BEFORE THE
ILLINOIS COMMERCE COMMISSION
POLICY SESSION
Wednesday, October 25, 2017
Chicago, Illinois

Met, pursuant to notice, at 10:00 A.M.,
at 160 North LaSalle Street, Chicago, Illinois.

PRESENT:
BRIEN J. SHEAHAN, Chairman
SHERINA MAYE-EDWARDS, Commissioner
MIGUEL DEL VALLE, Commissioner
JOHN R. ROSALES, Commissioner

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CHAIRMAN SHEAHAN: Good morning. I will call our 2017-18 Winter Preparedness Meeting to order. Present with me in Chicago we have Commissioner del Valle, Commissioner Edwards, and Commissioner Rosales. We have a quorum.

I remind our speakers that a court reporter is present, and a transcript of this hearing will be available on the Commission's web site.

With that, I'm going to turn things over to Commissioner Edwards, who is going to MC the session.

COMMISSIONER MAYE-EDWARDS: Thank you, Chairman Sheahan.

Good morning, everyone. It is absolutely my pleasure to conduct this Policy Session to address the issue of Winter Preparedness for 2017-2018. This Policy Session, not unlike our previous ones, will allow representatives of the gas industry, regional transmission organizations, and Illinois local distribution companies to assure Illinois consumers and the Commission that the upcoming winter demands can be met.

With predictions of exceptionally cold
conditions in the upcoming winter season, the
performance and capacity of natural gas and
electricity systems is vital.

And we especially wanted the
background weather to match the Policy Session today,
so we turned it down a little bit for you.

(Laughter.)

COMMISSIONER MAYE-EDWARDS: The coordination of
supply and demand storage pricing and various
pipeline operations, as we all know, is extremely
critical and important to ensure winter preparedness.

As indicated both on today's agenda
and in the comments that you will hear, the
Commission has asked the participants to address a
few issues for today's presentation, and I'll quickly
go through those.

The first is, How is the U.S. Natural
Gas Market positioning itself to meet the 2017-2018
winter demands? Second, Are there any remaining
adjustments that need to be made in the coordination
between gas and the electricity markets to avoid some
of the problems experienced in the past, particularly
the year of the polar vortex? Third, What challenges are the RTOs facing with respect to assuring electric reliability during the 2017-2018 winter months and how are they addressing those challenges?

Fourth, Have the LDCs been able to refill gas storage facilities or otherwise assure access to supply for the 2017-2018 Winter? And, lastly, What steps are being taken to ensure that customers receive safe, reliable gas supply and customer service for the 2017-2018 Winter?

I'm very excited to hear from our panelists about the development and processes implemented to meet the needs of the State of Illinois and address any issues that consumers might have.

Please allow me to introduce our presenters for the first portion of this morning's Policy Session. We will begin by hearing the national perspective from Chris McGill, Vice President of Energy Analysis and Standards of the American Gas Association. After Chris we will hear the RTO's perspective. Tim Aliff, Director of System
Operations will present on behalf of MISO; Kenneth Seiler, Executive Director of Systems Operations; and Rich Mathais, Senior Consultant, will present for PJM Interconnection.

We do ask that each speaker please limit their remarks to 15 minutes or less. And please join me in welcoming our first group of speakers. Thank you.

(Applause.)

MR. CHRISTOPHER McGILL: Thank you, Commissioner Edwards and Commissioners. It's always my pleasure to come to Chicago and talk about the winter heating season. It normally coordinates very well with AGA's national work on the subject. I always seem to be able to come here and get a sense of what maybe the nation has in store for it.

Obviously, Illinois and the Chicago area are focal points for natural gas pipeline capacity as well as storage in the state. So let me try to place it in to context, on a national basis, how the companies have been planning and what they are looking at in the marketplace as we go forward.
Let's remember, very quickly, that with the polar vortex of the first quarter of 2014, we saw much colder than normal conditions here in the country as well as in the East-North Central, which is often the region I use, because it is the upper Midwest where we have a lot of customers, and they use natural gas.

The following year was colder also, particularly for your area, about 7.6 percent colder. But the last two winter heating seasons, nationally and here in the Midwest, have been dramatically warmer. When you talk about 16 and 17 percent variations from the norm for the nation, that is an extraordinarily large deviation from the norm. So the past winter heating seasons have been very, very warm.

From a national perspective of what I see in the market currently, domestic production is strengthening again. Natural gas to power generation, this year, 2016, was a record year for power generation, using natural gases. It's down about 3 Bcf per day compared to 2016. However, in
October it's actually been up 3 Bcf per day from last October. Acquisition pricing has hovered around $3. Underground storage injections have generally been modest week to week compared to history.

But now we have another demand factor nationally in our marketplace. We have significant pipeline exports to Mexico, LNG exports internationally; and certainly in our population -- and just a little bit more as we go forward -- I would say predictable national gas imports from Canada.

All of this has been happening at a price range that's very similar to what we've seen over the last several years. However, note the red line there that in late spring/early summer natural gas prices went up just a little bit around the country. They went over $3. That has tended to have a little bit of an impact on what the Energy Information Administration sees as the average cost for natural gas to residential consumers this year. They think it has gone up about 2-and-a-half percent.

Let's remember that our companies are putting natural
gas in storage during that time, so that cost of gas going into storage is a little bit higher than it was in 2015 and '16.

It's really important to understand what has happened in the United States with the shale revolution and domestic production. Prior to it really coming online, we saw, in the 2007-2010 time frame, somewhere between 50 and 55 billion cubic feet per day of domestic production. That wasn't very long ago.

Looking at that shaded area, that was a time when the Marcellus Shale, Utica Shale of the east produced about 3 billion cubic feet per day. Today those locations produce 26 billion cubic feet per day, and it can't possibly be used where it's produced. That was then.

The two curves you see above that are about 70 Bcf per a day -- actually, a little north of that -- that's now. That's where the country has gone. And there are opportunities to increase production, but of course the demand requirements need to be there also. Part of those demand
requirements recently have come from exports of
natural gas.

Sabine Pass, in Louisiana, exports
somewhere a little bit north of 2 billion cubic feet
per day. To give you a sense of scale, we produce
something a little north of 70 billion cubic feet per
day. In addition to that, they just had a fourth
train come online and Cove Point is coming online.

Mexico receives LNG exports from the
United States. Capacity is growing. Together those
two demands for our natural gas on a daily basis
exceeds 7 billion cubic feet per day, almost 10
percent of the country's total production. To think
of that 10 years ago, people would have thrown their
hands up in the air and run out of the room. But
even with events like what we saw with the hurricanes
this year, going back and reminding you, those
disruption events virtually caused no pricing
reaction in the marketplace. In my view, as an
analyst, this is the classic definition of abundance.
This is well-supplied. And of course the
infrastructure for our companies, the expanded
infrastructure to deliver that to consumers, is there also.

The Potential Gas Committee from the Colorado School of Mines this summer, in July, released their newest estimate of natural gas resources in the country. The number is enormous. It's larger than it's ever been. Over 3,000 trillion cubic feet of natural gas future supply. And their expectation, that's up from about 2800 cubic feet 2 years prior. So the resource base in North America and here in the United States more and more becomes less and less of an issue.

Storage levels a little higher than we saw earlier in the year of course because we had such a warm winter in 2016 and '17. Storage inventories have basically closed in on themselves. They're a little bit behind, about a percent or so behind. Last year right now -- I mean a percent or so behind the 5-year average, about 4 percent behind last year right now, in terms of storage accumulations.

From a national perspective, I see no issue with that whatsoever. And I would go back to
reminding you that not only is the storage capacity there, but we are dealing with a flowing gas supply in this country that's much larger than it was a decade ago.

One thing I would like to point out is the market does change. It does adjust. This slide is interesting because, if you go to 2014, each of these bars represents the peak day for natural gas demand in the United States. It's generally in early January. This is almost 139 -- or about 139 billion cubic feet during January of 2014. Last year, during a very warm winter heating season, it was still 135 Bcf.

Part of that is an indication of what's happening in the marketplace. What's happening here is natural gas to power generation is peaking on top of the winter heating season load. This becomes a challenge, or a bigger challenge, for meeting demands of customers during those periods of time; but, in fact, the companies that I represent, the local gas utilities, seem to have been able to do that on a very reliable basis. I do not expect all 4
of the years that we see here -- 2014, '15, '16 and '17 -- are higher numbers than any year prior, regardless of what happened during the winter heating season, warm or cold. And I don't really expect that to change.

The importance of storage, again, demonstrated even this year, 135 Bcf of consumption, 58 Bcf nationally came out of storage. That's 43 percent on that coldest day. Over the course of the entire winter heating season usually storage accounts for 15 to 20 percent of total gas that goes to consumers. So it's very dynamic and very flexible.

Here is the expectations from our National Weather Service regarding the 2017-18 winter heating season. If you look on the left, that's the October through December forecast that was made in September. It, basically, said the lower 48 was going to be warmer than normal, and so far that's been true. There's a little bit of a chill in the air to, but it has been significantly warmer than normal.
When it comes to our view of the upcoming winter heating season and what that might mean to consumers is the fact that the longer term forecast, January through March, that conditions -- particularly, here in Illinois, the upper Midwest, Northern Tier -- are likely to be much closer to normal this year than they were last year.

For consumers that means they are likely to consume more. Prices are up a little bit. If consumption is up, bills will be up a little bit. We surveyed our companies on that question, and we will be talking in detail to the companies here today. But on a national average basis for the 42 companies that we got responses from this year, most expected some increase. They expected the increase to be somewhere in single digits -- and I'm talking about expenditures for natural gas -- a 5 to 10 percent range, at the high end. Although, I would say, in our survey, we had an outlier at 24 percent and an outlier at minus 3 percent on expectations for expenditures; but most were around that 5 percent target. And of course all of those expectations
utterly depend on what the weather actually turns out to be.

Commissioner, I've held to my 15 minutes or less. I'd be happy to answer any questions, if I can.

COMMISSIONER MAYE-EDWARDS: Commissioner Rosales, do you have a question?

COMMISSIONER ROSALES: I do.

Thank you for being here.

MR. CHRISTOPHER McGILL: Yes, sir.

COMMISSIONER ROSALES: We wanted clarification on the predictability of Canada. What did that mean? I didn't understand, that Canada is predictable.

MR. CHRISTOPHER McGILL: We have a total supply in the country of, generally, very close to 8 billion cubic feet per day. Canada has been supplying about 5 billion cubic feet per day for the last couple of years -- winter, spring, fall, summer.

COMMISSIONER ROSALES: But if we're so abundant, why are we receiving imports from Canada?

MR. CHRISTOPHER McGILL: So there are traditional trading relationships with Canada. Also,
if you think about the location of major cities along the Canada border, or the U.S. border, and areas like the Northeast, sometimes it's easier to access the Canadian pipeline infrastructure or for them to utilize the U.S. pipeline infrastructure to swing gas back into Canada.

COMMISSIONER ROSALES: So that was an overview of the country, not specifically Illinois?

MR. CHRISTOPHER McGILL: Yes, sir, of the country. Now, that number, in history, has been as large as 10 billion cubic feet per day. It's about half that today.

COMMISSIONER ROSALES: Thank you.

COMMISSIONER MAYE-EDWARDS: Just one question. I know you said in your presentation that it's been anticipated that we'll have another winter with warmer than normal temperatures. When we say "normal", I think that word sometimes can tend to be a little bit in a gray area.

So the last couple of years -- the last, specifically, two winters we've had warmer than normal temps. So is that the new norm, or are we
now -- what is that "normal"?

MR. CHRISTOPHER McGILL: That's a very fair question. Generally, the "normal" that we're referring to -- we're referring to what NOAA uses. And NOAA uses, essentially, a 30-year marker. And it stays in place for a period of time, and then it kind of moves. But they're using a multi-year average to make a determination of "normal".

COMMISSIONER MAYE-EDWARDS: So we won't necessarily see normal temps than last year, so to speak but, or just within that range?

MR. CHRISTOPHER McGILL: Well, for the core of the winter, January through March, what this diagram is showing on the right is that the expectation is that temperatures here in the Midwest should be close to normal. Compared to last year, that would be a significantly colder situation than what we saw last year.

COMMISSIONER MAYE-EDWARDS: I see. Okay.

MR. CHRISTOPHER McGILL: And they are all incorrect.
COMMISSIONER ROSALES: So that's the question I would have. Why do we use only one forecast?

MR. CHRISTOPHER McGILL: I don't use just one. I only have one up here. There are commercial forecasts. Oh, gosh. Names are eluding me right now. I read them constantly. There are commercial forecasts. Generally, they have been similar to this; they're not always.

Commercial forecasters for weather?

AUDIENCE MEMBER: AccuWeather.

AUDIENCE MEMBER: The Farmer's Almanac.

COMMISSIONER MAYE-EDWARDS: That worked for my wedding.

COMMISSIONER ROSALES: It didn't work for Paul.

(Laughter.)

MR. CHRISTOPHER McGILL: Yes, sir. That's a fair question. I'm sorry. I do read them. I can't name one right now, but the companies use multiple forecasts.

COMMISSIONER ROSALES: I would hope so.

MR. CHRISTOPHER McGILL: Thank you.
COMMISSIONER MAYE-EDWARDS: Are there any other questions for Mr. McGill?

(No response.)

COMMISSIONER MAYE-EDWARDS: Well, thank you very much. We appreciate your insight.

We'll now turn to the RTO perspective. We'll have first MISO and then the PJM.

MR. TIM ALIFF: Good morning. My name is Tim Aliff. I'm Director of System Operations with MISO. I'm going to talk to you about MISO's winter preparedness.

So, first, just to start off with a little overview of MISO -- you folks are probably familiar, but just in case you haven't seen a lot about MISO, this diagram shows where our footprint is. We have functional control over the electric, high voltage transmission system. We have our footprint broken up into three regions just to get a little bit more locally controlled. So we have Eagan, Minnesota; Carmel, Indiana; and Little Rock, Arkansas, the three control centers that we have.

Down at the bottom right of this chart
you can kind of see that that majority of the MISO
generation is made up of coal and gas. We have seen
the coal percentage come down and gas percentage
increase, as well as the wind percentage increase in
how much is serving the MISO load. Our peak summer
demand was about 127 gigawatts a few years ago. And
for a comparison, this year we got just about 121
gigawatts this summer.

I'm not going to belabor the forecast.

I think we talked a lot about it. There were good
questions. I actually learned something about the
forecast there a little bit ago in that questioning.

So this is an older version from
August. You can see how that forecast changed. We
do also look at different forecasts, and we have
forecasts from Europe as well. Along the lines of
temperature, and wind, and all of that, cloud cover
for the few solar plants that we have on our
footprint as well. So we're all looking at that in
various ways to look at what's the range of
possibilities.

Looking from a capacity standpoint,
MISO has a reserve margin target of about 16 percent with our projected preserved margin at 28 to 37 percent. And then after you take out outages we're at about 19 percent. So we have sufficient capacity compared to our requirement of our reserve margins.

And, historical, our winter peak has been about 103 -- I'm sorry. Looking forward, our winter peak is expected to be 103 gigawatts. It's a little bit about average of what we've seen from the winter peak perspective -- of what we've seen recently.

One thing of note in these numbers, from a capacity standpoint, we do have about 6 gigawatts behind the meter demand response generation in those numbers. What that just means is that we have emergency procedures, and we have to activate those emergency procedures to use those megawatts. So we've seen an increase of MISO declaring emergency procedures, but you can almost look at it as the normal. That's how we access the capacity that are in these numbers here. So it's the capacity we plan for; but in order to use them, we have to --
COMMISSIONER ROSALES: When is the last time used it?

MR. TIM ALIFF: We just recently -- in late September, the 21st through the 25th, we did activate some of our emergency procedures, maximum generation due to the warm, unseasonable weather that came through. It was in the 90s through most of that time. And it's outage season. There's a lot of generators on maintenance. And the two factors combined led to us using our emergency procedures.

I would note that we did not have to activate the behind the meter demand response during that time in September.

So winter occurs later in the year, but we're not just thinking about winter in October. We're thinking about winter all year long. From a long-term perspective, we plan our transmission system based on our forecast for the seasons, for what we expect wind generation to be -- new wind generation, new natural gas -- and we plan the transmission system for that on a longer term basis.

And then we also look at, How do we
improve our market? We did have some emergency pricing enhancements this year that helped. When you commit extra generations, for the prices to stay at the level, that indicates that you did need that emergency generation.

And then on an annual basis we do workshops. We have one coming up on November 6th. Folks are welcome to listen in. We talk through our emergency procedures. We have our members dial in. We just kind of talk about being prepared for the winter season. We do a field survey where we survey all of the gas generation and make sure they're okay for the winter with anything that they're expecting, any issues that they may be expecting for the winter. We also publish winterization guidelines, What do generators need to do to be prepared for the winter? Most of that is pretty standard, but we just share some guidelines that we have related to that.

Moving into the monthly phase here, every month we do operation drills. I've talked about the behind meter demand response. We do drills. We call it load modifying resource. And we
actually go through the process of how we are able to implement those and use of the communication methods and the procedures. So we step through that at MISO and with our members to ensure that everybody can activate those procedures when they're needed and we're not fumbling around trying to figure out how do we actually get those implemented. So we do those drills to make sure that the operators are sharp in how they should respond.

Coming into the daily look at it, we look at our peak hour for the day and make sure we have sufficient generation on for the day. Reliability calls -- communicating with our neighbors, communicating with PJM, communicating with Southwest Power Pool, and other RTOs across the country to make sure we all are seeing what's going on and that we understand what's happening across each other's footprints. We also have calls with pipelines to make sure we understand any issues that the pipelines -- or the gas pipelines may have and how that might impact our generation.

And then in real time we have a
processes to monitor those pipelines. And we receive
the notices for the pipelines. We actually post that
our on our web page. So that's one improvement that
we've done over the last couple of years to bring
more visibility to that, to our members, as well as
into our control room, on how those pipelines -- any
issue the pipelines may be having.

And then the final thing there is, we
drill and plan on our emergency and abnormal
procedures so that we know what will happen. And our
procedures are general enough that they can handle a
wide variety of scenarios. So we work through our
procedures to make -- we work through different
scenarios and have tested them to make sure that they
work through different scenarios that we might be
expecting.

COMMISSIONER ROSALES: Has there been a
scenario that came up that you didn't expect?

MR. TIM ALIFF: Well, the most recent was
September. That caught us a little off guard, it
being 90-degree weather in late September. Really
what caught us off guard with that is that we were
forecasting about -- I think we were about 3 degrees lower than what the actual temperature was. That ended up translating into about 4 gigawatts of difference in load that we didn't have. But we activated our procedures, and we were able to manage through that very successfully.

COMMISSIONER ROSALES: Did you use your demand response scenario?

MR. TIM ALIFF: We did not in September.

So just talking overview again about winter preparedness and operational challenges; so gas-electric coordination, enhanced operational tools, as I mentioned, with our website and communicating those notices to our control room as well as to our members.

The Gas-Electric Market Alignment. We adjusted the timing of our day ahead of market to be better aligned with the gas market. There's some efficiencies related to that.

The field survey, I mentioned. The guidelines, I mentioned.

Operational Situational Awareness is
where we're communicating with the gas pipeline and making sure that we understand what's going on at a high level. We have what generators are served by what pipelines so, if the pipeline is having an issue, we can know what generation might be having an issue with those pipelines.

Emergency Preparedness/Winter Readiness at FERC. We talked about winter preparedness at FERC. We've come to Illinois to talk about winter preparedness. We have a winter workshop. And then we also do -- we just finished up last week our emergency response and power restoration drills. So if we weren't able to stop a decline in the blackout conditions, essentially, how would we restore it? So we even go to that point to make sure that the operators understands what happens in those scenarios. So we're drilling all kinds of scenarios to make sure that we're better prepared.

The Generation Portfolio. I mentioned that our generation is pretty diverse, which helps. If there might be gas issues, we have coal and wind. So a diverse generation can help, and you're not
using a single source, from a fuel perspective.

I think that's about it. I covered everything else on here previously. I don't think I have anything additional from the specific questions that were asked. I've already covered it.

There's a few other slides in the Appendix that are just more informational.

Are there any questions?

COMMISSIONER MAYE-EDWARDS: Thank you. Just a quick question.

I know that you briefly touched upon your communication strategy with some of the other RTOs. I think you mentioned SPP and maybe PJM. But who specifically and how frequently are those communication occurring?

MR. TIM ALIFF: So every day we have a call with all of our neighboring entities. So we have Southwest Power Pool, PJM, Southeastern, another southern company. We get all of those folks on a call in the morning, and we talk about what we expect the day to be, any issues that we have. We talk about our transmission generation outages. We talk
about load, any specific weather issues that we might
be expecting.

COMMISSIONER MAYE-EDWARDS: Every day?

MR. TIM ALIFF: Every day.

COMMISSIONER MAYE-EDWARDS: What about
Christmas?

MR. TIM ALIFF: I'm sorry. Business days.

(Laughter.)

COMMISSIONER MAYE-EDWARDS: That's wonderful.

MR. TIM ALIFF: Outside of those we have that
scheduled call that does occur on business days. The
operators do communicate 24/7 if they need to.

COMMISSIONER MAYE-EDWARDS: Do we have any
questions?

(No response.)

COMMISSIONER MAYE-EDWARDS: Thank you very much
for being here today.

And now we're going to hear from PJM.

MR. RICH MATHAIS: Good morning, Commissioner
Maye-Edwards, Chairman Sheahan, Commissioner Rosales,
and Commissioner del Valle. We're delighted to be
here today. And we've been invited to discuss winter
preparedness with the Illinois Commerce Commission.

As you know, I represent PJM Interconnection, which is regional transmission organization that operates in parts of all of the 13 states and the District of Columbia. In Illinois PJM manages the transmission system which is owned by the Commonwealth Edison Corporation.

With me today is Ken Seiler, who is the Director of System Operations for PJM. You may recall that Ken was here 6 months ago when we were talking about summer preparedness.

You may wonder why we would start out with -- one of our first slides sets to talk about the vortex which occurred this past summer. For two reasons we've decided to bring this before the Commission: number one, we thought it was a great segue to the Public Open Meeting that Commissioner Leah (phonetic) had a few days ago, in which she talked about renewables and distributed energy resources. You'll recall that Scott Baker from PJM appeared during that discussion of renewables and distributed energy resources.
And then we also thought that instead of talking about the big picture of over a number of month period, it would be interesting to just look at what happens on a particular day -- a special day, admittedly -- in the past few months, and that is the solar vortex which occurred August 21st of 2017.

I'm going to look to Ken to go through some of these slides because he was the guy that was planning for this and making certain that we were appropriately preparing for the polar vortex.

And what I would emphasize is what you're hearing about right now for one day is what PJM, MISO, SPP, and others do every day of the year, the type of preparation and actual operations that occur during the entire year. This is just one segue into one day.

So, Ken, will you go through these slides?


Good morning. I have four slides that I'll walk through very quickly. The first one is really showing four different models that we
projected based on cloud cover and the amount of sun that we had across the entire footprint. But the gray line that you see there is really reflecting a partly of the sunny day where we have lost about 2200 megawatts of output from the solar farms we have. We had estimated around 2500. So we lost 2200 megawatts of solar, and we have projected about 2500 megawatts. This is also showing the solar drop compared, as well, to the load drop we had across the footprint. So we were on the eastern seaboard, for the most part, except for certainly the western zones, where we saw load drops starting in California as a result of the solar eclipse along with the amount of solar output drop. We had lost about 5,000 megawatts of load during the eclipse in the 2-hour trade from the time it hit Illinois through the time it went off the eastern seaboard. And, again, you can see the total amount of output we have.

The next slide is really one that shows temperatures set. And we saw a large correlation to temperatures much like we do during thunder storms.
COMMISSIONER ROSALES: I'll insert my question here.

MR. KENNETH SEILER: Yes, sir?

COMMISSIONER ROSALES: So is this the PJM footprint?

MR. KENNETH SEILER: This is our footprint.

We also saw, on the integrated hourly average temperatures of a 3 degree drop. However, we had reports from various parts of our footprint where we had temperature drops to 5, 7, 10 degrees during the actual solar eclipse. So we wanted to show the correlation between load drop as well as the temperature drop along with certainly consumer behavior during the event.

We took a real hard look at this event as a result of the planning activities that we had performed in preparation for the April 8th of 2024 total solar eclipse. Our projections were overall very close. I was told that we had expected a load decrease by quite the amount as the solar output decrease, which we thought was interesting; and we attributed a lot of that to human behavior. A lot of
folks took their lunch hours during the eclipse as well as there were a lot of people going out to view it, based on the media coverage of the event.

Our load forecast models were not as well-trained for this event as what we had hoped because we were getting temperature sets on the hour. We're looking to get maybe 15-minute integrative temperature sets into our load models going forward.

And then our coordination with our forecast vendors is also very important. We used this as a pilot going forward in preparation for the next one.

MR. RICH MATHAIS: And, again, I would emphasize that this was one specific day and an unusual day. But it's the type of activity, the type of planning, the type of operations that PJM and the other RTOs in the United States do on a daily basis, on an hourly basis. So each one of these notes that Ken mentioned are very important just on a day in, day out basis. What's the sun going to be like? What's the temperature going to be like? Is it going to be raining? Whether our load model showed -- were
are load models accurate? Could we accurately forecast human behavior?

A lot of people, as Ken mentioned, left the office or left their manufacturing facilities, maybe shut down the computer, or the machinery didn't run quite as it always might have in a normal time because people went outside to look at the eclipse. And this all has an impact on electrical usage. And it's something that we would like to be able to think that we can prepare for in the model going forward.

COMMISSIONER MAYE-EDWARDS: I apologize if I missed this. But was there actually a preparedness plan put forth ahead of time for the eclipse; or was it just you're saying, in hindsight, now that you've seen the data and the behavior that occurred because of the eclipse, you're saying going forward you will do it, make a change?

MR. KENNETH SEILER: There was a significant body of work done by our operation support staff in preparing for this event, looking at different models and what we thought the end time was going to be.
And that all translated to the control room where we had specialized training for the operators for the event as well. We had extra staff on board. We carried some extra reserves as well as an extra regulation during the event in case we got different results than we had expected. So we prepared for it.

And then a lot of the work that we're talking about today is post event analysis.

COMMISSIONER MAYE-EDWARDS: This is interesting. This is actually the first time I've heard this. I'm sure other RTOs and other utilities did take preventative measures for that.

Have you all heard anybody talk about it? I have not heard anybody talk about it.

COMMISSIONER ROSALES: Were you out there during the eclipse?

MR. KENNETH SEILER: We had some folks who were outside taking a view at it.

(Laughter.)

MR. KENNETH SEILER: I can tell you that I personally was not. I was in the control room the entire time.
MR. RICH MATHAIS: And, again, the emphasis is not just on the polar vortex -- or the solar eclipse, rather. What happened that day is done every day of the year by PJM's operations group, trying to predict what happened and then actually handling the operations during the event or the day, and then a subsequent review of what happened to see if there are any ongoing issues that would be of interest going forward.

And of course, as Ken mentioned, we're going to have another solar eclipse in 2024 that will go much more across the footprint of PJM as well as MISO. So we really have to be active in predicting what's going to happen during that particular day as well as every day between now and then and thereafter.

COMMISSIONER ROSALES: So as you pointed out, this was definitely an anomaly. Is there any other days that you've come across that are anomalies that would be weather related that you would have had this type of change in your load?

MR. KENNETH SEILER: Yes, sir. A lot of times
we'll see storms or we have a very hot summer day
where temperatures certainly are in the mid to high
90s. That would have a very, very similar effect on
the load as well.

COMMISSIONER ROSALES: Okay.

MR. KENNETH SEILER: Moving on to the winter
preparation side, I have these broken out into three
different buckets. Primarily, it's broken out into
the studies and drills that we do in preparation
combined with what MISO has just talked about with
the different discussions with our neighbors to the
north, to the west, and to the south. And then
certainly the gas-electric coordination is very
important today based on the gas penetration that we
had in our footprint.

If you look at the left-hand side of
the study -- I'll talk about the winter assessment
study on my last slide. I'll spend a little bit more
time on that there. But much like you heard from
MISO, we spent a number of hours with all of our
system operators drilling for this winter as part of
our training, combined with a field inventory survey
with all of our different generators, as well as the checklist that we sent out to all of our generators in preparation for a winter event.

The coordination has been much more extensive with all of our neighbors -- much more specific -- even speaking to what major transmission avenues may be taking effect and when. When those schedules are out, we communicate and share all of that with our neighbors as well as any major generation avenues where we have large coordinators. We share that information as well with our neighbors, as applicable.

And we've had a significant body of work as well done with the gas industry with coordination up to and including a lot of tools and processes that we've put in place and enhanced in our control room over the last several years in preparation for the winter as a result of the 2014 polar vortex that we had. So a significant body of work done there, including up to 50 gas pipelines that helps us run a control system.

MR. RICH MATHAIS: Ken, could you comment on
the analysis that PJM has done with regards to how much gas is too much gas, how much natural gas is too much gas for an RTO.

MR. KENNETH SEILER: Sure. So last year we actually released a study. We spent several months doing a study to take a look at the different generation portfolio mixes that we could have across the footprint, assuming that we'd have an increase in renewables, including wind and solar, and an increase in gas as well as the increase in other areas, like nuclear as well as coal. We have the ability to still maintain a resilient bridge. And, in our opinion, this is based on the changes that we see at least in the short term as well as the long term.

So gas penetration continues to increase based on the fuel pricing, as you heard earlier. And we see a large increase in the amount of renewables that we have. Our generation interconnection queue also has continued to see gas combined cycle units coming into the queue, which we continue to study, as well as it does increase solar and wind resources across the footprint.
MR. RICH MATHAIS: And I would only add that a few years ago one or two other people in the room were in the same meeting where we had kind of the first get-together about that natural gas pipeline -- the LDCs, and PJM, and other RTOs -- to talk about how to coordinate or integrate our activities, which means pipelines and generators and the LDCs and so forth. It was a very interesting discussion because we were using the same terms, but they didn't mean the same to different entities, to natural gas pipelines or the generators; and it was just a total inability to be able to communicate.

This was 5 or 6 years ago. I would say that the communication and the understanding of the gas pipelines, and the LDCs, and the generation resources has significantly improved. But it wasn't many years ago that really there was a lull between the ability for the LDCs and the natural gas pipelines to communicate with and truly understand the needs of natural gas generators and vice versa, but that discussion is now much, much improved.

MR. KENNETH SEILER: Okay. The next slide we
have is weather, and I'll talk about that just briefly.

As you heard earlier, we have a staff metrologist who works with our organization in-house. We're expecting higher rain and snowfall in this area, certainly this coming winter, with some bouts of colder temperatures as compared to the last 2 or 3 years. You heard some of that earlier. I'm not going to spend a lot of time on this. But these are forecasts, so we'll see how the accuracy pans out.

CHAIRMAN SHEAHAN: Can I ask you a question about that? Have you guys modeled a polar vortex scenario kind of under current conditions, and can you give us some insight as to what that would look like?

MR. KENNETH SEILER: Yeah. If you don't mind, sir, I'm going to go on to the next slide, and I can talk about that in a little bit.

So what we do is we take a look, on a seasonal basis, at the summer and winter expectations, and we run various sensitivities to the point that you're making. So if we saw loads to the
levels that we saw, based on what we saw in 2014, I can walk you through some of those numbers here in just a second.

So our current assessment for this coming winter is we're expecting a load of around 135,000 megawatts. When you look at the amount of generation that we have, around 185,000 megawatts and normal generation outages -- if you run the math, there's still 33,000 megawatts of reserves that we have available to us with this load projection that you see here, which represents, with the generation outages included, about a 24 percent margin that we have of available capacity. We feel like we're capacity rich right now.

To the question that you made, relative to if we had another polar vortex, we run a series of sensitivity studies, which I haven't shared with you here. But we'll ramp the load levels up to 145,000, 150,000 megawatts to determine what the impact will be; and, based on those scenarios, we would still be reliable to have extra capacity on the system to maintain the needs of our customers.
CHAIRMAN SHEAHAN: There were a number of resources that didn't perform as expected during the polar vortex; and, you know, there's a whole debate about why, but the fact is that they didn't. Do you build in those kinds of assumptions, in terms of --

You know, obviously, the gas has a much bigger presence in PJM now than it did even a few years ago. You know, it is more vulnerable to weather disruptions. So do you sort of factor that in to your calculation?

MR. KENNETH SEILER: We actually do. So we'll run though a number and ramp the generation outages that could happen as a result into this winter assessment. We do that as part of the sensitivity studies, if we cannot get the gas. We also take a look at any help that we can get from our neighbors, if we need it. We also look at the main response, which we have about 9500 megawatts in demand response available to us. And a lot of the times in the winter the wind is blowing, so we get a lot of help from the wind turbines that are out there as well.
We may not get as much help from the solar folks. But based on a number of those sensitivity studies, including exporting additional power into our neighbors' areas, like in New York, we still anticipate being able to serve that load even with a large generation outage rate, which our generation outage rates have been coming down over the last several years.

MR. RICH MATHAIS: That concludes our discussion from PJM's perspective. We'd be glad to answer any questions -- any further questions today or in the future. And we believe that within the footprint of PJM we have sufficient capacity and operational ability. We do not anticipate any kind of operational problems this winter.

COMMISSIONER MAYE-EDWARDS: That's all good to know. Thank you very much.

Are there any other questions from the Commissioners?

(No response.)

COMMISSIONER MAYE-EDWARDS: Well, will everyone please join me in giving a round of applause to all
of our presenters this morning.

(Applause.)

COMMISSIONER MAYE-EDWARDS: On behalf of the entire Illinois Commerce Commission, my colleagues and I would like to thank you for your participation today and for the information that you provided on winter preparedness.

At this time we'll take a 10-minute break and reconvene at 11:00 -- well, I guess we finished a little bit early, so we'll reconvene at 11:05. Thank you very much.

(Whereupon, a brief recess was taken.)

COMMISSIONER MAYE-EDWARDS: Welcome back. It's always nice to have a little bit time to network, I think. We will proceed with the last portion of this morning's policy session where we'll hear from the Illinois LDCs' perspective on gas supply, energy efficiency, customer service and outreach.

Presenting on behalf of the LDCs are Tim Eggers, Manager of Gas Supply at Ameren Illinois; Chuck Rea, Director of Energy Efficiency & Regulatory
Analytics at MidAmerican, and Ellen Rendos, the Managing Director of Customer Experience at Nicor Gas.

We'd ask that each speaker please hold their remarks to 15 minutes. Please join me now in welcoming LDCs' representatives. Thank you. We can go ahead and get started. Let's give them a round of applause.

(Applause.)

MR. TIM EGGERS: Good morning, Commissioners. My name is Tim Eggers. I'm the Manager of Gas Supply for Ameren Illinois. I want to thank you for the opportunity to share the Illinois LDC's perspective with you today.

The strategies and plans that we're going to present are generally indicative of the five major gas utilities here in the state of Illinois. And the first slide is Gas Supply Planning Objectives.

The LDC would also like to thank the AGA for sharing the good news about all of the continued growth in domestic production and moderate
pricing that our Illinois consumers have enjoyed for the last several years. Our LDCs delivered the good news to Illinois consumers by providing safe, reliable, and economic natural gas. Due to that, we contract for a variety of services, including pipeline transportation, storage capacity, balancing and peaking services that allow us to make that peak day obligation -- that coldest day of the winter -- and also effectively manage our supply in any winter weather event.

We also diversify our capacity supply resources among pipelines and producers and purchase supply on various pricing structures -- first of the month index pricing and daily pricing. And, finally, we optimize our resources to minimize our PGA costs and price as to ensure against price spikes.

Looking at the next slide, it's our Send-Out Data from last winter, 2016/2017. And it highlights the challenges that we faced with substantial load swings. On our coldest day of the winter we moved more than 6.8 Bcf of gas to our customers; and on our warmest day last winter that
was down to just 1.2 Bcf.

When these dramatic swings occur, the LDCs have to rely on our portfolio resources, such as storage services with winter injection capabilities; balancing services; and other assets that serve the daily load and balancing system.

The next slide is our forecasted peak day and resources for the upcoming winter. With that warm winter last year, our highlighted day was only 6.8 Bcf, which is 31 percent lower than our peak day, which is 9.9 Bcf. So our peak resources weren't even tested last winter.

The combination of resources that we used to meet peak day include 4.5 Bcf per day of pipeline storage capacity; 4.2 Bcf of utility-owned storage that's owned and operated within the state of Illinois; and 1.2 Bcf of third-party supply.

Our Gas Supply Strategy, focusing on our strategy, we have a hundred percent of our firm gas supply requirements purchased under firm contracts with a mixture of base load supply with monthly index pricing and daily supply with daily
index pricing that's used to go on and off on any
given day. Majority of our gas supply is purchased
from strong producers and established marketers with
a focus on credit worthiness, performance, and their
access to supply. And we have a forward-planning and
procurement cycle with long-term contracts for our
transportation and storage capacity. And it's
important that we carry right of first refusal on
those contracts so, if there's competitive bidding,
we would be able to retain those.

Our Gas Supply Strategy, continued:
The LDC's own contract for firm transportation on
interstates pipelines is back to the major production
basins and liquid market centers. Various pipelines
provide diversified access in many of the traditional
supply basins -- like, the Midcontinent, the Gulf
Coast, Texas, and Rocky Mountain suppliers. They
also assess the majority of the new shale plays such
as Fayetteville, Haynesville, Bakken. And,
importantly, Illinois has now received a greater
access to the variable shale plays -- Utica and
Marcellus -- which is in Northern Eastern United
States. Those two shale plays now provide 30 percent of U.S. production and are responsible for most of the growth that Mr. McGill spoke of earlier. Those two shale plays are really driving growth in the United States. And our utilities continue to be top-tier shippers on many of the pipelines that we resource, and that allows us leverage to negotiate the lowest possible rate and best possible terms for our customers.

Looking at the map of Illinois and the pipelines that provide service to our consumers, as you can see the Illinois LDC is very well-positioned to be able to access gas supply from many different regions of the country. We are literally at the crossroads of the supply picture of the United States thanks to the Northeastern shale plays. Growth in shale, both all around Illinois and particularly to the east, has created a lot of infrastructure projects, many of which actually have been placed in Illinois. The two major ones in place, in service, already bringing in nearly 3 Bcf per day are Marcellus and Utica shale supply, two Illinois
markets. Another is partially complete that the Rover Pipeline. And then another one that is underway is the Nexus Pipeline. Together those will bring in another 5 Bcf per day to the Midwest markets.

There's been quite the pipeline investment actually within the state of Illinois. Approximately, $286 million of investments have occurred in the last couple of years and is forecasted to occur in the state of Illinois.

The all important pricing: Nationally domestic production is keeping ahead. Demand growth from the exports industry, electric generation, is holding down current prices. And this slide obviously demonstrates that the forward pricing in red is very consistent and very affordable, hence the historical averages. And if we look at something closer to home, the Chicago natural gas pricing, the tremendous amount of capacity and supply against a relatively flat demand here in the Illinois area reduces prices in the Chicago market. This slide depicts the monthly index price for natural gas
in the Chicago area relative to the Henry Hub, which is the price and benchmark of the United States.

So, typically, an Illinois consumer might pay a premium of 60 cents over the last 10 years to suppliers nationwide. Now we actually pay a discount forecast of about $0.13 against national supply. So great news for Illinois consumers. And the other local hubs in Iowa, Michigan, and Ontario are also seeing the same kind of price drop. So good news for consumers in the upper Midwest as well as Chicago.

Moving on to our Price Risk Hedging Strategy, we target hedging 50 to 75 percent of our normal winter demands against market price volatility. We price hedge up to 36 months forward over time and achieve dollar-cost-averaging results. We use a variety of methods to hedge price, including storage, fixed price contracts, as well as financial instruments such as swaps, options, and collars. And we do target at least 30 to 50 percent of our gas to come out of storage for the winter. Financial hedging transactions diversify our credit risks.
between gas suppliers and financial counter parties.

Current Winter Preparations: We our in
great shape for the upcoming winter. Our storage
inventory -- we're starting off the winter at the
historically low prices. I know in the AGA slide it
did mention that some of the summer injections were
relatively mild compared to 5-year averages. That's
not the case for the Illinois LDCs. We're on track
to be completely full by the time winter starts.

All firm gas suppliers are under
contract, and pricing hedging is largely complete.
And, finally, the LDC has secured the pipeline
capacity to meet our designed peak date.

In summary, our gas supply plans are
in place for this winter. We're equally prepared for
the winter season with extreme cold weather and
extreme warm weather. We learned a lot from lessons
of the polar vortex and the last two warm winters.
We can expect higher usage this season should the
weather normalize. Obviously, we would expect to see
higher heating costs, but it's important to note the
actual cost of gas are very similar to last year, so
it would just be an increase.

And natural gas prices for this winter remain well below historical averages. These prices suggest that moderate pricing will continue for years to come. However, should we get some price spikes this winter, our storage and price hedging should mitigate rate impact for our customers.

So that concludes my presentation.

I'm happy to take any questions.

COMMISSIONER MAYE-EDWARDS: Quick question: At one point does price hedging stop for the upcoming winter?

MR. TIM EGGERS: We generally go up to 36 months out. Some utilities go a little further, some a little less, based on risk management guidelines within those individual organizations.

COMMISSIONER MAYE-EDWARDS: So you start about 36 months out, and when is it complete?

MR. TIM EGGERS: Typically, within a couple of months prior to November.

COMMISSIONER ROSALES: Can you explain the collar part.
MR. TIM EGGERS: Yeah. A collar is a financial instrument that establishes a set range for the index price. It sets a high, the max I will pay; and it sets a low, the least I will pay. So there's a financial instrument that limits my upside and limits my downside. Rather than a fixed loss, it just sets a fixed price.

COMMISSIONER ROSALES: Why would you limit your low part?

MR. TIM EGGERS: The people we trade with, it's kind of a required piece of the financial swap.

COMMISSIONER ROSALES: Okay.

MR. TIM EGGERS: As soon as you buy a pure option, it's a little more expensive, and then you can participate as far as low as it will go.

And certainly we look at where the prices are and at least some expectation as to what type of instrument to use. If the prices are particularly high, we might want more a little more of a downside. When prices are low, getting much below $2, it's not that impactable.

COMMISSIONER ROSALES: Now, in your view, with
the new infrastructure to Illinois, and some of these pipeline investments that we've had, would this mitigate any problems in congestion that happened during the polar vortex?

MR. TIM EGGERS: Yeah. We would certainly expect the extra capacity into Chicago to alleviate things on the pipeline side, to give pipeline operators or LDCs other options.

COMMISSIONER ROSALES: Okay.

COMMISSIONER MAYE-EDWARDS: Thank you very much, Mr. Eggers. We appreciate your time today.

We will now hear the energy efficiently perspective of the LDC.

MR. CHUCK REA: Good morning, Commissioners. My name is Chuck Rea with MidAmerican Energy Company. I'm Director of Energy Efficiency & Regulatory Analytics. I'll talk to you this morning for a little bit about energy efficiency from the LDC's perspective.

It's an important topic. Energy efficiency is not just about helping customers save money. It's also an important part of the customer
experience in total -- the customer service experience. And it's something that we take very seriously, and I'm pleased to have the chance to talk to you this morning about our efforts.

We are going to talk generally about energy efficiency, but specifically this morning about our efforts as it relates to winter-related energy efficiency investments and more specifically this morning about our efforts with residential customers. We're going to have some examples of how we communicate with customers, specific marketing and communication strategies related to our energy efficiency program for customers, for communities that we serve, and also with our trade ally partners. And that's another part of this little presentation that I'm going to emphasize, is our relationship with our trade allies and their importance to the whole energy efficiency experience for customers.

All of the LDCs have pretty broad portfolios for energy efficiency; serving residential customers, non-residential, commercial/industrial customers electric and gas across all of the
different customer spectrums, customer classes, in
terms of income and where they're at in terms of
their ability to make energy efficient investments.

Specifically, I think we have come to
target more and are doing a better job with
income-eligible customer groups and public sector
customer groups. So we'll talk a little bit about
that.

But it's a very broad portfolio with
energy efficiency in Illinois, and it's done
basically two different ways for most customer
groups. One way that we do energy efficiency is,
basically, your classic rebate programs where
customers purchase energy efficient equipment -- for
instance, boilers, thermostats, what have you -- and
the utility company helps them pay for the energy
efficient portion of those investments with incentive
dollars. You buy equipment, whether it be a furnace
or an air-conditioner, and generally your equipment
contractor helps you fill out paperwork. You send
that in, and the utility sends you an incentive to
help you pay for that investment.
The other way that energy efficiency happens is there --

COMMISSIONER ROSALES: And how well does that work? What is the amount that's redeemed? What is the percentage of those rebates that you pay out?

MR. CHUCK REA: Generally, for the cost of an energy efficiency furnace, for example, about kind of the standard furnace, incentives can go anywhere from 50 to a hundred percent. MidAmerican can pay about $700 for a furnace rebate for an energy efficient furnace. That's probably more than a lot of other utilities pay, but that gives you an idea of how much. Our furnace rebates are about $700. Our air-conditioner rebates are about 4 or $500. Usually there's a flat amount for most types of equipment.

COMMISSIONER ROSALES: And that's residential as well as industrial?

MR. CHUCK REA: That's for residential.

COMMISSIONER ROSALES: Residential?

MR. CHUCK REA: For residential, right; and residential-size equipment that commercial customers might purchase.
For industrial projects, the incentive structure can be a little more complicated.

COMMISSIONER ROSALES: Okay.

MR. CHUCK REA: The other way that we bring energy efficiency to our customers is through on-site assessments. And this is residential, commercial, and industrial. We do in-home residential audits where we come in. The customer asks us to come in. We walk through a home. We have some energy saving products that we can put in place right there at the time. These tend to be things like low-flow shower heads, low-flow faucet areas, make some LED lighting, maybe some water pipe installation.

But we also make recommendations on other types of things that the customer can do that are a little more expensive where we can help with incentives: furnaces, boilers, a lot of insulation. For MidAmerican that's the gateway for insulation projects with customers. We can talked about insulation improvements, and then we'll talk about how we can help them pay for those investments.

So for most customer it's either
equipment rebates or something that comes out of these in-person walk-throughs that we do. And that can be for the home or it can be for a business or a factory or a larger facility.

We also have weatherization programs for income qualified customers. These are done more through service agencies, but MidAmerican and the other utilities help fund these kinds of programs for income qualified customers, free weatherization and energy efficient products. Some utilities in Illinois do on-bill financing -- not all of them do, but some of them do -- where you can actually finance investments on the bill. And more and more you see utilities in Illinois getting into things like smart thermostats that are a little more kind of high tech stuff.

Utilities have done rebates for programable thermostats for a long time. You'll see more and more in Illinois utilities getting into smart thermostats. And that's an incentive that we are starting to offer, too.

But this, obviously, doesn't happen on
its on. There is a lot of customer outreach and a lot of communication that the LDCs do and that the utilities do with customers in various forms. Mass media campaigns. There are program-specific campaigns that utilities engage in. There's specific customer communications that we engage our customers with: e-mail, bill inserts, newsletters.

MidAmerican has a program where we provide home energy reports that are specifically tailored to each individual customer, and that allows us to communicate things on a quarterly basis with customers that make it very specific to their own energy profile. So that's an opportunity for us to communicate directly with customers through separate mailing.

We have community events that we partner with, that we help sponsor, and also a lot of communication with trade allies with equipment and insulation contractors. You can't emphasize enough the importance of these kind third-party trade allies and installation folks that help deliver energy efficiency. And we'll talk about that in a little
There's a lot of multi-cultural outreach. You see here some pieces that MidAmerican has and some of the other utilities that communicate in different languages with our various customer groups. Spanish is very common in what you see here -- Arabic, Bosnian, Chinese, Korean, Polish, Indian, working very hard to communicate with communicate with all of our customer groups.

Most of the utilities -- perhaps all of the utilities in Illinois do this. Certainly Nicor and some of the other utilities that you don't necessarily see pieces for are engaged in that kind of process. So we're striving and working hard to make sure that we reach all of our customers and take advantage of this energy efficiency program.

And you see here just some examples of customer communications that we have. There's e-mail blasts. There's door hangers, newsletters, bill inserts, a variety of ways that we communicate with customers. As I mentioned, MidAmerican has home energy report where we communicate with customers on
a quarterly basis, and those messages can be very seasonal. Certainly we're talking about winter steps, steps that customers can take for energy efficiency in the winter -- thermostat setbacks and things like -- that gives us an opportunity to communicate and talk to our customers with energy efficiency.

Also, a lot of communication with our trade allies. We do a lot of training with our trade allies network. MidAmerican is getting ready next month for kind of a road show that we do in different cities across the service territory, not just Illinois, where we talk to trade allies about changes for energy efficiency in the coming year, changes in rebate structures, and ways that we can communicate together with customers.

Trade allies are big partners in delivering energy efficiency programs. They're a point of contact for customers, so we work very hard to work with our contractors and HVAC dealers and make sure that they are fully aware of programs that we offer and how they can help customers participate
And then we do a lot of community outreach in general with a focus on winter preparedness in the fall. MidAmerican has a program where we do a night at the ball game where we sponsorships for high school football games in the fall, high school basketball where we come and are available to talk to people attending these events about energy efficiency. We have some things that we hand out, some giveaways; but it's a way that we can come out into the community where the people who are our customers are and talk about energy efficiency.

The delivery model for energy efficiency is pretty sophisticated these days. We recognize that it's not just about making incentives available to customers and hoping that they take advantage of them. The delivery model is important, and it's important to focus internally on how we can make that delivery model work as well as it can.

Starting from the top of this chart, we've partnered with our trade allies, and we've partnered with are industry experts to train and
ensure that quality installation of equipment is
done. We are very focused not just on delivering
energy efficiency products to customers, but making
sure with our trade allies that they're installed
correctly, that they're installed in a way that
energy efficiency is actually delivered.

We do a lot of testing of equipment
after it's been installed to ensure that the energy
savings that we think should show up for the customer
actually do. So we educate our stakeholders on our
offerings and also our expectations on how energy
efficiency is delivered.

We have expectations that our trade
allies will communicate with the customer, so there's
a lot of training done that's there so the customer
gets the best experience that they can and that they
get their financial assistance in a timely manner.
It's not just enough to promise incentives that come
at some point. We want customers to get their
incentives in a timely basis and a timely fashion and
try to make sure that the entire experience for the
customers the best experience.
COMMISSIONER ROSALES: So who are your trading allies?

MR. CHUCK REA: HVAC dealers; so furnace and air-conditioning contractors. Folks that do insulation make up most of the trade ally group for the residential customers. We have lighting specialists, lighting dealers that are part of this network. Those are more -- for MidAmerican anyway -- more commercial and industrial related. But for residential customers it's mostly folks that sell furnaces and air-conditioners, self-install furnaces and air-conditioners, people that put insulation.

COMMISSIONER ROSALES: When you say educating them, is there somebody specifically that's responsible for making sure that those promotions that you have reach them?

MR. CHUCK REA: Yes, we have a program manager at MidAmerican that is dedicated to trade allies.

COMMISSIONER ROSALES: Great.

MR. CHUCK REA: And they make sure that the communications that we send out are what we want. And they're dedicated to trade allies to make sure
that the trade allies understand what we want them to do and the program to do. We have a dedicated program manager for trade allies.

And this last slide here, basically, shows that we have a lot of contractors in the state that do this work, but we also have a formal trade ally network that our trade allies can be a part of. And on the MidAmerican web site anyway -- and I know other LDCs may have this, too -- we basically have functions on our web site that customers can search for contractors that are a part of our network and that they know that we have worked with and that we have had good experiences with, and that help customers feel comfortable that they're getting good service too.

So we offer the opportunity for customers to look for insulation contractors and look for furnace and air-conditioning dealers straight off of our web site. So they can get that an incentive information all in the same place.

That's all I have for you this morning the I'd be happy to take any questions that you might
COMMISSIONER MAYE-EDWARDS: Thank you very much. I think you have provided a lot of knowledge. We appreciate you being here.

MR. CHUCK REA: Thank you for having me. I appreciate being here with you today.

COMMISSIONER MAYE-EDWARDS: We will now turn to the customer service and outreach portion of our morning policy session. Thank you.

MS. ELLEN RENDOS: Good morning, Commissioners. My name is Ellen Rendos, and I'm Manager Director in Customer Experience at Nicor Gas. And I'm responsible for our Energy Assistance Program there. So I appreciate this opportunity to speak on behalf of the utilities about our customer service and outreach initiatives and preparation of the winter season.

My presentation will focus on three key themes of winter preparedness and outreach. The first one is financial assistance, which includes programs for poor or low income customers; customer experience, including customer billing and payment
options; customer safety, such as winter safety advice and support of our customers. And then the four theme, energy efficiency, that was just covered by Chuck, we will not review. However, it's important to note the critical role it plays in our communication and outreach, particularly at this time of the year.

So the first theme I will cover is financial assistance. Illinois utilities are expecting to receive 167-and-a-half million dollars for LIHEAP for the 2018 fiscal year. That's similar to last year's number. And the utilities represented here today, the gas utilities plus some of Ameren's electric, we're expecting 82 million of that 167 million to be allocated to our customers.

And, again, Illinois ranks fourth in federal funding behind New York, Pennsylvania, and California. And this program year just started October 1st, and that's for LIHEAP and PIP. And the state's expecting, approximately, 173,000 recipients of LIHEAP. The vast majority of that is LIHEAP, but an increased number PIP households and then
households that receive weatherization.

So LIHEAP advocacy is really a year round effort for the utilities. Again, we're participating in the March 12th and 13th LIHEAP action day where representatives, along with consumer advocate groups, go to Capitol Hill to educate members of Congress about the continued need for LIHEAP and the positive impacts of its recipients. Also, in August we have activities during the LIHEAP action month to support our efforts to keep LIHEAP top of line for policy makers.

But, in addition to LIHEAP, the utilities all have their own financial assistance programs to support customers with their heating costs. LIHEAP, these programs allow us to have help more people, because the income guidelines for LIHEAP is at or below 150 percent of federal poverty levels, whereas the utilities programs usually go to 2, to 250 percent, meeting that next group of customers to serve.

So this year the utilities represented here today have already distributed almost $2 million
dollars in their own program and have almost $4 million dollars still available. So we work very closely with providing the LIHEAP agencies -- when the customers may not qualify for LIHEAP, we keep them very up to date on our company programs so that they can refer them to that next level and to obtain some support.

The utilities have also been working to increase the funds that they distribute through their own program. For example, Ameren has already completed four outreach event in March and did another two in October to provide assistance to their customers. Nicor has also worked with the Salvation Army for the past 2 years to increase the funds that it distributes. We expanded the sharing programs to provide additional assistance to veterans and customers in crisis situations, and we gave the customers more flexibility to receive those funds.

COMMISSIONER DEL VALLE: Can I get in a quick question?

MS. ELLEN RENDOS: Sure.

COMMISSIONER DEL VALLE: The 167 is for the
federal. What about the State dollars?

MS. ELLEN RENDOS: I don't have those numbers.

I'm sorry.

COMMISSIONER DEL VALLE: Well, it's a significant amount, isn't it.

MS. ELLEN RENDOS: Yes, it is a significant amount.

COMMISSIONER MAYE-EDWARDS: Would you be able to provide those numbers to us?

MS. ELLEN RENDOS: Yes. I think we did provide them in a supplement request last year on the dollars that the companies pay in to the program -- to the State program.

COMMISSIONER DEL VALLE: But those dollars are distributed through the same mechanism?

MS. ELLEN RENDOS: Yes.

COMMISSIONER DEL VALLE: So we have a lot more than earlier distributed?

MS. ELLEN RENDOS: Yes.

COMMISSIONER DEL VALLE: More than 373,000. Is it 373 include the State funding?

MS. ELLEN RENDOS: That includes it. That
includes the State funding.

Customer education about these financial assistance programs are a priority for each of the utilities year-round but especially in advance of the winter months. All of the natural gas companies utilize a variety of communication channels to educate their customers and make information as accessible as possible for them.

Of course we all offer 24/7 emergency assistance. But in advance of the winter, it's important to take the opportunity to get our customers thinking about the preparedness. There's a couple of examples on this slide. You can see Nicor has a website promoting their sharing programs, as do many of the other utilities. And then there's an example of Peoples promoting their sharing the warmth on CTA bus shelters.

So we all use a variety of communication methods and channels that we have listed here. It's really hard to cover them all and go into detail. But just to highlight one that I think is very important and that we all focus on is
our call centers. We have call center refresher
training for all of the employees just prior to the
heating season to review. These are things such as
winter rules and processes that change with the
winter season. And this includes discussions on how
to work with customers that are struggling to pay
their bills and where to refer the customers if they
need help. We also provide a lot of information on
the web site. And another key relationship is really
working with our community action partnerships to get
the message out to the customers.

The second theme is customer
experience. And all utilities share a common goal of
ensuring that it is easy to do business with us.
We're trying to offer multiple billing and payment
options, including electronic billing and payment
options, budget plans, payment plans that help
levelize the payments throughout the year for the
customers; and also letting the customers have 24/7
access to establish deferred payment arrangements
either on our web or through the IDR without having
to speak to a customer service representative.
Another area that we have seen an increase in the news is text messages or e-mail alerts for customers. So we have things that alert them that their bill is issued. There are due date reminders, past due bill notifications, and even LIHEAP pledges received that have been helpful to customers.

Ameren is doing a pilot this year to allow the customers to choose a due date. So with their capabilities they're letting the customers pick the date, and they're piloting that this year.

Lastly, I'm going to cover our third theme, customer safety. Safety is a priority for all of the Illinois gas companies. Educating our customers and raising awareness both about winter risk of carbon monoxide, build-up snow and ice removal, and scammer prevention is extremely important. It takes an enormous effort to get this message out and ensure our customers are listing to it. This slide has a couple of examples from MidAmerican on their customer brochure that has information about carbon monoxide and also a tweet.
that they did about safety.

Customer safety is not limited to just winter risks. We also want to ensure the security of our customers. And with the utility scans on the right we are taking a very proactive approach to warning customers about utility billing and payment scams. November 15th is a Utilities United Against Scams Day. Nicor Gas, Ameren, Peoples, and North Shore are all part of a nonprofit organization called Utilities United Against Scams that was formed last June of '16. And along with other utilities nationwide, you're promoting utility scam awareness to decrease the impact of our customers as these scams tend to move from one area of the country to the next.

On this screen shot here we've got an example of some efforts that Ameren is doing right. Ameren will be using a bill envelope -- it's kind of hard read that -- but beginning in late November for a few months that's alerting customers to avoid utility scams. They also, on the scam awareness day, November 15th -- Ameren will be canvassing businesses
in some of their major communities. And employees will be going door to door to some mop and pop type businesses with fliers and a magnet of theirs to help bring awareness to that because we've seen an increase in commercial -- scams against commercial customers. So they're calling their campaign Ameren Illinois Stands Against Scams. So that's just a couple of examples of some of the safety education that we're dealing with.

Again, safety has always been a high priority of the utilities. You've got a couple additional customer outreach examples from different utilities. Ameren, in its fall flier in October included a scratch and sniff gas odor so that that the customers could recognize the smell of natural gas. Peoples Gas and North Shore are also launching a major initiative to educate customers about what to do when they smell gas. The outreach will include a gas sniffer insert in all of the November bills along with advertisement -- CTA and Pace advertisement, radio, social media, and digital media.

Along the same lines with safety,
Nicor Gas took its safety program to more than 40 communities and fire stations across the area during September and October to promote fire prevention month. And MidAmerican does some similar things with press releases to remind customers about the risk of CO and how to prevent and recognize the signs of CO poisoning.

So, in summary, all of the utilities represented here today are taking measures to communicate about winter safety and preparedness through multiple channels. All of the communications we've covered today are designed to ensure that the customers have access to the information they need when they need it and ahead of the winter heating season.

Our collaborative efforts to educate customer around availability of financial assistance, our ongoing efforts to ensure outstanding customer experience, and our extensive communication about safety -- about natural gas safety and customer safety against scam will help ensure winter preparedness for our customers and communities.
That concludes our presentation, and I'd be happy to answer any questions.

COMMISSIONER MAYE-EDWARDS: Thank you, Ms. Rendos. I know you spoke specifically about communication with your customers about winter preparedness and safety. And while you have said that you have communicated about different financial options, we have heard this morning that we're going to see a colder winter than the last 2 years, which means that prices will then go up. The bills will be higher.

So has there been any communication about that information about, Be wary, we're predicting a colder winter, your bill may go up. I think oftentimes it seems like we tend to react instead of being proactive; correct?

MS. ELLEN RENDOS: And I think in some of communications with our call centers in preparation -- I think that's the key there, that we prepare our call center representatives to understand gas pricing. I was just at a meeting the other day talking about that, you know, getting them prepared
to understand what is expected and understanding degree days and cost of gas and the impact on those customers' bills.

COMMISSIONER MAYE-EDWARDS: I think that's good, but I think that falls under the reactive bucket instead of being proactive.

So you're saying that you don't have any communication prior to the season to your customers to say, Your bill is likely to increase? I know you can't speak for all of the LDCS. But you would say no?

MS. ELLEN RENDOS: I would say no. And I would say that we don't necessarily know very far in advance. But I think at this point we probably could take a more proactive approach, and maybe some of the utilities are in their newsletters that are going our in October and November about the winter.

COMMISSIONER MAYE-EDWARDS: I would hope that that would be a significant priority. If you have the information, I don't see why you wouldn't. If it's a matter of maybe a family saying, Well, maybe we could save a little bit more to prepare, you know,
that type of thing. So I would hope that that would be in some of the discussions going forward.

Also, with November 1st coming, I was just curious -- I know that you cannot speak for all of the LDCs -- but I'm just curious to know generally if the amount of disconnected, or the amount of customers without gas at this point, is higher than last year? Do you know?

MS. ELLEN RENDOS: So for Nicor gas it is lower than last year. We have had less disconnects this year. And I believe the last -- within the last couple of weeks we were at least a couple of thousand residential customers lower than last year. But I can't speak for the other utilities.

COMMISSIONER MAYE-EDWARDS: Thank you.

COMMISSIONER DEL VALLE: How many alternative suppliers do you have any Nicor?

MS. ELLEN RENDOS: 25.

COMMISSIONER DEL VALLE: How many customers?

MS. ELLEN RENDOS: 2 to 250,000.

COMMISSIONER DEL VALLE: 250,000.

MS. ELLEN RENDOS: That's a combination of
residential and commercial.

COMMISSIONER DEL VALLE: Do they share in the responsibility for educating customers and dealing with safety issues? Because you bill on their behalf; right?

MS. ELLEN RENDOS: Yes.

COMMISSIONER DEL VALLE: The customer gets your bill?

MS. ELLEN RENDOS: Mm-hmm.

COMMISSIONER DEL VALLE: So are the alternative suppliers involved at all?

MS. ELLEN RENDOS: Not to my knowledge. We have taken on the responsibility.

COMMISSIONER DEL VALLE: So if a customer's bill goes up quite a bit and they have an alternative supplier and they call into the call center, what are they told?

MS. ELLEN RENDOS: So they would probably refer them to the alternative supplier to answer those billing questions, but they can certainly provide them with the information about the current cost that Nicor has.
COMMISSIONER DEL VALLE: So energy efficiency and other kinds of information you would provide that information even though you're using an alternative gas supplier?

MS. ELLEN RENDOS: Yes.

COMMISSIONER DEL VALLE: But there's no coordination to speak of between the alternative suppliers and your company?

MS. ELLEN RENDOS: About educating customers?

COMMISSIONER DEL VALLE: Right.

MS. ELLEN RENDOS: No, not to my knowledge.

COMMISSIONER ROSALES: Under customer safety I do understand, and I appreciate you being here and I understand it's a high level duty and that it's really ambiguous about utility companies to warn customers about utility billing scams using traditional social media channels.

So I would ask that you would give me a little bit more information about what channels because we constantly have this problem. Do you do it in other languages? Which channels do you use? Why is it not working? Because it's not working.
We constantly hear about they're having run to get gift cards to pay their utility bills, which is totally outrageous, and yet they continue to happen. What are you doing to make sure this doesn't happen?

MS. ELLEN RENDOS: Well, I was explaining what Ameren was trying to do, and that I think has been more proactive, to use the envelope because that's going to get out to a lot of customers, seeing that on the envelope. And their efforts in going out to the commercial customers. But I believe most of utilities have been using some social media, tweeting about the scams or making sure that you are asking for company IDs when people come to your house, and just trying to get that awareness out there.

I can ask the utilities to get more specific information on what they're doing about scams. We've done press releases, especially when we get into that groups have are quite new, the Utilities United Against Scams. There's a monthly meeting about that, and they're just sharing best practices about getting the messages out there.
So I think we have some more to do and learn, but I think we've been increasing our efforts to try and educate the customers.

COMMISSIONER ROSALES: I would like more information on that because it's usually very similar. It's usually by phone calls. And it puts people -- not only residential, but also commercial -- at risk. And they do a very good job of this. And I don't know if we're hitting the right people at the right time because this continues to happen.

COMMISSIONER MAYE-EDWARDS: I think throughout this session we realize we do have -- the Commission had quite a few questions and would like some follow-up information. It may be easier -- Joanne will send an e-mail to Paul and get that information on that. We would like to get information back from all of the LDCs.

We do understand that you're one person representing everyone, so it's difficult to be able to answer all of those questions. But thank you very much for being here, and you did a wonderful
Can we please show everyone a round of applause.

(Applause.)

COMMISSIONER MAYE-EDWARDS: Again, on behalf of the Illinois Commerce Commission and my colleagues, I'd like to thank everyone for your participation in today's policy session. Winter preparedness is a very important topic and it's always important that we gather to address those issues beforehand.

I think I can speak for everyone in the audience when I say that there's a very reassuring feeling to know that all of our national regional and local utilities are really putting forth a great effort in ensuring their readiness for this upcoming season.

A very special thank you to the Chairman and my fellow Commissioners for attending today's session. And with that, this policy session stands adjourned. Thank you.

(Whereupon, the above-entitled matter was adjourned.)