. With that, the meeting is adjourned.

(Whereupon, the meeting adjourned at 12:00 noon.)