BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

IN THE MATTER OF:	)	
	)	
NATURAL GAS-FIRED, PEAK-LOAD	)	R01-10
ELECTRICAL POWER GENERATING	)	
FACILITIES (PEAKER PLANTS).	)	

VOLUME II

The following is a transcript of proceedings from the hearing held in the above-entitled matter, taken stenographically by GEANNA M. IAQUINTA, CSR, a notary public within and for the County of Cook and State of Illinois, before MS. AMY JACKSON, Hearing Officer, at 100 West Randolph Street, Assembly Hall Auditorium, Chicago, Illinois on the 24th day of August, 2000, A.D., scheduled to commence at the hour of 10:30 a.m.

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

HEARING TAKEN BEFORE:

ILLINOIS POLLUTION CONTROL BOARD
100 West Randolph Street
Assembly Hall Auditorium
Chicago, Illinois 60601
(312) 814-3629
BY: MS. AMY JACKSON, HEARING OFFICER

ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT:

Ms. Claire Manning, Chairman
Mr. G. Tanner Girard
Mr. Nicholas Melas
Ms. Elena Kezelis
Dr. Ronald Flemal
Ms. Marili McFawn
Mr. Samuel Lawton, Jr.
Mr. Anand Rao

MEMBERS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AS WELL AS OTHER INTERESTED ENTITIES AND AUDIENCE MEMBERS WERE PRESENT AT THE HEARING, BUT NOT LISTED ON THIS APPEARANCE PAGE.

I N D E X

THE WITNESSES:

HEARING OFFICER JACKSON: Good morning. I want to welcome all of you. Thank you for coming to this second in a number of inquiry hearings that the Board is holding in order to examine the potential environmental impacts of natural gas-fired peak-load electrical power generating facilities, commonly referred to as peaker plants.

My name is Amy Jackson. I am the attorney assistant Board member to Elena Kezelis and at the request of Board Chairman Claire Manning, I am serving as the hearing officer for these proceedings. We are very pleased today to have the entire Board present for this hearing.

I would like to take a moment to introduce the Board members to you. To my immediate right is Chairman Claire Manning.

MS. MANNING: Welcome. Good morning.

HEARING OFFICER JACKSON: Dr. Tanner Girard is next to her.

MR. GIRARD: Good morning.

HEARING OFFICER JACKSON: And Nicholas

Melas is to my far right.

MR. MELAS: Good morning.

HEARING OFFICER JACKSON: To my immediate left is Board Member Elena Kezelis.

MS. KEZELIS: Good morning.

HEARING OFFICER JACKSON: Followed by Dr. Ronald Flemal, Marili McFawn.

MS. McFAWN: Good morning.

HEARING OFFICER JACKSON: And Samuel Lawton, Jr.

MR. LAWTON: Good morning.

HEARING OFFICER JACKSON: Actually, to my far right is Anand Rao, who is the head of the Board's technical unit, and he will also be participating in the questioning this morning.

Those of you who were present for yesterday's hearing have already heard the opening remarks that I'm about to make. However, for the benefit of those who were not here yesterday, I will be repeating the information I gave out yesterday.

As some of you know, this matter was brought to the Board in a July 6th, 2000, request

by Governor George Ryan. In that request, Governor Ryan asked the Board to examine the following five issues: First, do peaker plants

need to be more strictly regulated than currently provided under Illinois' air quality rules and regulations; second, do peaker plants pose a unique threat or a greater threat than other types of state-regulated facilities with respect to air, noise, or water pollution; third, should expanding peaker plants be subject to siting requirements beyond applicable local zoning requirements; fourth, if stricter regulations are needed, should new regulations apply to currently permanent facilities or only to new or expanded facilities; and, finally, fifth, how do other states regulate peaker plants.

Through the information presented at these hearings, through questions and through public comments, the Board will develop a complete and well-rounded record that will enable it to provide an informed and well-reasoned response to each of the governor's five questions.

At this time, the Board anticipates being able to present an informational order to the governor that will include all of the Board's findings and recommendations. This informational

order should be ready for the Governor by the end of this calendar year. The Board's final meeting this calendar year is currently scheduled for December 21st of 2000.

Today's hearing will focus on testimony and information from those involved in the peaker industry. We are happy to have representatives from the following groups present today to present testimony: Indeck Energy; Commonwealth Edison; Mid-America Interconnected Network, or MAIN; Midwest Independent Power Suppliers; Ameren; the Illinois Environmental Regulatory Group; and Huff & Huff Environmental consultants.

Each of these groups pre-filed their testimony, and that testimony is available on the Board's website. The Board's website can be found at www.icpb.state.il.us. We have provided some extra copies of that testimony, and the

extra copies remaining are available on the table at the entrance. We are in the process of making additional copies. So if they were gone when you walked in this morning, please check back a bit later.

Also present to observe today's proceedings is a representative from Midwest Generation, EME, Inc., Mr. Doug McFarland. Mr. McFarland asked to be recognized and wanted me to note that although Midwest Generation is not testifying today, they do anticipate filing written comments for the Board to consider in its deliberations.

For those of you who were present at yesterday's hearing, you are familiar with the format that we will be following today. Basically, we will invite each presenter to make their presentation to the Board, and at the conclusion of each presentation, the Board members and our technical unit will be asking questions of the presenters.

I already mentioned that extra copies of the pre-filed testimony is available at the

table at the top of the room. In addition, there are informational sheets prepared by the Board's public information officer. These sheets contain general information about the inquiry hearings, such as the dates, times, and locations of all hearings and information about submitting written

public comments to the Board.

For those of you interested in following this proceeding, we are attempting to keep our website as up-to-date as possible. In addition to the pre-filed testimony, all Board orders, hearing officer orders, transcripts from the hearings, and written public comments will be available for viewing and downloading from our website.

As you can see, we do have a court reporter present who will transcribing everything that is said today. We have requested an expedited copy of the transcript from today's proceeding, and that expedited transcript should be available within three to five working days. For the court reporter's sake, I would ask that all presenters please speak clearly and slowly so

that she will be able to transcribe everything clearly.

I also want to note that we are having the proceedings videotaped today. If any of the presenters object to being videotaped during their presentation, please let me know and we will make sure that the videotape is turned

off during your presentation.

I want to note that testifying at a hearing before the Board is not the only way to provide information to the Board in this matter. The Board will be accepting written public comments, and those written comments must be filed with the Board's clerk's office. The address is listed on the public information sheet that I mentioned earlier. The deadline for filing written public comments is currently set at November 6th, 2000.

One other thing I want to mention is that we do also have a notice list for this proceeding. Those persons on the notice list will receive copies of all Board opinions and orders as well as hearing officer orders.

Persons on the notice list, if they are filing their own documents, do not need to file them with any other person on the notice list. Your only obligation is to file with the clerk of the Board and myself as the hearing officer.

If you are not currently on the notice list, but would like to be added to the notice list, I ask you to please contact Kim

Schroeder. She is in our Board's Springfield office. Her telephone number is area code 217-782-2633 or you may e-mail Ms. Schroeder at schroedk, s-c-h-r-o-e-d-k, at ipcb.state.il.us.

In addition to the hearings this week, the Board has also scheduled three hearings during the month of September. They will be held as follows: September 7th in Naperville; September 14th in Joliet, and September 21st in Grayslake. These are the hearings where we really want to have lots of participation from the public, from local governments, citizen groups, et cetera.

Because of the overwhelming public interest we are expecting and the limited time we

have for these hearings, the procedures for the hearings will need to be very orderly. If any of you know that you will be attending these hearings and know that you will want to make comments on the record, please let me know in advance. I will be keeping a list of presenters for those hearings as well. There is no obligation to file pre-filed testimony for those hearings, but it will help us to know what to

expect if you contact me in advance. My telephone number and e-mail address are on the informational sheet provided at the top of the room.

Our final appearance in this proceeding will be held in Springfield on October 5th and 6th. These hearings will provide an opportunity for those outside the Chicago area who may want to make comment to the Board. Additionally, we hope to use these final hearings to wrap up any questions that are still remaining from the previous hearings.

Before we get started, I want to emphasize that this is an information-gathering

process. It is not an adversarial proceeding. I ask that everyone act appropriately as if you were in a court of law. Finally, please be aware that although the Board members may ask a variety of questions today, you are not to infer anything from the types of questions asked other than the Board's desire to develop a complete and concise record in this matter.

The Board has made no conclusions in this matter at this time, and it will not begin

its deliberations until all information is submitted and the record is closed.

The order of presentation today will be as follows: Indeck Energy will go first, followed by Commonwealth Edison, Mid-America Interconnected Network, Midwest Independent power Suppliers, Ameren, the Illinois Environmental Regulatory Group, and, finally, Huff & Huff Environmental Consultants.

At this time, I will invite Chairman Claire Manning to make any opening remarks that she would like to make. Chairman Manning.

MS. MANNING: This morning I would just

like to welcome everyone, and we look forward to another productive day of hearings. Thank you.

HEARING OFFICER JACKSON: Does anyone have any questions before we get started? Okay. Seeing none, Mr. Erjavec, I'll let you begin your presentation.

MR. ERJAVEC: Okay. If we take a moment for the projector to warm up while, I believe, the Board wants to come down this way.

HEARING OFFICER JACKSON: The Board will be moving down to the front row. Indeck has

prepared a power point presentation, and they'll be making that first. So the Board members can see, they will move down to the front row.

MR. ERJAVEC: Good morning, and my name is Gerald Erjavec, and with me today is a colleague of mine, Greg Wassilkowsky. We are both managers of business development for Indeck Energy Services, and it's my privilege to speak on behalf of Indeck representing independent power developers.

A little bit about my background, I've been in the power industry for 22 years.

Curiously, I'm a chemist by degree with graduate studies in environmental engineering. I spent the first 12 years of my career at Commonwealth Edison where I worked in their chemistry lab and performed analyses on air, water, emissions, and solid waste. I moved to their environmental affairs department where I was responsible for all water quality permitting.

Under that part of my career, I had the privilege to address the Board 12 years ago with regards to water quality standards. When I came to Indeck, I was initially responsible for

full permitting of facilities, evaluating impacts. I've run the air models that we're about to discuss, and I've actually written environmental impact statements. So under those -- with that kind of a background, I'm prepared to discuss the impact of peaker plants on Illinois and the regulation thereof.

Indeck is an Illinois company. We are located in Buffalo Grove, Illinois. We've been there for approximately 15 years now. We're a developer, builder, owner, and operator of

independent power plants. We have a 15-year history of sales to utility customers, and we right now have 13 stations that deliver 1220 megawatts in operation.

I'd like to thank the Board for holding these hearings. There's a lot of misinformation out in the public, in fact, much of which generated the hearings, and we appreciate the opportunity to set the record straight. Before we can address the questions, it behooves us a little bit to talk about what a peaking plant is. I'm going to go through these fairly quickly because, as I listened to

Mr. Romaine's presentations yesterday, he covered a lot of this material very well. So in order not to have to reiterate everything Chris said, we'll move fairly quickly.

As we discussed, throughout the day, there's a varying amount of electrical need in the system. This can be any system; Commonwealth Edison, the state of Illinois, any system you want to talk about, any country you want to talk about. Peculiar to our area is a daytime

afternoon peak pretty much, although, again, that's going to vary by season and by weather.

In order to meet those needs, different types of units are used. We talked about baseload capacity. Those are primarily nuclear stations and the most efficient coal stations. Economics pretty much drives what runs at what time. There are stations that will cycle on and off also known as intermediate capacity. I believe Waukegan, the former ComEd station, now Midwest Generation EME has that plant, that would probably fall in that category, and then there's the plants that run just a very small fraction at a time to meet the absolute daily peaks. Those

are the plants we're talking about.

You may recall several years ago ComEd had a commercial on about Collins Station where the phone rang and somebody picked it up and said, I'll be on in a half hour. That was their peaking plant or one of their peaking plants at the time. Collins, I believe, probably tends a little bit more towards intermediate capacity right now.

Again, the combustion turbine, we spoke about that yesterday. That really -- the name gas turbine is kind of a misnomer. The gas that's being talked about is the air as a working fluid. It passes through the turbine where it's compressed. It's heated with natural gas, and in the case that we're talking about now, these can also be light oil.

In some countries, they actually use diesel fuel for these things. That's not common in the United States, and then it's expanded through and expanded through a turbine which turns a generator. We also talked about the need for some water in these peaking plants, primarily used at the front end.

Because these machines pass a constant volume of air, so many cubic feet per minute at one time, the more -- as the temperature gets hotter, the air gets lighter, and the less density that passes through the machine, the less efficient it is, and the output goes down. What we will do in a lot of cases is pass the air through a stream of water, which

will cause the air to be become cooler. It's kind of like perspiration on your skin, it evaporates and increases the density and increases the output of the machine in hot weather when they're primarily needed.

There are other ways of achieving this effect. Chillers, for example, mechanical or electric chillers are one of them. There are some trade-offs in terms of parasitic load. A chiller also will have a tendency to dehumidify the air, which is not a bad thing, but it just means that some of the energy that's being used is being used to dehumidify and not to chill it. So there are some trade-offs on these.

Water consumption can vary by humidity and temperature. For example, on a very

humid day, you'll evaluate very little water. So very little water will be used. On a hot, dry day would probably be your maximum consumption. Typical for, say, a 300 megawatt unit would be about an average of 40 gallons per minute. It can range from about zero to 80, depending upon the temperature and the humidity.

This is a picture of a combustion turbine, and I'm a little disappointed. The bottom one from this distance doesn't look as good as you'd like. Major components on the turbine, you've got your air inlet at the top here. Your filters that we talked about are in there. Also, the evaporative coolers would be in that section.

The generator for the combustion turbine actually sits right here underneath it. That's at this end of the turbine. The turbine itself is not all that big a part of the unit. The turbine occupies approximately this box right here. Everything else behind it is stack silencing, and then there's your stack here. At the bottom of the picture, you see a cutaway of an actual combustion turbine. This is the bottom

of the air inlet right here. The air compressor section is here. The combustors are right in here, and then your turbine section begins here.

Most of the time I've seen these things they were in packaged units which had all of this together. So they were deceptive when we

just put our Rockford plant together. This is probably 50 to 60 feet long in here. It's not all that big. It's amazing when you look at it. A little bit about the history of gas turbines. Gas turbines have been around for a long time. They've been around for over 100 years. It's often been said that these are jet engines.

Well, actually, a jet engine was adapted from a gas turbine. It's not the other way around. We're not just strapping jet engines on the ground and letting them fly. These machines would not fly. They're way too heavy. The components and the sound muffling and everything else that goes into them would make them entirely different from jet engines.

The reason jet engines are brought up is because it's the most similar technology, and if you're trying to explain it to somebody,

that's what we usually use. They're similar to jet engines, but they're not -- they're not just taken off of aircraft. You have -- some improvements from aircraft engines have been made and used in what they call aero-derivatives,

which is the one type that Mr. Romaine referred to.

The other type is an industrial frame turbine, which is not quite the same thing. It's more of a heavy-duty machine, slightly different construction, a difference in some philosophies. You can see that jet airplanes were actually -- turbines were actually adapted to jet airplanes about 55 years ago or so.

The heavy-duty turbines began to be produced, again, about 50 years ago. In the '60s, gas turbines were installed to meet peaking loading. In fact, there are approximately 100 utility gas turbines in Illinois as of 1999. While the -- this proceeding is directed at peaking plants. I think it behooves us to talk a little bit about combined cycle because I know that the subject is going to come up.

Being in the industry, we have heard all the things that are being said about peaker plants and we know will be said again. There's a great fear that they'll be converted to combined

cycle and that suddenly they will use up all your resources.

You can see over in the box on the left-hand side here, this is the peaker plant that I showed you before. They have an evaporative cooler. The air comes in, comes out. What you do in a combined cycle plant is you add a heat recovery boiler. The hot gas enters about a thousand degrees up. It passes through a series of coils, which are filled with water, which will generate the steam. The steam is then taken and used to turn a steam turbine. Sometimes, in the appropriate location, we do what's called cogeneration. We produce steam for industry also.

There are a lot of economics and locational issues that drive the decision to do that. By the time it gets to the stack, it's down to about 250 to 200 degrees out. So you've removed all that heat from there. The advantage

to these plants is that they're much more efficient. As Chris noted, they can be up to 50 percent more efficient than a peaking unit. The

disadvantage is that they take a much longer time to bring on-line. Your capital costs are higher. They're not really suited to peaking applications. So if you talk about -- even if you talked about converting them, there would still have to be peaker plants somewhere.

One of the things that's a concern about this type of plant here is the water use, and I would like to bring that up. The water use, there's two places. Number one, there's water in the steam system going around this way. You have to -- you get some trace contamination going in there. So you have to occasionally blow it down. The steam cycle on this plant, this is based on putting a heat recovery unit on the back of a 300 megawatt plant, would probably be about 25 gallons per minute, which is not a lot.

Now, when you move down to the last section here, you have to cool the steam in the steam turbine. Typically, that's done with a cooling power or some other kind of system. It

can be water cooled. If you're converting a combined cycle plant -- a peaker plant to a

combined cycle plant, assuming that water is your only medium in here, you can use about 2500 GPM, which can trend toward, depending upon where you are, significant numbers.

Now, the good news is that there are other ways to attack this problem. They've made significant advances in dry-cooling systems, which would not require this water at all. There are some hybrid systems that cut down on the amount of water use. I'll address some of the impacts of that a little bit later, but there are other ways to solve this problem then with evaporating water at this end of the system. I'd like to also talk about the impacts of peaker plants as a preface to addressing the Board's questions.

Combustion turbines fueled with natural gas have about the least environmental impact per kilowatt hour of just about any technology available today, particularly for peaking uses, and, again, you have to differentiate peaking from base uses. From an

air pollution standpoint, the impact that's

really to be concerned or considered is the impact that we as people have to breathe, and both Mr. Romaine and Rob Kaleel described the ways that this is measured by using atmospheric dispersion models.

What happens is the exhaust gas leaves the stack, mixes with the air around it. It then encounters a receptor, and we're most concerned, of course, with the human population. What is used is a five-year history of meteorological data and just about every meteorological condition imaginable to see what is the worst conceivable thing that could happen, and we're required to be conservative. We're required to look for the worst possible cases, whether it's going to happen or not, and that makes a lot of sense because you want to know what your worst possible scenario is going to be, and if that is not of concern, then any other impact should also not be of concern.

You predict the air quality impacts, and then you compare them to USEPA amount standards. The USEPA standards, as were

mentioned, are set at levels to provide an adequate margin of safety for the population looking at sensitive populations, such as the very young, the elderly, and those with respiratory difficulties.

What I'm presenting up here is modeling that was done for a plant. Specifically, this one is a 300 megawatt plant that's been proposed for Libertyville in Lake County. After atmospheric modeling, look at one of the pollutants NOx, the ambient concentration, the highest over a five-year period, ambient concentration that's expected to be seen, which is measured in units of micrograms per cubic meter is 0.028 micrograms per cubic meter.

Now, that needs to be compared against something. Comparison is against the ambient air quality standard, which is 100 micrograms per cubic meter. The numbers are in the decimal places here. You're talking 2.8, not even,.028 percent of the standard. It's insignificant. Fifty-nine micrograms per cubic meter is the ambient background now. You're talking something on the order of one-two

thousandth of the ambient background, again, an insignificant impact for a peaking facility.

Similarly, carbon monoxide standards, we also did some start-up modeling. They are measured for different time periods because it's been shown that different air contaminants affect people over different periods of time. For example, NOx is a chronic-type thing; whereby long-term exposure has been the one that's demonstrated to be potential problems. That's why it's an annual standard for NOx. Carbon monoxide, much shorter period of type. You've got a one hour and an eight. Again, your standards, 40,000 for one hour versus 23 and eight for a 300 megawatt plant; 10,000 versus three and one, insignificant numbers or at least let's say well, well below any level of concern.

Twenty-four hour standards are in place for sulfur dioxide, and PM-10 is particulate matter, ten microgram particulate matter. .01 micrograms per cubic meter, that's to be expected. Natural gas is very clean fuel with respect to the sulfur, and the source of sulfur dioxide is sulfur in the fuel. So for

natural gas, that's to be expected.

Particulates, there really isn't much made in the process in the way of particulates. In fact, the air filters tend to clean out particulates on the machine to a great extent. You don't want particulates going through your machine. So, again, very low impacts.

Short-term SO2 numbers, again, as would be expected from natural gas fuel, very, very minimal impacts. Now, we'd like to put this into some kind of a context that may be more familiar. You could say, well, what is .028 micrograms per cubic meter? What is it? What do I know that's like it? How does it feel? We prepared what we hope are a couple of meaningful comparisons.

One of the things that we're all familiar with or most of us are familiar with are gas stoves. We cook with gas stoves. To my knowledge, not too many people have ever experienced an ill effect, you know, when they're cooking from your gas stove. Typical concentrations from a gas stove, I believe, range from something on the order of 14 micrograms per

cubic meter to about 90. That's the air concentrations that are generated in your home when you're cooking. Again, compare that to the ambient concentration that would be experienced or would, on the worst case level, be generated by the power plants; again, far below anything that we experienced from that.

Another comparison that we've tried to make is to the impact that you would receive from a home or a school. Now, let me be very clear about this, we're not trying to imply that a home or a school emits on a pounds-per-year basis anywhere near what a peaking plant does. That's just not true.

However, what we need to be concerned about is what people experience. If you were in your backyard, what would you breathe? If you were walking down the street, what would you breathe? These are typical numbers. Again, the power plant number we've seen, 0.028 micrograms per cubic meter, in the wintertime, the ambient concentration around the house outside in your yard is about .01. Okay. So if you're standing between about three houses, you'd figure that

might be about what you'd experience. A school actually produces probably in the schoolyard about ten times that concentration.

We're not trying to point out schools or homes as bad things. We all know they're not, but we also know that there doesn't seem to be any adverse impact to the people that are there from what they're experiencing every day, and put that in perspective with the peaking plant.

Water use, as I noted before, when operating a typical 300 megawatt peaker plant with an evaporative cooler uses a maximum of 80 gallons per day, an average of about 40. Technology, the evaporative cooler generally is only used above 60 degrees. That's when the benefits start to be seen in the efficiency pickups. As I noted, it's a function of temperature and humidity. So a hot, dry day, it will use more. A hot humid day, you'll actually use less because you're just not able to evaporate anymore into the machine. So your increase in efficiency is not as good as you'd like to see.

What is 80 gallons per minute? Well,

basically it's the equivalent of 11 homes watering their lawns at the same time. If you walk down the street and you saw 11 homes watering their lawns, you probably wouldn't think anything of it. On an annual basis, approximately the consumption of about 30 homes, 30 average homes. Other water impacts that need to be considered are wastewater and stormwater. Stormwater is captured on site.

It's sent storm sewers after the retention just as you would do with any other development. Wastewater is minimal. If you have a softener in there to treat the water that goes into the evaporative coolers, they have to be backwashed occasionally. They're sent to the local treatment plants. Facilities, such as I've described, that generate, I believe, something on the order of $10,000 gallons of wastewater a day, which is, again, not a big load.

Let's talk about sound a little bit. The Board has established and the EPA has implemented regulations that govern the sound that can be emitted by any industry actually. There are standards that go from industrial to

commercial, industrial to residential, and commercial to residential.

What we're looking at here is basically industrial to residential sound standards. The actual standard is the table in the center here by octave band. For example, during the day from industrial to residential land at the receptor, which would be at the home that's receiving the sound, in the 31.5 hertz octave band, 75 decibels, 74, 69, et cetera, across the octave bands.

Now, on occasion, in order to simplify things, we'll refer to the equivalent as being 61 dba. It's a weighted equivalent. However, again, let's be careful to state here the actual regulation is across every octave band. You have to meet the octave bands. Where you refer to dba in this case it's just to simplify things. We're well aware that this has to be translated back into the octave bands in order for your compliance testing.

Because you cannot control when a plant or you don't know when a plant is going to

be called upon to operate, number one, and,

number two, the sound attenuation on the plant does not change. You know, you can't increase it at night. You can't increase the amount of treatment or silencing you put in at night. You'll design your plant to meet the nighttime standard at all times. Okay.

With this standard in place, and I believe it was also testified to yesterday, Illinois EPA has never received a noise complaint for any of the peaker generating stations in Illinois. As we noted, there are at least 100 out there right now. There's probably more. Since 1999, there have been a few more put in place.

Board members from McHenry County were taken to a tour of a peaker plant operated by the local utility in Springfield, and, you know, there's a quote, they didn't hear anything. We've also talked to homeowners living near peaker plants that just do not hear them. Mrs. Carver here that I discussed -- I had a few conversations with the lady. She operates a

wildlife preserve between the plant that's down there and her home, and the deer come all the

time and there's not been any impact, you know, from a noise issue in terms of deterring them from coming either.

With respect to the design of these plants, Mr. Zak's testimony notwithstanding, the noise criteria are being met by these plants. Some of them will apply buffers. Some of them will apply additional noise silencing. If you remember the slide I showed you with respect to the cutaway of the peaker plant, there's an amount of noise silencing that can be built in. These plants can and do meet the noise criteria.

I'd like to make one other comment. I didn't have a slide for this one, but with respect to siting, because the subject has come up, and I'm sure it will, and just think about this for a minute, like all businesses, and this is a business or an industry, peaker plants need access to raw materials and need a way to deliver their finished goods. This makes it no different from a stationary store or a food store or a

McDonald's or what have you.

In this case, we're talking about gas and electricity, and I don't think I'm giving

away any industry secrets when people look out and they say, well, gee, a gas line has come very close to an electric line. That's where a lot of peaking plants are being sited. There's been suggestions that these plants be sited miles away from the gas and electric and that we run lines to them. Yes, it's technically feasible. I think the amount of disruption to be created by that is a lot more than by siting them nearby. We've just discussed the impacts, and they're minimal. It doesn't always make sense. Yes, it can be done.

It brings to mind -- in terms of some impacts, actually the impacts can be greater. While we were going through one of our recent proceedings, it was announced that a rail station was being built. It was built adjacent to a parking lot and a rail line. Now, are there impacts from that rail station? Probably. There's traffic. There's noise. There's cars.

But at the same time, you've got the infrastructure there, and we would agree with the developer that that makes sense.

Now, if I was to turn around and

suggest that he put the rail station three miles away and run a rail spurt, he'd probably think I was nuts, and I think that the same thing can be said in terms of siting peaker plants. Their impact is minimal, and siting them where the raw materials are delivered and the offtake takes place makes a lot of sense.

With that -- with that foundation, I'd like to address the questions that were put before the Board. Question number one, do peaking plants need more regulation? First of all, I believe it's been said already, but deregulation is a large, large misnomer here, and I believe that -- I have read some of the pre-filed testimony, and I believe plea ComEd is going to address that also. Restructuring is actually what happened in Illinois, and it's a more accurate term of what's happened. Deregulation refers to utility rates.

At one point in time, it made sense for one utility to serve an area. They were granted a quasi monopoly status, if that's the proper term, and someone will correct me, I'm sure, if they want to look at it a little

differently. However, in exchange for that, because they were becoming keepers of the public trust, their rates were regulated. You might say that their rates of return were limited. We being on the other side of the coin, knowing that we have no guaranteed rate of return, we could say they've got a floor on there. So it's a matter of perspective, but deregulation refers to the utility rates and sometimes the ability to spend the money that they're collecting from the rate pairs.

Peaking plants are already very regulated. They're regulated by codes, standards, permit requirements. This is a list, just a partial list, of the standards that must be met by peaking plants. Now, you've got your different industry standards between concrete, steel, petroleum, the engineering standards.

It's all the same -- I don't know if it's prominent or not, but Illinois EPA has jurisdiction for air permits, noise control. If there's a water discharge associated with the plant, the surface waters of the state, there's a permit to be put in there.

ComEd has interconnection requirements. You've got electric codes, building codes, fire codes, Army Corps of Engineers' approvals, and there are local approvals. Right now under the system that we're operating under, you've got zoning, stormwater. There's local wastewater approval, water supply approval, and ultimately the building permit. All of that must be supplied by the locality.

So for someone to say that these plants are not regulated is really, really a misstatement. In our opinion on this basis, additional regulations would seem unjustified and they'd also seem counterproductive.

Question number two, do peaking plants pose a unique or greater threat than other state-regulated facilities? I'm going to show

you some analyses. First, we've discussed that peaker plants have minimal impacts compared to standards. I want to compare that to also some other existing facilities. What I did here, this refers to some local facilities, and this was, again, prepared for the plant in Lake County. You could see that clearly the -- in cases of

NOx -- in cases of NOx, the largest emitter is the coal-fired power plant. You've also got Abbott Labs. These are some temporary diesel peakers that were installed. They're not there this year. They may be back, maybe they won't.

You've got Indeck right here. You've got a coffee roaster. You've got a hospital. In the grand spectrum of things, it's not out of line with the range of impacts of other industries. Looking on a statewide basis, I did an analysis under SIC codes, that's standard industrial classification codes, which are used, among other things, by EPA to set emission standards, and took a look at some industries in the state. This is by no means inclusive of all industries.

I took the list of SIC codes, I picked some out, and I just wanted to see where peaker plants would line up with respect to other industries. You could see down the side here we do have some steelworks, refineries, electric, and other services. That's this guy right here. Wait a minute. No, it's not. I apologize. That's this

guy right here for steel. Industrial machinery manufacturers, brick and tile manufacturers, heating and ventilation manufacturers, airports.

Caution on this one. Airports refers to the physical plant at the airports. This is not the airplanes. These are stationary sources we're talking about here. So there are some impacts here also. This blue bar here, this is cold rolled steel. For whatever reason, I was not able to make it appear there. I tried for a couple hours, and Bill Gates wasn't returning my phone calls. So I had to leave it out on that one.

The point here, and I'm going to go through several these, is not to show that one

industry is bad or good or is, you know, bad compared to another, but to show you that the peaker plants, this box here, is the average permitted emissions of all plants that either had received a draft or final permit as of a couple of weeks ago. You could see that in the grand spectrum of things it's probably about in the middle of all of these other industries.

NOx emissions by far, electric

services, and this includes utility plants, private plants. There were a number of different plants, 200 and some odd, and I've got the number on a later slide, that contributed to these. This is the average permitted emission in the permit. I used the permit numbers. So those will change over years, again, peaker plants down near this end.

Particulate emissions, way down at the low end of things. S02 emissions, natural gas-fired plants, as is expected, way down at the low end of things. VOC emissions, similar picture. This is the total permitted NOx emissions. This is when you've summed up all the

plants, okay, in tons per year.

Just to give us a feel of where we are, and this is in hundred -- well, you could see, hundreds of thousands of tons. You have several industries that are higher. You have several industries that are lower, right in there. The number above each bar is the number of permits that are being compared for each individual here.

For example, can you see that there's

229 permitted electric services. That's by that SIC code. The number of peaking plants on here is 22. Again, this was an older list. As was noted yesterday, I believe the number is now up to about 40 -- 40 or 49.

I can't remember exactly what I heard, but even if you doubled this bar, it still pales in comparison to everything else that's out there or, in some cases, it falls right in the range of everything that's out there.

Looking at the impacts of these plants, again, we've looked at -- and this is an S02 impact because it was the only information I

had available. These are the numbers that were modeled for the plant in Lake County in the blue. What you've got here in the green are the impacts at the same point, which is approximately 45 miles away, of a steel plant that's located somewhere around the Illinois/Indiana border. We happen to have numbers for that plant. Again, I'm not saying that a steel plant is a bad thing.

What I'm trying to do is put this in perspective. There are other industries out

there that have significantly larger impacts than a peaker plant would have in its own backyard, and this is from 45 miles away. As you get closer to that plant, I'm sure the impacts go up.

Water consumption, a million gallons per year. Compare your 300 megawatt peaking plant to a 50-home subdivision, a typical high school, or a retirement home, a 200-bed medical center, or a 400-room hotel, way down at the low end, I think my laser pointer is dying here, of water consumption. Just to put things in perspective, again, this is not to cast

dispersions on any of these other enterprises, because I don't think that's our purpose here, and we wouldn't want to do that. That's interesting.

Going back to question number two, which I thought I had in here another time, should -- do peaker plants pose a unique or greater threat than other state-regulated facilities? If you look at the emissions that are out there, if you look at the impacts that are out there, I don't see how you can say that they propose a unique or greater threat than any

other facility.

They are well within the range and, indeed, toward the low end of anything that's out there right now. I guess the conclusion I would come to on that, if peaker plants are to be regulated more strictly as we referred to in question one, the comparative analysis here shows that other facilities would definitely require stricter regulation or should fall into the same thing. I guess, the long and short of it, in our opinion, is if you're going to regulate peakers

more stringently, then you should probably revisit every industry in Illinois because the impacts are well within the range and at the low end of the range, and so if you can justify regulating peakers more strictly, you probably want to reopen every regulation that you have.

Question three, should new or expanding peaking plants be subject to siting requirements beyond local zoning? Well, we've already taken a look through peaking plant impacts. For many measure, the impacts are minimal. If you review a lot of local zoning codes, most zoning codes already allow for

somewhere in the code for uses that have greater impacts, whether it be noise, air pollution, water use, what have you. Really, right now, they are handling that end of the things.

Finally, any process, in our opinion, new or existing, that is implemented should restrict decisions to facts on record. That, unfortunately, doesn't seem to be the case in a lot of zoning. We've been advised many times that the decision could be whatever they want it

to be. So we'll leave that go there.

Question four, should any new rules apply to existing facilities or only new or expanding Peaking plants? One of the design bases for power plants and, indeed, anything that you're going to design, whether it's, you know, a building you're designing to conform to local building codes or what have you, is the existing regulations.

Trying to design to hit a moving or potentially moving target could bring design work to a halt. It could run into a lot of unjustified expenses. In this or any other industry, again, a period of regulatory certainty

is necessary to allow us to be able to move forward. We're not asking for any special treatment, just that any change in regulatory philosophy should apply to all industry, not just to peaker plants. Again, we don't think that they should be applied to the new or to expanding or to, excuse me, existing facilities. Quite frankly, we don't think any changes are justified.

And finally, question five, how do other states regulate peaking facilities? The process will vary by state. Several other states have a process similar to Illinois. It's also known as a segmented process. You'll go to the air bureau for your air permit, the water bureau for your water permit. If there's a solid waste issue, which there's typically not, you'll get a solid waste permit. You will go to locals for zoning.

That approach has been successful in many states. Other states have a coordinated approach. All issues are directed through a single siting agency. It should be noted that in most of those states the siting Board then will

overrule any local zoning too. It tends to make it a one-handed process instead of a process that plays off between two different entities, and it works more efficiently for them.

Just one other comment with respect to impacts of plants and I just want it noted that on the water issue, the Governor's Task Force will be convening in the near term future,

and I think with respect to water impacts, we probably should wait for their report to come out, but really this is -- we like to thank the Board for the ability to present our information here. We think we've addressed the questions that have been asked by the Governor, and we think that we've given the Board some pretty good information to take back, and the, in our belief, should be that the process is sufficient as it is and that any changes to the process really should be examined in light of all industry in the state because it's not an isolated industry. Thank you.

HEARING OFFICER JACKSON: Thank you, Mr. Erjavec.

MR. ERJAVEC: You're welcome.

HEARING OFFICER JACKSON: We'll take some

questions from the Board members.

MS. MANNING: Could you please describe the negotiations and input that the village of Libertyville had and the project proposal you have in that village?

MR. ERJAVEC: I would --

MS. MANNING: Just kind of summarize --

MR. ERJAVEC: Okay. If you don't mind, I'll refer that to Greg, because he was -- is a project manager for that project. Okay?

MS. MANNING: In terms of just the local input that was given to you in this project, and if you could describe it, from your perspective, what kinds of negotiations took place with the village of Libertyville?

MR. WASSILKOWSKY: Really, there's no negotiations. What we do is there's usually an early-on meeting with the zoning staff to understand and clarify filing a petition to the zoning regulations. Sometimes in reading these regulations, you need clarification, and we asked for guidance into how to direct our petition.

So it's really an education on our part because the zoning criteria does vary from

municipality to municipality, state to state, and we need these clarifications regarding definitions. So that's what we did with the village of Libertyville. There's really no negotiations. The law is the law.

MS. MANNING: Okay. That's all I have

right now. I have more questions, but I'll just pass it along right now.

MS. KEZELIS: Your material indicates that Indeck has 13 stations which currently operate.

How many of those are gas-burning peaker plants?

MR. ERJAVEC: Oh, boy. Nine or ten. We had acquired, up in the state of Maine, a couple of wood-burning plants. I believe we've got one in New Hampshire and the hydro plant in Maine. So that would take four. All the rest are natural gas-fired, combustion turbines. I believe most may have an oil backup. We're not proposing that in the state of Illinois, but they are, for the most part, gas combustion turbines.

MS. KEZELIS: And how many are you currently proposing or in the process of with the IEPA Illinois?

MR. ERJAVEC: I want to say about four just off the top of my head. There may be five that have been -- for example, we have filed permit applications for four, which, I would assume, would be the answer to your question.

MS. KEZELIS: Yes. That is my question.

The figures that you addressed with us in your power point presentation concerning the air quality impact charts in micrograms per cubic meter, were those based on modeling?

MR. ERJAVEC: Yes.

MS. KEZELIS: So although you have peaker plants that you operate, those figures were not based on measurements of actual operations?

MR. ERJAVEC: No, they're not, and there's a couple of reasons for that.

MS. KEZELIS: I'd like to get to that.

MR. ERJAVEC: Okay. There's a few reasons for that. First of all, if you are to -- what happens when you do the modeling, and I almost wish I had the gentleman sitting here because he could probably speak to it better than I can, but I'll do the best I can on this.

You establish, on a USGS map, which

takes into account topography and hills and things like that, a receptor grid, and you go out 100 meters, 200, 300 meters in every direction to try to figure out where the greatest impact would

be predicted. Okay.

The model has been verified, and, you know, I haven't developed the models. I've taken some classes on the models and things like that. It's my understanding when you verify these models, because you take five years of meteorological data and you model it every hour, hour after hour after hour for five years, and you try to find the single highest point, the single highest number in that five years, okay, and based on that particular data set, which, in this case, will be five years of data from O'Hare airport, there's a little point on your grid. It's so many hundred meters this way and so many 100 meters that way, that has that .028 that we showed.

Any variance in that weather, and weather changes all the time, might relocate where that point is. Okay. So it's my understanding, from people who have verified the

models, that the models are pretty good at predicting what the worst day's impact would be. They're not so good at telling you where it's

going to be, whether it's going to be -- you know, your model may say here, and it may turn out to be over here, and I'm pointing to different places. It may be southeast as opposed to northwest.

So finding that point, number one, would be difficult. Number two, the levels that we're talking about are not measurable, and that's part of the thing. Were we to try to go out and verify compliance, you wouldn't see the difference in the background.

We're talking a background of about 59 micrograms per cubic meter. We're talking about a difference under the worst case, a temperature inversion where everything is forced to the ground and high winds and everything else, of .028 micrograms per cubic meter, about one-two thousandths. That's well within the range of uncertainty of the test. You wouldn't be able to measure it.

MR. WASSILKOWSKY: What I would like to do

is clarify that a little bit. What Gerry is talking about is when the EPA asked for a model

and we prepare models to see the ground level impact of the air you breathe, these numbers were very small in our modeling, which is expected.

Now, by Indeck, by our consultants, and consultants representing every other developer here in the power generating business, including ComEd, these numbers are not dreamed up. They're very consistent, and we expected them to be this low. Now, from your standpoint you're saying, well, how can -- you can't measure it this low. That's correct. It's nonmeasurable. You'd have to take into consideration the wind, topography, a home's furnace, a high school furnace, all that kind of stuff. We're that low. So that doesn't make sense to measure it out in a block away or two blocks away.

You can measure and get guarantees, which we have, and others have gotten guarantees as to the rates from these machines, and you put monitors in stacks to monitor the flow of emissions from the stacks. So if you know what's

coming out, you can easily then verify what the

impact is in the local neighborhoods. So once you know that data point, you got the manufacturer to guarantee what's coming out of the stack. That given, the rest of it's just going to, you know, flow out in terms of your topography and wind and so forth.

So yes, you need the model because every area's weather pattern will vary. Every area's topography will vary day to day. That's why you have five years' worth of data, the machines burn very consistent and reliable fuel, unlike coal or other solid fuels, where we have to worry about the fuel consistency minute to minute, hour to hour.

This fuel is incredibly reliable and consistent in its heat characteristics, and, therefore, we can easily model this and see the impact to the residences nearby.

So, yes, it can be modeled reliably, and the data coming from the machine is very reliable and consistent and can be monitored in the stack, but to give you an idea, it's so reliable that you can make a test on one given

day, come back a year later, and test it again and be that consistent. It doesn't wander much once the machine is tuned in.

You could also have the monitor continuously, which is called a CEM, a continuous emissions monitor, and you'll find if you're to watch the monitor that this would be basically a straight line. It's that consistent.

MS. KEZELIS: Thank you. That was very helpful.

Can you tell me the name of the model that you used?

MR. ERJAVEC: ISTSD, which was described by Dr. Kaleel. That's an industry standard basically.

MS. KEZELIS: It didn't reflect that in your material.

MR. ERJAVEC: I apologize for that. Just to be -- if we were to submit any other model, Illinois EPA would have sent it back to us. That's the bottom line. That's what is expected, and sometimes we forget and assume that people know that.

MS. KEZELIS: The active facility,

assuming one is in operation or is completed, construction is completed, all the necessary permits have been completed, is this physically manned by a person 24 hours a day, or is it simply left in place until it is needed to be turned on? Can you explain the operation, characteristics?

MR. ERJAVEC: The plants are designed such that they can be operated remotely. It is not our philosophy to do that. We man the plants, and we also cooperate with the local villages in terms of their requirements for emergencies and things like that.

It became quite clear to us, you know, for example, in some discussions with places we've talked to to say, yes, we want the plant to be manned, and plants will generally be manned, but, you know, there are utility ones right now that have operated reliably for years by remote control. There may be somebody within several thousand feet, but he's not sitting right on top of the thing.

MS. KEZELIS: Yesterday we had testimony that it could be turned on through the internet

provided there was a password --

MR. ERJAVEC: With all the right things in place, it can be done. There are a lot of things that are technically feasible. Whether they're practically done, we don't do that, but I won't speak for all of my colleagues.

MR. WASSILKOWSKY: I think historically you'll find that smaller machines are done remotely. The larger machines, these types of investments, we commonly have one or two people on staff, maybe more. What they would do is they would have the staff up more during periods when you expect generation to be needed, summertime periods obviously, but when you get into the wintertime periods, you may wind up shifting staff away, but do you still have staff on site? You may have less available.

So I would think across-the-board I would expect people to have someone on site probably all the time, and that staff can vary depending on when they anticipate to operate more or less.

MS. KEZELIS: And the design figure issue

that you addressed with us in the photographs of a turbine and so on that we looked at on your power point presentation didn't highlight, at least that I noticed, or marked for any sound baffling mechanisms.

Would you address that please?

MR. ERJAVEC: On the far right-hand section, just passed the combustion turbine, I believe there's a thing that says muffler.

MS. KEZELIS: And that is the sound baffling --

MR. ERJAVEC: That is the sound attenuation. There are also enclosures built around the turbine area itself because some noise can emanate from that area. I mean, the enclosure around is not -- it's not just a sheet metal building. It's a metal fabricated panel with acoustical material in it. It's perforated on the inside. There's an art to designing sound attenuation for these plants, and each one undergoes a rigorous design to ensure that it's going to meet the criteria.

There have been occasions where, for example, on start-up there may be something

unpredicted, and I had -- I discussed with a colleague, he had heard of one plant in Illinois that at start-up did not meet its criteria, however, within a short period of time, the problem was identified and solve, and it does meet the criteria now.

We've been doing this for a long time. It's not just -- it's not something that's new. All of our plants in New York had to meet the sound criteria. Our plants we're building in the state here have to meet criteria, and it can be done, and it is being done.

MR. RAO: May I ask a follow-up question?

Do you take actual noise measurements to show compliance with the Board regulations once your facility is built?

MR. ERJAVEC: Absolutely.

MR. RAO: And would it be possible for you to provide noise measurement data to the Board?

MR. ERJAVEC: I think we can do that once we've taken the final measurements. We've built one plant in Illinois so far, and I think we're in the process of getting that done right now.

MR. RAO: And also yesterday the Agency's

NOx expert, Mr. Greg Zak, he listed a number of strategies for noise reduction of peaker plants.

Are those some of the strategies that you generally considered in your plants?

MR. ERJAVEC: Yeah. As a matter of fact, I believe he talked about some of the muffling technology. He also talked about buffering zones. Both are useful. If you've got a larger buffer zone, you may not need to put quite as much acoustical treatment onto your facility. However, the buffer zone does not necessarily have to be as large as I thought was being implied because there are other ways to solve the issue and to make sure that you are in compliance with Board regulations.

MR. WASSILKOWSKY: To give you an example, today there are probably 100 gas turbines in Illinois in operation. Gas turbines started operation in Illinois in 1965 and probably started operation throughout the United States since 1965. There are probably thousands of gas turbines in operation.

The University of Illinois has gar

turbines in the Champaign campus. Across the street from the hospital has gas turbines. In its Chicago campus, they're installing. I think they've got about 100 megawatts at the Champaign campus, and maybe I've got them mixed up between two campuses, and the other one has about 60 megawatts.

Acoustical treatment is done on a case-by-case basis and can easily -- not easily, but with many -- much technical calculations and money spent can meet the sound -- they're stringent limits. They can be met. Indeck, in our budgets, in looking at the designs in McHenry and Lake Counties was going to spend about six to $8 million in acoustical treatment alone on the facility to give you an idea how serious we take it.

MR. RAO: Thank you.

MS. KEZELIS: I have a follow-up question about emissions. One of the items -- one of your references was continuous emissions monitoring.

Do you currently perform those at your peaker plants in Illinois?

MR. WASSILKOWSKY: Can you repeat the question?

MS. KEZELIS: Do you currently perform any continuous emissions monitoring at any of your peaker plants?

MR. WASSILKOWSKY: According to the regulations in Illinois, with the Rockford plant, we don't need one right now.

MS. KEZELIS: I understand that.

MR. WASSILKOWSKY: On our other facilities, we have combined cycle facilities with CEMs. We don't see a problem putting a CEM in. We have CEMs at all our gas-turbine facilities. So it's not -- it wouldn't matter if it's a peaker or combined cycle.

MS. KEZELIS: That's a very good clarification. I appreciate that.

My question really is more directed towards if you have such data today with respect to operating gas turbines, would you be willing to provide that to the Board --

MR. WASSILKOWSKY: We would. We would, but we don't have a continuous monitor. We

certainly could give some data.

MR. ERJAVEC: We do have -- if you want to see an example -- for example, if you want to get

an idea of consistency and things like that, we have some combined cycle plants. Most of them are in another state, but they do have continuous emissions monitors on them. Several of them do not have add-on controls. They're a little bit older. So they've had their NOx reduction through, for example, steam injection and some water injection in others. I don't know that there's a dry-low NOx one out there with a CEM on it, but the idea is the same.

The technology to control the emissions is very, very effective and very, very predictable, and we could provide, you know, data from those plants if that would meet your needs?

MS. KEZELIS: It would be helpful for purposes of developing the record, yes, please. I'll turn it over to somebody else for a bit.

DR. FLEMAL: One of the themes we heard regularly yesterday was that there's a need for power in the peaker area in the state of

Illinois.

What we didn't hear was any evaluation of what the magnitude of that need is. Do you have any perspective you can share

with us as to what we --

MR. ERJAVEC: Okay. Let me say this very carefully because there are probably several divergent opinions on this. Everywhere we've looked, there has been -- people fairly much agree that there's a need.

Even the proceedings we've been in where we've had opposition, you know, the statement has been, well, we know there's a need, we just don't want it here. I believe you're going to hear from Mr. Bulley from MAIN, and he could probably give you the best snapshot later on, the official numbers. The numbers we've seen published imply that we need to add anywhere from a thousand to 1500 megawatts a year for the next five to seven years to maintain an adequate reserve margin.

DR. FLEMAL: That's an annual addition?

MR. ERJAVEC: Annual addition, correct.

So anything that was built last year doesn't figure into what's needed this year. That's all additive.

DR. FLEMAL: How does that translate into numbers of peaker plants? Let me put it in

another way.

When the dust all settles, the 50 current applications that you're proposing, will those 50 be -- will they be built?

MR. ERJAVEC: Well, that's two questions. The first one is a simple one to deal with. It depends on the size of the plant. For example, you know, we've been talking about 300 megawatt plants. If you're going to say 1500 megawatts a year for five years, that's five plants times five is 25 plants.

The next issue is, will they all be built? No. I mean, I can't tell you which ones won't be because I don't know, but I could tell you right now that looking at the list that's out there, I'm fairly certain that some are going to make it, some are not. That's just -- you know, just looking at the industry and seeing how

things get sited and seeing how it goes, they don't all get built.

DR. FLEMAL: You had mentioned that Indeck itself has a number of plants in the east, Maine and New York?

MR. ERJAVEC: Correct.

DR. FLEMAL: Do you market the electricity generated from those plants in Maine and New York or is it broader than that?

MR. ERJAVEC: I believe it's being sold in New York under contract with the local utilities, and Maine also to Maine utilities or to the northeast grid.

DR. FLEMAL: And the power that you propose to generate with peaker facilities here in Illinois would be marketed in Illinois?

MR. ERJAVEC: That's a good question. Our expectation is that it would be marketed in Illinois. We are not a retail provider. We're a wholesale provider. With the restructuring of the industry, the door has been opened for other retail suppliers to come into the area.

It is our expectation that the

offtake from any plant that we propose in Illinois would be sold to someone who is doing retail business in Illinois. Our Rockford plant, for example, is selling to Commonwealth Edison. As other marketers come into the state, there, for example, are requirements that they have generation in Edison's control territory. So we

would be providing that means for that to happen.

There has been some discussion as to, gee, selling out of their territory. Quite frankly, if we wanted to serve another area, we'd be building in another area. It doesn't make a lot of sense to build a plant in Illinois to serve Florida, Tennessee, what have you. While that might happen on an occasional basis, there are some constraints. Number one, the transmission system. The transmission system that we have in this country was not designed for bulk transfers with from one site to the other.

If that was the case, there wouldn't have been shortages in New England because the plants in Illinois would have met that need.

That's not what happened this past year. Number two, there were some discussions yesterday, I believe, from the gentleman from the IPC who briefly touched on transmission tariffs.

If I'm going to sell into another state, let's say, I'm going to Tennessee, I have to pay a tariff across Indiana -- my geography is failing me right now, but, you know, there are

several service territories that I have to cross. It makes a lot less economic sense, provided I can sell the transmission issues, which are very constrained on hot days, to try to sell into there.

Is there a chance that it could happen? In other words, if I contract to somebody else, could he resell it there? There's probably a rare occasion where the economics might make it make sense, but by and large I would say it would go into this service territory.

Now, by the same token, the converse could also happen. It could be happening that there's a shortage here that we receive the

benefits of a plant that's built someplace else. I don't think anybody objects to that, but this is to put it in context. It doesn't happen all the time, but, you know, could it conceivably happen? I hate to do it. I've got the engineering syndrome. It's every answer starts with it depends. You know, by and large, no, it would serve the Illinois market. It doesn't make sense to put a plant in Illinois to serve

someplace else.

DR. FLEMAL: In a slightly different direction, you had discussed in your testimony or presentation the difference between a simple peaking plant, single cycle, and a combined cycle facility.

I believe in part of your message there was that the conversion from a single cycle to a combined cycle is not necessarily a simple matter.

Have I captured some of the essence of that direction?

MR. ERJAVEC: This, again, the engineering syndrome. Simple is relative. Can it be done?

Yes, it can be done. Some of them will be converted. You have to take the plant out of service for a period of time. The message that I was trying to get was to try to address what some of the impacts were to making those conversions. It's probably a year-long process.

DR. FLEMAL: I guess in my concept of simplicity I'm looking at it not from the engineering side. I understand engineering -- engineers can do things.

I was thinking more from a regulatory approval sort of perspective. Do you need -- in your understanding, for example, would you need to go back through some of the same steps that involved your original siting?

MR. ERJAVEC: Here comes the D word again. That's going to depend upon how you permitted the original facility. There are many facilities out there that probably have in the back of their minds the idea to build a peaker and then convert down the road, and they have just permitted it as a peaker, in which case it will have to go back to the local -- to the local

zoning probably for -- definitely for building permits because this is a substantial building that gets added to this facility.

They will probably also have to go back to the Illinois EPA because they will be turning a minor source into a major source with all the PSD considerations that were discussed yesterday, BACT analyses, and things like that.

Now, I do know that there are some entities out there that were forward thinking enough to permit their plants to be combined

cycle from day one. I know that one was mentioned that, you know, was being built initially as a peaker and was going to convert. It has all that permitted already, and, you know, they've bought it and they've done that.

So they wouldn't have to go back. Someone else who is contemplating changing a plant that was only permitted as a peaker, yes, would have to go back and go through probably more proceedings than they did to put the peaker in because the impacts have changed significantly.

MS. MANNING: In your power point presentation, you gave examples of annual water consumption. You showed that Indeck is small in comparison to a 400-room hotel or a medical center, retirement home, those kinds of things.

What basic hours of operation -- when you considered an annual figure, what hours of operation were you basing --

MR. ERJAVEC: For the peaker plant?

MS. MANNING: -- for the peaker plant in order to get to that figure?

MR. ERJAVEC: Again, this was the 300

megawatt plant we're talking about. We're talking a plant that was permitted for approximately 2,000 hours or it was permitted 2,000 hours of operation.

MS. MANNING: And more generally -- and so that's what those figures are based on --

MR. ERJAVEC: Correct, correct. Yes.

MS. MANNING: -- per year?

MR. ERJAVEC: Yes.

MS. MANNING: More generally in the water area, we haven't heard anything in terms of --

the water is taken in, I assume, to cool -- for the most part, to cool the operation?

MR. ERJAVEC: Okay. The water that we are pointing to on that particular facility is for an evaporative cooler you put at the front end. That is water that is evaporated in the air to cool the air on a day to allow denser air to go through it and increase the efficiency.

MS. MANNING: So most of the water is evaporated and not discharged in any way?

MR. ERJAVEC: That's correct. That's correct. The only discharge really associated with it is the water treatment for the water

that's being used going in, and that's about -- it's five to seven percent of the water that's consumed comes back as wastewater.

MS. MANNING: In cogeneration facilities, we've had issues of a thermal -- the Board's thermal regelations being impacted.

MR. ERJAVEC: Uh-huh.

MS. MANNING: Is it your understanding -- and we didn't hear anything from the EPA either about thermal issues.

Is it your understanding that peaker plants would not be of concern at all in terms of the Board's thermal regulations?

MR. ERJAVEC: I haven't looked at the thermal regulations in probably ten years now. However, my recollection of them would be that they would probably be -- the impact would probably be very little. All of these plants -- I don't know if anyone is proposing an open cycle plant. In other words, you know, drain water from the river, sending it through, sending it back, which would definitely have a thermal problem.

In fact, I don't know that you could

permit that kind of a plant anymore from a USEPA or from an Illinois EPA standpoint or Pollution Control Board standard standpoint.

They would all have cooling powers. The boil down from the cooling power is relatively minor if discharged through surface water, and that's where we would apply the thermal standards. In the discharge of thermal surface water, there could be an impact. I'd

have to look at the specifics. Perhaps, a diffuser would be in order or something like that. Many of them will discharge to the local sewers, and it's generally not a problem.

MS. MANNING: That's what you're doing at the Libertyville facility, is it not?

MR. ERJAVEC: No, no, because that one is not -- the only time that that thermal impact comes into play is when you have -- you've made it into a combined cycle plant where you've got the steam cycle because the heat is generated from cooling the steam that runs through the turbine. That's where the cooling cycle comes, and that's where the thermal discharge occurs. There is really no thermal discharge from a

peaker plant, at least from the ones that we're proposing.

MS. MANNING: And on the issue of noise regulation, obviously, you're quite aware of the Board's noise regulations, but it's your understanding as well, is it not, that it's not actually part of the permitting process in terms of the air permitting process with the Agency?

MR. ERJAVEC: It's not a part of the process. There are no noise permits issued. We're well aware of that. However, that doesn't relieve us of the obligation to meet the standards. I mean, that's part of the research you do no matter where you're going to build a plant.

You know, you go and find out what the state and local regulations are with respect to noise, water, air, what have you, and you make sure that your design considers all those because it's your obligation to meet them.

MS. MANNING: Thank you.

MR. RAO: From your perspective, would you describe a typical peaker plant in terms of the, you know, size and land that it occupies, and how

much it's built up, and how much open space? Can you provide that?

MR. WASSILKOWSKY: The peaker itself, if you were just to look at the area it takes up, is about five acres, maybe even less. What we do is we've looked at sites that are larger for layout and construction, some creating natural barriers,

some to aesthetically tend to a setting.

So there's several reasons for why some of the sites are bigger than what they are. In some cases, people may look at expansions. Sites that we look at for peakers for the most part were for just buffering standpoints, aesthetics, just management standpoint of how we want to lay out the plan.

So from our standpoint, I would say the power plant itself is on about five acres or a little less, and we've probably shown sites where, you know, they've varied even from 20 acres and larger, but that's for buffering in most of the cases.

MS. McFAWN: Did you say the power plant itself takes up five acres?

MR. WASSILKOWSKY: Yeah, because you need

space in between the equipment. You know, you can't put one gas -- there are two gas turbines on a 300 megawatt plant, and you have some other equipment joining with it. So it takes anywhere, I'd say, around five acres, maybe a little bit less.

MR. RAO: I have one more question on the turbines themselves.

Do turbines used by Indeck utilize, like, any combustion modification techniques to reduce NOx emissions, you know, such as dry-low NOx?

MR. WASSILKOWSKY: They're all dry-low NOx combustion. Mostly the large machines today use that technology, and Indeck's also include dry-low NOx.

MR. RAO: How do, you know, emission rates from these turbines compare with the emission rates that IEPA has given us with BACT for one or two plants in the state?

Are you familiar with those numbers?

MR. ERJAVEC: I saw the numbers yesterday. Forgive me. Is it Dr. Romaine or Mr. Romaine?

MR. RAO: Mr. Romaine.

MR. ERJAVEC: Okay. Chris, I didn't want to keep doing this. Sorry about that.

I don't recall exactly what he said. I thought they were on the order of 15 parts per million, I think.

MR. RAO: Yes.

MR. ERJAVEC: Okay. That's what we have permitted our plants at is 15 parts. It's 15 to 25, I believe. It was in the range right there depending upon the piece of equipment.

Quite frankly, you've got basically three competitors out there producing these large frame turbines, and they are all striving to get them as low as they can, but, you know, as any other industry you have, you know, one may get a little bit ahead of the other in the curve. So they're all trying to shoot -- I think the range that's out there for dry-low NOx is somewhere between 25 and nine depending on the manufacturer, and they're all trying to get lower.

Frequently, they'll perform better than the design because they have to guarantee the design. So they want to put a bit of a

margin in there for themselves, but, yes, they meet BACT without question for a peaker.

MR. RAO: Thank you.

HEARING OFFICER JACKSON: Any others

questions? Okay. It looks like --

MR. ERJAVEC: One thing before I go, they say that one picture is worth a thousand words or in this case of these hearings maybe 10,000 or tens of thousands of words. We've just commissioned a plant in Rockford, and we would be very pleased, if it would work for the Board, to have them come visit the facility.

I'm sure that any of my colleagues in the peaker industry who have plants in the state of Illinois would, again, extend such an invitation. So if something would help to enhance the Board's understanding of the issues here, we would be very glad to host a visit. Thank you.

HEARING OFFICER JACKSON: Thank you. We'll take that into consideration. At this point, it's just about 12:00 -- were you finished?

MR. ERJAVEC: I've just got to pack up.

HEARING OFFICER JACKSON: It's about 12:00 o'clock. We'd really like to get started with the next presenter. Commonwealth Edison is

scheduled to go next. If we could have the Commonwealth Edison folks come down to the front.

Commonwealth Edison, you may begin your testimony.

MS. JURACEK: Thank you. Commonwealth Edison is pleased to be here to provide our perspective on the questions that have been raised by the Governor in his request that you investigate the peaker siting in Illinois. Presenting testimony is myself, Arlene Juracek, and Steve Naumann. We both, between us, have more than 50-person years of experience at Commonwealth Edison, and I believe we can address the issues coming from that wealth of experience.

My background is in the regulatory and legislative end as well as in the rate-making end. I also participated in the redrafting of the Electric Utility Restructuring Act in the state of Illinois.

HEARING OFFICER JACKSON: I'm sorry to interrupt. Could you speak into the microphone?

MS. JURACEK: And Mr. Naumann comes with a wealth of experience on our transmission and distribution services side of the business. We have filed 14 pages of pre-filed testimony. We will be giving you a very brief summary of that testimony, and then we'll be pleased to answer questions.

You will note that in my qualifications in that testimony that I am chairman of the Mt. Prospect zoning board of appeals. While that experience has certainly played an influencing role on my business judgment, I am not testifying either on behalf of the village or its zoning board of appeals at this point in time.

That being said, Commonwealth Edison does support the restructuring of the electric industry as crafted by the Illinois legislature and the Federal Energy Regulatory Commission. Yesterday, you heard from Mr. Charlie Fisher of the Illinois Commerce Commission on the evolution of that regulation in the state of Illinois, and

we believe that as designed by the Illinois

legislature that the free markets in the generation market will lead to ample capacity at reasonable prices in the state of Illinois.

Right now, there's a lot of discussion about events in California with respect to their market design and the type of pricing that they have seen, and I'll address that very briefly in a few minutes in my remarks.

A critical feature of restructuring in Illinois is the availability of new privately developed electric generation to meet the state's increasing demand for power. In fact, load is continuing to grow. Commonwealth Edison is in the process of beginning its re-evaluation of load growth, and we suspect that that load growth, despite the best efforts of the Energy Conservation Industry and the beginnings of the solar and wind industry in the state of Illinois that, in fact, that load growth will probably be higher than we have experienced in recent years.

While no longer will the customers of the utility be at risk that too much generation

will be built by a utility resulting in high rates based on a cost of building it, as a matter of fact, in the restructuring industry we finally get the pricing right.

Under the old regulated industry in which utilities built generation and were regulated by the Illinois Commerce Commission, we could not put the value of that plant into our prices until that plant was up and running. So what you have was increasing prices with increasing supply. Well, anyone who has taken Economics 101 knows that's completely backwards. Under the laws of supply of demand, prices go higher when there's a shortage of capacity, thus throwing out economic players to fulfill that need and then get reduced or stabilized to the extent you get into an optimal supply and demand condition. That is the condition that the new marketplace is attempting to mimic.

Now, whether the marketplace rather than the regulator or the utility determines what generation is needed, the regulatory scheme has shifted so that while there are still state and federal standards for air, water, and noise

pollution, local governments now have an increased role in the process of siting nonutility generation using the traditional zoning authority. We would point out that that traditional zoning authority and the existing laws and regulations as supplied by both the state and federal agency appear to be working.

Of the numerous plants that have been proposed in the state, some are up and running and some are not, but the process is working, and the fact is that the need for these load-following resources is continuing to grow, as I mentioned earlier. So you will see more than possibly we need being proposed, but that's because the process is going to weed out some and allow others to be built, and the fact is with load growth, so long as our customers expect light switches to be flipped and lights to go on and so on, the utilities do retain an obligation to serve in this restructuring marketplace. There will be a need for this new generation.

We don't believe that a new or more stringent regulation is warranted and, in fact, would likely have a negative effect on the

state's generating capacity. To the extent any new regulation would slow down the permitting process, it simply does not work in today's marketplace. In the past when utilities were building large baseload generation that had ten-year construction schedules and they were forecasting ten years out, a lengthy permitting process was an accepted piece of the norm and could be accommodated through minor shifts because you were talking about something ten years out.

Today, the technology is smaller. It is built more efficiently and, in some cases, in a matter of months rather than years, and following the trends of industry generally with respect to just-in-time resources, any lengthening of supply permitting could, in fact, result in supply shortages which would impact either the liability or the prices of electricity in Illinois.

I mentioned California's model for restructuring. It is considerably different than the Illinois model, and, whereas, California has maintained tight regulatory control over

wholesale prices and the approval of new generation, Illinois has allowed prices in the free market to determine what generation needs to be built. California's experience in the summer, in which demand has continued to grow while generation capacity has not, supports the view that the market should be allowed to operate in Illinois as the Illinois legislature intended. It's very important that that generation be located, to a large extent, in the state of Illinois, and Mr. Naumann will address that.

MR. NAUMANN: Thank you. Good afternoon.

In effect, I'm going to answer the flipside of the question that was asked earlier about whether these plants being built in Illinois can be used to serve load outside of Illinois. The flipside of the question is if plants were built outside of Illinois to support the load within Illinois, could you actually get the power in and could you do so reliably?

Of course, the answer is with enough time and money, we could do anything, we believe, but as a practical matter, there's a limitation on the number of transmission lines that can be

built, the cost of those transmission lines, and the ability to site those transmission lines.

From a reliability point of view to serve the customers within Illinois, it's much better to have the power plants locally where the transmission is under our ability to build, less transmission is needed, and, in fact, less problems will occur.

This summer, for example, we've seen on a daily basis multiple incidents of what we call transmission loading relief where sales from, in this case, one area to another had to be cut or curtailed because the transmission lines were being overloaded in much the way that your house if you tried to draw too much power, a fuse or a circuit breaker would go. We don't get to that point. So from a reliability point of view, it is important to have your generation closer and it's much better.

Other than that, we're prepared to answer any questions, both about our testimony or anything else. Thank you.

HEARING OFFICER JACKSON: Thank you. Board members may now ask any questions that they

may have.

MS. KEZELIS: Good morning, and thank you for being here today.

Exhibit D to your joint testimony is Edison announing preferred locations for peaker power restructuring structures.

Is it fair to say that the distinction is based on the peaker?

MR. NAUMANN: These are preferred locations for any generation from the point of view of the electrical network where we can most easily accept generation without the additional new transmission facilities.

MS. KEZELIS: And the purpose of that was to encourage independent producers of electricity to construct facilities in Illinois?

MR. NAUMANN: In the right place where they can get access to the network and be able to deliver it to the customers without having to either try to construct lines or the delay involved in actually constructing a major line.

MS. KEZELIS: Thank you.

MR. RAO: In your testimony, you mentioned that in recent years the maximum peak load faced

by ComEd was 21,000 megawatts I think it was in 1998.

Could you tell us, you know, what the actual peak demand is in the area and how much is needed to meet the demand, you know, of the existing peakers already in place.

MS. JURACEK: The actual peak demand that we experience is highly weather-dependent. Generally, on these systems, a peak day, about 40 percent of that peak is coming from residential air-conditioning loads. So you can imagine that if we have a large heat buildup or a temperature/humidity index buildup or other adverse impacts we can see a higher demand versus a more moderate.

So you do need to look at what the weather is each day. Our forecast has been something on the order of 20,500 megawatts for the year. I believe Steve knows wires better than I would the number it actually was. In fact, a lot of the demand growth that we're seeing, though, is not coming from the traditional sources that we saw over the last

saturation as well as economic growth. We're also seeing a technological revolution in terms of additional computers which cause then additional air-conditioning loads, additional facilities such as internet, hotels where we are seeing loading on the order of 150 watts per square foot in a building. This is ten times the type of load we have seen in the past.

This is one reason why Commonwealth Edison is embarking on a re-analysis of its load forecast, something it does on an annual basis anyhow, but which has particular interest to us given the phenomenal load growth that we have seen in the last year.

MR. RAO: So have you made any specific forecasts for, you know, the demand, the additional power that's needed to meet this demand in Illinois?

MS. JURACEK: Generally, the load that Commonwealth Edison delivers has been growing at about one and a half percent a year. That is, again, as I said, going to be revisited. It's

going to be interesting because under customer choice, Commonwealth Edison does not supply all

of that load. By the end of the year, all of our nonresidential customers will be able to choose their electric supplier. There is a phase-in to customer choice in Illinois.

Approximately, 52 percent of Commonwealth Edison's nonresidential load on October 1st was able to choose a new supplier, and then on June 1st all of our manufacturers are able to choose a new supplier. So you've got folks that are actually shopping for other than Commonwealth Edison to supply that load, and, in fact, 40 percent of the eligible kilowatt hours are already operating under nontraditional supply.

Commonwealth Edison in the restructuring marketplace is focusing on having the delivery system in place, and, of course, we need to plan for that peak load for delivery purposes to make sure the wire capacity is there. The marketplace is going to be suppling a lot of the generation capacity in order to meet

those delivery requirements.

MR. NAUMANN: The number you referred to, the peak load in excess of 21,000, was last year,

which was a rather hot summer, and as we probably all know, this has been a rather cool summer. Yet, last Tuesday, we came within a thousand megawatts of that all-time peak in a very, very cool summer, which shows a great deal of load.

Our official numbers that were prepared last year are reported to MAIN, and Mr. Bulley has those aggregate numbers, but as Arlene said, we're going through a re-evaluation on the belief that those official forecasts may be too low for the load that we have seen, especially over the last two or three years given the economy and the other factors that we just mentioned.

The other thing is that from Commonwealth Edison's point of view, our load serving responsibility, as Arlene said, is changing with retail access, but if you look at what we call the control area, all the load within the area that will be served and used to

be served by ComEd, changing the name on the supplier obviously doesn't change the load, and that load growth within northern Illinois, though, will continue to grow at these higher

rates.

I think you should -- you know, in addition to understanding the competitive situation, you need to look at the fact that it is the entire load, whoever sends the bill for it, that actually needs to be served ultimately.

MR. RAO: Thank you.

DR. FLEMAL: The peaks that you referred to, the 21,000 peaks, are all summer peaks, am I correct, in my understanding?

MS. JURACEK: Yes. ComEd is a summer-peaking utility.

DR. FLEMAL: And what kind of demand for peak -- peaker power exists in the nonsummer months? Is there any demand at all?

MS. JURACEK: Peakers are used in the nonsummer months, particularly if some of the baseload units need to come down for any maintenance, which is when you would typically

take some of your baseload units out, particularly in the spring and fall months.

It depends on the expected load shape. In the wintertime, you will have peaks which may be spiking and then depending on the

weather situation. We don't have a whole lot of electric space heating, per se, in our service area, but to the extent furnaces are running longer, be they gas furnaces or oil or whatever, they're going to be using their fans more intensively.

So we do have a shaped load profile every day of the year to a greater or lesser degree, and there may be some instances in which peakers need to be run. That being said, there is generally sufficient intermediate capacity to fill the need in the nonsummer months, and the more prevalent time that peakers would be run would be in the summer months.

MR. NAUMANN: Let me just add one minor point. They're also an insurance policy because occasionally things do go wrong on a large system, whether it be ours or any other system,

and sometimes it's nature that causes it.

I guess we haven't had a bad winter or a real severe winter for a long time, but there are times that, for example, the river freezes and you're not able to get coal -- any more coal up the river, and on that coldest day

in the winter, you may need to run the extra capacity. There are other times where you get a rain followed by a freeze and people have to deal with things like frozen coal. So there are occasions of emergencies when you would want the peakers there that can be started very quickly that can supply that load during the winter when sometimes it's a matter of public safety obviously to continue service to people.

DR. FLEMAL: Is there anything that differs in the economics of running a peaker gas-fired plant in the winter than during the summer, difference in maybe the costs of that or gas or anything like that?

MR. NAUMANN: Well, one of the -- someone who knows the gas market could probably answer that. It's fairly hard to predict prices of

commodities. I think a lot of people were surprised that the price of gas -- natural gas went up this summer, but it wouldn't be for long periods of time that we would be -- that we, as a load-serving entity, or others would be generally calling on peaking units during the winter.

As Arlene said, during periods of

maintenance with very high loads or very severe winters or during times of emergencies, and during short periods of time, the economics do take care of themselves in general.

DR. FLEMAL: Thank you.

MR. GIRARD: I have a question.

A few years into the future when the residential electric market is restructured, could we see the kind of price surges they've had in California this past summer if we get a real hot summer and we don't have enough peak load available in the state?

MS. JURACEK: Certainly not in 2002. What happened in California is the way their model was set up, once they exhausted their stranded cost recovery, their customers were essentially put on

the spot market for electricity. I think that was a really silly thing to do.

It was a simplistic notion of how electric markets actually work because no one buys all of their supply on the spot market. What we saw with San Diego Gas & Electric in particular, because it was able to pay off its stranded cost early, under the regulatory

mandated model, their residential customers did get put on the spot market.

In Illinois, residential customers do get choices in the year 2002, but they are still affording the opportunity to take bundled rate service. Bundled rate is the end-to-end traditional service that we have always been providing. Those prices are frozen through 2004, and, in fact, in order to abandon those bundled rates, we would have to petition the Illinois Commerce Commission to abandon those customers and basically put them on the market.

That being said, I don't know too many customers in my experience in Illinois that really want spot market pricing. You'll have a

steel mill or an air separation plant who, perhaps, can respond to spot market pricing, but most of the suppliers, retail electric suppliers, that are serving retail load on an alternate basis are not sending spot pricing to our commercial and industrial customers.

So I think the model is set up differently here, and to the extent the marketplace simply cannot tolerate those spot

prices, we won't see them here.

MR. NAUMANN: I'd just like to add to the other side, and that's -- Arlene well described the economics, but there is the -- from my point of view of having to run electrical systems, the ultimate thing is having enough generation capacity to serve the load.

Whatever the price is of however insulated customers may be from a price spike, there has to be sufficient capacity to meet that load, and I think if there is not new generation to cover the load growth, you could run into a situation, and it may not be a normal situation, it could be a very hot summer day or there could

be outages occur or something else, that would you simply not have sufficient generation, and at that point, price doesn't really matter anymore, unless someone is willing to get off for a lot of money, and that's our ultimate responsibility as a utility is to be able to serve the customers with the generation.

MR. GIRARD: Thank you.

HEARING OFFICER JACKSON: At this time, would you like to admit your pre-filed testimony

into the record?

MS. JURACEK: Yes.

HEARING OFFICER JACKSON: It's so admitted. It will be marked by the court reporter. Thank you.

This afternoon's schedule will be the same as I mentioned earlier, with one change. When we come back after lunch, the first presentation will be by the Illinois Environmental Regulatory Group. There are some travel issues that need to be met with them. So their presentation will begin first. Otherwise, it's as I had mentioned earlier. We'll reconvene

exactly at 1:30. We will try to start exactly at that time. Thank you.

(Whereupon, further proceedings were adjourned pursuant to the lunch break and reconvened as follows.)

HEARING OFFICER JACKSON: We're going to get started here. We still have five presenters to get through this afternoon. We want to get started as soon as possible. First to present this afternoon is Deirdre Hirner with the

Illinois Environmental Regulatory Group. If you want get started whatever you're ready.

MS. HIRNER: Thank you very much. My name is Deirdre Hirner. I am executive director of the Environmental Regulatory Group, which is an affiliate organization of the Illinois State Chamber of Commerce. Madam Chairman and members of the Board, I do appreciate having the opportunity to talk to you about this issue today.

What I'm going to present right now is a summary of my pre-filed testimony which we

have submitted for the record. We at IERG do not, by any means, hold ourselves out to be experts in the area of peaker plants. However, we do recognize the need for a reliable, dependable, and safe source of electric and thermal power to allow business, particularly the manufacturing sector, to conduct normal operations and to equally, if not more importantly, assure the safety of process operations.

Because some of our members do and/or will own and operate peaker units and because

many of our members may well, at some point, have to rely on peaker units to provide energy at critical times, IERG has a strong interest in assuring that peaker plants are able to locate and to operate in the state of Illinois.

On review of the Governor's request to the Board to make recommendations whether additional requirements need be imposed on peaker plants to safeguard the environment, the members of IERG would respectfully request that the Board keep the following issues in mind: First, that

the scope of the hearings be limited to natural gas-fired peak-load electrical generating plants, and by that we mean those specifically constructed to supply only electrical power and only in times of peak demand, and when making recommendations regarding such units, to bear in mind that with deregulation, utilities no longer will have the obligation to provide adequate power in return for a guaranteed rate of return.

Peaker plants will be necessary to ensure a safe and reliable electricity supply at critical times, and each obstacle or cost added to constructing peakers will, at best, be

reflected in the cost of electricity and, at worst, will deter any decision to construct, thus leaving Illinois without necessary electric capacity. We believe that would be an unacceptable outcome.

Second, power generating facilities operate within locational constraints. While IERG maintains, and as reflected in my first point, that cogeneration and emergency generators are not within the purview of these hearings, we

do want the record to reflect the unique locational constraints of these units. The electricity generating facility must be located on or near the site that will be receiving the energy output. Regarding siting matters where peaker plants that are the subject of these hearings, it is important that local governments are prepared to address siting within the body of law and regulations that is available to them.

Third, based on IERG members' knowledge of and experience with not only Illinois' current air quality statutes and regulations, but also additional federal and proposed air quality statutes and regulations, we

unequivocally believe there is no need to more strictly regulate peaker plants. Peaker plants, like any other facility, must, if they trigger regulatory thresholds, demonstrate they meet minimum performance levels by complying, for example, with new source performance standards. Units must demonstrate that prescribed emission levels be met. If the facility cannot meet these levels, it's back to the drawing board for the

facility.

Similarly, peaker plants, like other facilities, that trigger PSD must undergo rigorous PSD review and analysis to assure that air quality in a given area is not adversely affected. Peakers triggering PSD will be required to implement BACT and the terms will be placed in a federally enforceable permit prior to construction.

I would further point out that those facilities that do not have the capacity to trigger PSD review and as you and I heard EPA's testimony yesterday, that most peakers will not trigger PSD review, are by no means without limitations. Restrictions will be placed in

their permits to assure the facility does not exceed the protective upper limit on emissions.

Restrictions can include such things as operating limits, allowing the facility to operate only X number of hours per year, or to produce only Y kilowatts of electricity. Permits can and usually do contain monitoring and testing provisions to assure that emission caps are not

exceeded.

Finally, as it relates to the current state of air regulation, I will reference another proceeding currently before the Board, that proceeding to meet the requirements to demonstrate attainment of the one-hour standard and complying with the NOx SIP call. We heard in IEPA's testimony yesterday that NOx is the primary pollutant of concern associated with peakers. All peakers will be subject to a NOx cap and trade system. New peaker plants will begin operation with an allocation from a new source set aside of existing NOx emissions.

If additional allocations are necessary to operate, these will have to be purchased from previously permitted facilities.

The result is a zero sum effect. Fears that additional peaker plants will increase the total tonnage of NOx in the overall region are unfounded.

In conclusion, I will note that in our businesses and in our homes, we expect the lights to come on when we flip the switch.

Recent newspaper accounts that I have read indicate that that expectation may not hold true in some areas on the west coast, and some of the factors impacting that situation are very similar to those before the Board in this proceeding.

Therefore, the members of IERG would urge the Board to consider the need for and benefits of a safe and reliable supply of electric power along with the strength of current regulatory programs and those coming down the pipe before it considers the need for any additional regulation, and that concludes my remarks. I'll be pleased to answer any questions.

HEARING OFFICER JACKSON: Thank you. The Board can proceed with any questions. Okay.

MS. HIRNER: Thank you.

HEARING OFFICER JACKSON: Richard Bulley from MAIN is our next presenter.

I just want to note for the record that a couple of individuals have asked me about presenting testimony today. Those individuals had not pre-filed testimony for the proceeding

today, and I just want to reiterate that as stated in my hearing officer order of July 13th, any presenters for the hearing yesterday or today were required to pre-file their testimony. Therefore, we're not going to be able to accept any testimony from persons who did not pre-file their testimony prior to today.

However, that certainly does not mean that we are not interested in the information you have to give us. There are five other days of hearings scheduled, both in the northern part of the state and in Springfield, and we invite you to attend any and all of those hearings and make your presentations there. As well, we are accepting written public comments until November 6th, and you are also welcomed to file your comments with the Board in the form of written comments.

At this point, we'll proceed with Richard Bulley from Mid-America Interconnected Network. Mr. Bulley, when you're ready.

MR. BULLEY: Thank you. As you said, my name is Richard Bulley. I'm executive director

of MAIN, and I have a double E degree from the Illinois Institute of Technology and have spent more than 40 years in the electrical utility industry, mostly in the area of generation and transmission system planning and system operations.

MAIN is one of ten regional reliability councils which comprise the North American Electric Reliability Council, NERC, and collectively those 11 agencies coordinate the planning and operation of the North American electric system, which includes generation and high voltage transmission.

MAIN encompasses more than just Illinois. It includes eastern Wisconsin, eastern Missouri, eastern Iowa, a portion of Minnesota, and the upper peninsula of Michigan. Illinois or even MAIN, for that matter, cannot be evaluated individually because they're all part of an

interconnected system of transmission and generation which stretches from the Rocky Mountains to the Atlantic Ocean. For this reason, NERC and its ten reliability counsels

work together to develop standards for planning and operation of the North American electric system.

One area of this activity is evaluation of resource adequacy. We had some questions about that this morning, and I think these comments will come directly to that. MAIN performs detailed annual studies to determine the amount of reserve that's required for reliability in the MAIN region. We do the studies every year. The reserve requirement varies slightly depending upon the particular group of units that we're looking at, but over the past several years and as we look to the future, that range is in the 17 to 20 percent range, and this number has been approved by the board of directors.

MAIN then takes that -- takes the projected loads and capacity of its member companies and compares the reserves to that -- to the 17 to 20 percent number. Based on these

studies, we've determined that for the summer of 2000, the projected reserve margin was 18 percent. This is within the 17 to 20 percent

range requested by or determined by the studies.

However, I'd like to point out that if there had been no IPPs in the capacity that was considered for serving the main loads, that margin would have been only 7.4 percent, clearly well below what is required for reliable electric service.

Looking at it another way, if you start with today's electric capacity, including the IPPs that are already there, but excluding IPPs which are planned for the future, our projected reserve margins for the next three years are 13 percent, 11 percent, and ten percent respectively, and these numbers also are below, significantly below, the reserve margin required for adequate resources. That concludes my testimony.

HEARING OFFICER JACKSON: Thank you, Mr. Bulley. Any questions from the Board?

MS. KEZELIS: I have one quick one for clarification purposes only, Mr. Bulley.

Would you explain the standard that is used in the industry that one day is ten years

loss, and is that base peak or is that loss of production capacity? Simply amplify what that is.

MR. BULLEY: Okay. Let's see. I'm start back before we ever had computers and people just kind of judged on what was an adequate amount of reserving margin to carry based on the generating units that they had, and then as computers became available and programs where they could look at this analytically, they started making calculations, and the calculation that kind of came close to what everybody was using anyway and to provide the right answer was the criterion of one day in ten years, which means that in a ten-year period, one of -- there has to be one day on a probability basis, one day which the load is going to exceed the available resources. The one day in ten years is arbitrary, but it's based on historic practice and results of historic practice which have been favorable.

MS. KEZELIS: Thank you.

MR. RAO: I also have a clarification

question.

The minimum reserve capacity that you mentioned, is that a reserve in addition to baseload or is that, you know, with reference to the peak loads?

MR. BULLEY: I should have clarified that. Reserve margin is the amount of reserve left over. I'll do it another way. The capacity that you have available to serve the load minus the load that you expect, that's the reserve margin, and you express that in percent by dividing it by the load.

So if you have in MAIN roughly 55,000 megawatts of generation and 50,000 megawatts of load, the reserve -- I didn't think about this ahead of time. This isn't going to come out right, but if you had 55,000 megawatts of generation and 50,000 megawatts of load, you would have 5,000 megawatts reserve, and that translates into a ten percent reserve margin, 5,000 divided by 50,000.

MR. RAO: Thank you.

MS. McFAWN: And when you talk about load, you are including the peak demand as well as the

base demand?

MR. BULLEY: Yes. This is the total demand. This is the total demand, I should say, excluding contract interruptible customers.

MS. McFAWN: How accurate has your forecasting been?

MR. BULLEY: I'll punt on this. Our members do the actual forecasting, and we compile that to use our -- do our studies in. The forecasting is pretty much -- accuracy is pretty much dependent upon the weather. Weather -- as Arlene Juracek said earlier this morning, air-conditioning accounts for about 40 percent of the load on a hot summer day. So if it doesn't get hot, then the load, it doesn't materialize as well. So on an average -- I don't have any specifics on accuracy, but on an average we have fairly good load estimates.

MS. McFAWN: Would you explain to me a little bit more about MAIN? You say your members. So are you an independent organization funded by the members or how do you operate?

MR. BULLEY: We are an organization funded by our members. Our members are electric

utilities and other entities with interests in the region which I defined as -- I defined before as Illinois, eastern Wisconsin, eastern Iowa, eastern Missouri, the upper peninsula, and a small part of Minnesota.

It's not only electric utilities, but it's independent power producers who operate in that area and market. It includes municipal systems and state agency municipals.

MS. McFAWN: How many members do you have?

MR. BULLEY: Forty-five.

MS. McFAWN: When you talk about the reserves and the margins, you were talking across the whole territory of your members of MAIN or just Illinois?

MR. BULLEY: Yes, MAIN. We don't segregate -- we don't separate Illinois out of that.

MS. McFAWN: Is there any reason for that particular geographical area? Is that a transmission area or is it just random?

MR. BULLEY: I don't want to say it's random, but it's somewhat based on transmission

restraints. It's what was formed back in 1968 when all the other regions were formed and boundaries were defined. Prior to the formation of NERC in 1968, MAIN was formed in 1964, and they had an area that reached out.

I've been to the Twin Cities area and over further east into Ohio and Michigan, and when the other -- after the northeast blackout of 1965, the other regions -- other areas of the country set up regions. Some of those took that, some of the territory that had been part of the MAIN region. So there are political reasons, there are electrical reasons that determine the boundaries.

MS. McFAWN: Thank you.

HEARING OFFICER JACKSON: Are there any other questions? Okay. Thank you, Mr. Bulley.

Our next presentation is from Midwest Independent Power Suppliers. I believe Freddi Greenberg is here to testify.

MS. GREENBERG: Good afternoon to all of you.

HEARING OFFICER JACKSON: If you have others that may be assisting you in your

presentation, just make sure they're identified for the record.

MS. GREENBERG: I certainly will do that. My name is Freddi Greenberg, and I am the executive director and general counsel of the Midwest Independent Power Suppliers or, as we call it MWIPS, M-W-I-P-S, and I have with me today members of -- representatives of two of my member companies. On my right is Wendy Lessig of Dynagy, and on my left is Steve Brick of PG & E's National Energy Group.

We're delighted to have the chance to be here to talk with you today, and we're also very pleased to see that so many of the presenters who have spoken to you in these last two days have positions that are common with ours, and that will make our presentation actually quite a bit shorter than it might otherwise have been, but we do have pre-filed testimony.

Attached to our pre-filed, for your information, is a list of members of MWIPS, and I just want to note that any time we present comments probably, those comments represent the

opinions of the group, but not necessarily of any individual member company. MWIPS is an organization of leading and competitive power suppliers within an interest in participating in the competitive electric markets in Illinois and elsewhere in the Midwest.

Our members are committed to providing reliable electricity at a reasonable cost. You've heard presenters in the last two days talk about the need for electric -- for electric capacity in this area. Commonwealth Edison has talked about the extent to which capacity within the control area of their system is beneficial to the system itself and to the reliability of the system, and we just heard Mr. Bulley talk about shrinking reserve margins.

We've also all heard about the price spikes that occurred in the wholesale electric markets in the summer of 1998 and all of these are indications that there's a need for generating capacity in this immediate area. MWIPS' members and other members of our industry have stepped up to the plate to meet -- to meet that need.

Our members have committed to invest significant amounts of capital within Illinois to comply with all the applicable laws and regulations and to build a generation that's needed in the short-term in the form of peaking plants.

Many of these peaking plants, in fact, are to be located in areas designated by Commonwealth Edison as areas where this new generation would be most beneficial to the existing system, and this also will minimize the need for additional transmission construction which will further benefit the environment.

I'm not going to -- and I just want to go back for one moment. I forgot to mention that Indeck is also a member of MWIPS. I'm not going to go into the definition of peaker plant. I think that was more than amply covered by the speakers before us, but I would like to just mention one point about peaker plants. People often refer to these plants as unregulated, and to some extent, we take issue with that designation.

one aspect, and that is that they are not rate regulated the way that a utility-owned generating plant is regulated. These plants are not included in a utility's reg base, but in all other aspects, they are subject to a multitude of regulations, and we certainly heard a great deal about that yesterday from the speakers from the EPA, and there are many other laws and regulations that apply to these plants, but this being outside of the rate base is the characteristic that distinguishes these plants from utility-owned plants.

One benefit to the rate pay of this unregulated unreg-based feature of the plants is that the developer of the peaker plant bears all the risks associated with the plant's construction and all the financial risk associated with the plant. The proposed peaker plants, if constructed, will enhance reliability of electric services to Illinois and to the Midwest by both increasing the generating capacity and by providing voltage support and the

other system benefits mentioned by ComEd.

In addition, competition will be

increased in the wholesale market, which will further reduce the probability of price spikes in that market in the Midwest, and all of these results are what the legislature envisioned that it enacted its customer choice and reg relief act of 1997.

Against this background, I'd just like to very briefly go through the various questions that were asked when this proceeding was noticed. The first question, do peakers need to be regulated more strictly than the current air quality statutes and regulations provided, I think the answer to that that was supported by the various speakers so far is definitely not. There's a strict set of regulations applicable to these plants, and the peakers do not pose a threat to air quality, to human health, or to the environment.

In addition, the peakers use state-of-the-art technology, and I'm advised, although I am personally not an environmental

expert, that a typical simple cycle plant that might be permitted as a minor source would, even if BACT, B-A-C-T, review were required, meet that

requirement and not require any addtional controls beyond what the plant already has. So the air impact is not a problem at all.

The second question was whether the peaker plants pose a unique threat or a greater threat than other types of state-regulated facilities, and, again, I think the presentations that were given, both yesterday by the EPA and this morning, particularly by Mr. Erjavec, clearly state that that's not the case with respect to any of the types of pollution mentioned, and the groundwater issue will, of course, be addressed further by the Governor's Task Force.

I did want to mention the question of noise because it seems to have been a theme. Although, I understand that it's not a focus beyond any of the other points, and that is simply that the developers who work for my member companies have indicated to me over and over

again when we've discussed this that although air quality is not part of the state permitting process, it is very much in the mind of the developer and in the forefront of the developer's

planning as they design the plant.

The developer typically works with the community to address the concerns that are raised with respect to noise, and I think the statement we heard yesterday that there have been no noise complaints to the EPA about peakers is really very telling because what it says to me is that, in fact, these developers have succeeded in addressing the concerns or we certainly would have complaints because people tend to be vocal about their concerns with respect to these plants.

I wanted to just share with you one anecdote that I did hear from a member when a group of local officials was visiting one of the peaker plants. The officials came to the plant and started their tour, and at one point, somebody asked when is this plant going to start up so we can hear it, and the answer was, it's

been operating since you arrived here.

To further illustrate the veracity of that last anecdote, I would like to reiterate the invitation that was offered to all of you and to any of your staff by Mr. Erjavec this morning.

If there is an interest in visiting a peaker plant and looking and particularly hearing what it sounds like, I have more than one member of my group who would be pleased to provide that opportunity, and please do feel free to call on me if that's something that would be of interest.

I'd like to turn now to your next question which is, should new or expanding peaker plants be subject to siting requirements beyond the applicable local zoning requirements, and our answer to that, again, is no. Illinois should be very cautious about imposing stricter than necessary siting requirements in order to avoid the very situation that we're seeing in California.

We don't want to create a situation that would risk a power shortage and the accompanying increase in the cost of wholesale

power as well as possible reliability problems. California has had great delay in plant siting and is now seeking ways to streamline and expedite the process. We've heard from the experts in the EPA that the current siting process addresses the various needs and

requirements for these plants, and our recommendation is that anything stricter would be detrimental and would have no further value.

The next question you asked was whether peakers should be more strictly regulated, should additional regulations or restrictions apply to currently -- if they're more strictly regulated, excuse me, should those additional restrictions apply to the currently permitted plants or only to new facilities and expansions.

In that regard, we strongly feel that any new more strict requirement or any additional or different requirement should not apply to the plants that are currently permitted, but that new facilities, of course, should adhere to the then existing requirements, and a facility expansion

would, of course, have to adhere to the requirements existing when that facility expansion applies for its permits, and, of course, at that time, there would be the opportunity for public input just as there is initially when the facility is first sited.

Your next question was, how do other

states regulate or restrict the peaker plants, and we talked a little bit about that in our written testimony, and we've had some other testimony today as well. I will not go further than to say that a number of states handle things the way that Illinois does. There are the state permitting process and a local process, and a smaller number of states have adopted a process for siting and permitting the peaker facility or other generating facilities that's administered in one stop in one place or a combined hearing at the state level.

Oftentimes, those proceedings are a carryover from the permitting of utility-owned generation, and in Illinois that's not the case. California is an example of a state that's

currently experiencing the consequences of a very bureaucratic and time-consuming process for siting plants. In California, a plant of 50 megawatts or more must be approved by the California Energy Commission.

Many proposals there have taken more than a year to get through this process, and California has not been able to add the

generation that it needs at a rate which reflects its growth.

Currently, there's more than $10 billion worth of new generation in California that remains in the queue to be permanent. According to recent statistics presented to the California governor, between 1996 and 1999 in California, 672 megawatts of new generation was added to the system. Demand during that period jumped more than 5500 megawatts. So you can see there's a great disparity there.

In response to receiving those statistics, the California governor issued an executive order earlier this month directing the state agencies involved in licensing electric

power plants to review the applications and respond to them within 100 days of receiving a complete application. So they are taking steps to reduce the difficulties in getting the plants permitted.

In conclusion, you need to keep in mind that an emergent plant developer does not typically wish to build and operate a plant where the plant is not going to be accepted by the

community. They look for a place that's appropriate, appropriate both in terms of the electric transmission and the gas supply and the community and work with the community to achieve community support and to be a good member of the community.

Communities which welcome the peaker plants and other generating plants recognize the benefits and positive impacts of this development on their communities. These might include new jobs, increased tax base, and possible attraction of additional economic development. There's also very little strain on the local resources when these plants are sited. They don't use schools,

for example. They give a lot to the community and take little. A community that accepts the peaker plant understands that a peaker has these relatively few impacts and that it provides the necessary service to the community and benefits the public welfare by contributing to the electric supply of the community.

MWIPS appreciates the opportunity to make these comments, and we would be pleased to respond to any additional questions you might

have, either today or if there are any questions which we might answer as you continue in your inquiry. Thank you very much for your attention.

HEARING OFFICER JACKSON: Thank you.

Does the Board have any questions.

MR. RAO: Ms. Greenberg, in your testimony, you have some power demands projections on a regional basis. That's page two of your pre-filed testimony.

MS. GREENBERG: Yes.

MR. RAO: Do you have any, you know, perhaps, data for specifically Illinois? You

know, if you don't have it right now, would you, you know, have access to such data?

MS. GREENBERG: I have a great reservoir of resources among my member companies, and I will contact them about that, and I'm quite sure we'll be able to come up with something for you.

MR. RAO: That would be helpful to have that information in the record.

MS. GREENBERG: So it's specific with respect to Illinois?

MR. RAO: Yes.

MS. GREENBERG: We will definitely look into that and get back to you.

MR. RAO: Thank you.

HEARING OFFICER JACKSON: Anything else? Thank you, Ms. Greenberg.

MS. GREENBERG: May I move that my testimony be admitted?

HEARING OFFICER JACKSON: Yes, please.

MS. GREENBERG: Thank you.

HEARING OFFICER JACKSON: It's so admitted.

Our next presenter today is Ameren,

and we have Mike Kearney. I do want to say although the Board may not have some questions specifically for the presenters today, if questions do arise in the future, those questions will be provided to the presenters on the Board's website. Whenever you are ready.

MR. KEARNEY: Good afternoon. My name is Mike Kearney, and I'm manager of economic development for the Ameren Corporation, and I want to express my appreciation for the opportunity to summarize my pre-filed testimony for the record. I'd also like to introduce

Richard Smith, who is our manager of generation development for our nonregulated generation company, and he'll serve as a resource for me should there be questions from the Board.

As I mentioned, I'm manager of economic development, and Ameren Corporation was formed in 1998 with the merger of the Central Illinois Public Service Company and Union Electric Company, both electric and natural gas utilities operating within the state of Illinois. Ameren currently serves 1.8 million

electric customers in Illinois and in Missouri under the utility company's of AmerenCIPS and AmerenUE. In 2000, the electric generation activities of AmerenCIPS were transferred to a separate generating company, Ameren Energy Generating Company, which remains part of the Ameren family of companies.

Ameren Energy Generating Company is currently developing a number of generating facilities within the state of Illinois and to date, most of these have been in central and southern Illinois. I'm a resident of Missouri, but dedicate at least 70 percent of my time

working in the state of Illinois. I'm a native of Westchester, Illinois, up near Chicago, and I hold a bachelor's degree and a master's degree in urban and regional planning. I've worked with the utility industry since 1986 when I joined Central Illinois Public Service Company as an economic development representative over in eastern Illinois, and through this function, I work with a number of local regional community development organizations to encourage business

development and economic growth.

In my current position, I also work with the Illinois communities to promote economic development throughout the state. Toward this end, I've been involved in the identification of suitable sites for new generation facilities and have been a liaison between not only our company and the development officials in a number of communities, but also served as a resource for affected communities as they pursued other units of combustion turbine units throughout our region.

I've acted as a technical resource to city officials regarding these peaking facilities

and have attempted to advise them on infrastructure issues, tax issues, and other development-related issues as they've tried to attract this type of development to their communities. Such communities include Neoga, Beecher City, and several others in southern Illinois.

I think that for those who have landed in Illinois, it's represented a win-win

relationship, not only for the development company, but also for the community itself, and I think they've been widely received and well received in this processes.

I've also been involved with a number of our own generating projects, and the communities where Ameren Energy Generating Company has sited new generation include Gibson City and Ford County, Patoka, and Pinckneyville, and I think in each case, the communities recognize the important role that generation infrastructure plays, not only for the future development of Illinois, but the entire Midwest. These communities have been receptive to Ameren's proposals when it's become apparent that Ameren

would be a good neighbor, is committed to managing the public and environmental resources in a prudent manner, and was sensitive to the neighboring businesses and residents around these particular facilities. Officials in these communities have strongly endorsed these projects because of the benefits the development has brought to their citizens. Gibson City and other

officials have gone on record to commend Ameren's generation development approach.

Because of their cooperation over the past several months, Ameren has been able to add more than 400 megawatts of electric generating capacity within the state of Illinois and an additional 560 megawatts of additional Illinois-based capacity are expected to come on-line during the first and second quarters of 2001.

This generation not only helps to improve the reliability of electric consumers within the state of Illinois, but, again, through the Midwest. All of this development has been accomplished by working closely with officials in preplanning and with the citizens at a community

level. Ameren believes that the current regulations governing the development of new generation facilities within the state of Illinois are appropriate and provide each stakeholder an opportunity to become part of the process.

Ameren does not believe that

additional regulation of these facilities is warranted nor needed at this time. Again, I'd like to thank you for the opportunity and respond to any questions you may have about our particular development projects. At the same time, I'd like to also extend an invitation to the Board to visit any one of our facilities throughout central and southern Illinois to see firsthand not only the magnitude of the project, but how you can work with community officials and let the community process work.

HEARING OFFICER JACKSON: Thank you, Mr. Kearney. Does the Board have any questions?

DR. FLEMAL: Mr. Kearney, the facilities that you mentioned as your new facilities, Pinckneyville and Gibson City, are those peaking units or baseload units?

MR. KEARNEY: I think it would be a fair assessment to say they're a part of the baseloading units.

DR. FLEMAL: Have you developed peaker units?

MR. KEARNEY: Okay. Rick mentioned that

we should consider them a peaking unit.

DR. FLEMAL: You should consider them?

MR. SMITH: Yes.

DR. FLEMAL: I gather, though, the way you addressed my question, that there's -- these are made somewhat different than the peaker units that we've been talking about? These are gas-fired --

MR. KEARNEY: These are gas-fired. I think they're consistent with what you've been addressing in your Board.

DR. FLEMAL: All right.

MR. KEARNEY: I think I confused your question with the fact that it's a part of our reserve margin.

DR. FLEMAL: And then they do operate on a relatively limited number of hours --

MR. KEARNEY: Right.

DR. FLEMAL: -- per year and meet that and carry your typical peakers as well?

MR. KEARNEY: Right.

DR. FLEMAL: Ameren says, though, it does provide baseload power as its principal

production. I'm not sure I'm grasping the words correctly.

You would be considered a company whose major provision of power is the baseload area, would you not?

MR. KEARNEY: I'm not sure if I understand your question. The AmerenCIPS generating facilities were moved over into the Ameren Energy Generating Company.

DR. FLEMAL: Yes.

MR. KEARNEY: And we had a contract to provide purchase power from that company for a period of time.

DR. FLEMAL: I guess my understanding of the structure here is a bit fuzzy.

Where I'm really trying to go with this line of questioning is to develop some understanding for myself and for the record. We have seen, I think, that the principal proponents

of peaker development have been people who have come from outside the long-established electrical generating establishment in this state promoted by the nonregulation, and one of the questions

we've had is where have the -- what role have the historic power generators in the state played in the peaker plant development.

Are some of the old-line utilities actively pursuing peakers themselves or relying largely on the more recent enterers entering into the system?

MR. KEARNEY: That can be a complicated question. I think it's fair to say that obviously the old-line historic utilities in Illinois are actively involved with generation, but it may come through a different corporate structure than what we've experienced in the past. AmerenCIPS and Ameren family of companies are very proud of their reputation and relationship with the communities we've served.

So I think that based on that historic record, that historic experience working in Illinois, being an Illinois-based company has certainly played into this process, and we've

gone into the communities very upfront with preplanning efforts, informational efforts, worked with community leadership that we have a

longstanding relationship with and trying to address their development issues.

So I think it's fair to say that the development process works locally, and we try to use that relationship that we foster with these communities to advance projects of this nature.

MR. MELAS: I have a follow up on what Ron was just asking.

Do you basically depend on the traditional coal-fired steam generating plants for the bulk of the power that you generate as opposed to gas-fired turbines?

MR. KEARNEY: Are you asking if AmerenCIPS does, AmerenCIPS? Yes. We have coal-fired generation.

MR. MELAS: And from those generating plants use sort of the bulk of your needs?

MR. KEARNEY: I'd say yes.

MR. MELAS: When it comes to this peak demand, a 90-degree summer day down there in Springfield, where do you -- where do you turn to

for additional power that you need on a short-term basis, through your own resources or

do you buy them from an outside supplier?

MR. KEARNEY: I think that's based on the economics of the opportunity, but we have sufficient capacity to try to meet all our load demand internally.

MR. SMITH: These new peakers would also help to meet that --

MR. MELAS: Pardon me?

MR. SMITH: And the new peaking plants that he mentioned would help meet that demand at the time of peak.

MR. MELAS: So you are building some new peaker plants of the type that we've been talking about for the last couple of days?

MR. SMITH: Yes.

MR. MELAS: Have you built anything -- do you have any plans to come into the northeastern part of the state?

MR. KEARNEY: I think it's fair to say that there's certainly a market opportunity in the Chicago area, and while we're looking at a number of options, it would be premature to say

that we have advanced that in any way.

MR. MELAS: But from a regulatory standpoint, it is possible for you to do that, to serve the demand in this area?

MR. KEARNEY: Yes, it is.

MS. MANNING: I'm hoping to clarify this for the record. We've heard the terms competitive power supplier, wholesale supplier, and retail supplier.

Is it fair to compare that analysis or does a wholesale supplier that has -- does building within your own corporate structure even have trades?

MR. KEARNEY: I think it's fair to say that the entire Ameren family of companies is involved not only in wholesale, but also retail opportunities that deregulation offers us. Ameren Energy Generating Company is just one part of that corporate structure.

MR. SMITH: Just a little bit more clarification.

Ameren Energy Generating Company is a nonregulated company at this point. It's not under the traditional regulating utility

structure anymore. So we are functioning as an IPP or as an independent power producer at this point.

MS. MANNING: And for purposes of the record, too, I'm just going to clarify. We've been using the word nonregulated in different contexts, either the old utility context or the environmental context, and I think when you meant nonregulated, of course, you meant it in terms of the old utility regulation than the regular regulation; is that correct?

MR. KEARNEY: That's correct.

MS. KEZELIS: The Ameren family of companies has several peakers of the sort that we are discussing in these proceedings; is that correct?

MR. KEARNEY: That is correct.

MS. KEZELIS: All right. And those peakers as the IEPA permits operate; is that correct?

MR. KEARNEY: That is correct.

MS. KEZELIS: If you know the answer to this question, great. If not, if you could submit it to us in writing. What I'm interested

in knowing is whether your IEPA permit regulates or restricts the hours of operation.

MR. KEARNEY: I'll ask Rick to respond to that.

MR. SMITH: The broad answer is yes, there is a limitation, and I prefer to answer in writing as to what the limitation is because I'll probably not get it quite right.

MS. KEZELIS: If you would do so, I would be very appreciative.

I have another question, and it's a more general one. With respect to page one of your testimony, Mr. Kearney, you indicate that your dealings with communities in central and southern Illinois have been generally successful, and specifically you mentioned the few difficulties that have been encountered have been overcome.

Would you expand upon that sentence of yours?

MR. KEARNEY: Sure. I think in a lot of ways that when we approach the city, obviously there's a number of development issues we have to address, whether that's zoning requirements or

just public information. So, again, the process involves informational meetings open to the public so that we can explain the project, the scope of that, securing the necessary land for this project, and then we typically engage in a developer's agreement with the municipalities so that upfront we respond to issues like water supply, road use for getting facilities in, annexation in some cases, tax issues and others.

So each case is, perhaps, unique based on local needs and response to local concerns.

MS. KEZELIS: Whichever topics, are those similar to those in our communities up north, at least identified as well?

MR. KEARNEY: Sure, and not unique to any other type of development that a community may encounter in central and southern Illinois working through the city regulatory process, engaging in letters of commitment and developer agreements so that each party is fully aware of what their responsibilities are.

MS. KEZELIS: Thank you.

MS. McFAWN: I'd like to ask a clarifying

question as well.

These cities that you site in southern Illinois, were those for peaker plants, and were they done by Ameren Energy Generating Company?

MR. KEARNEY: We do site a number of communities, including Gibson City, Petoka, Pinckneyville. Those are the Ameren Energy Generating plants.

MS. McFAWN: Those would be the ones in central Illinois?

MR. KEARNEY: Right, but I also mentioned in testimony that we've got -- we have a number of other communities that are involved with trying to attract this type of development to their area. There's a number of companies looking for potential development opportunities.

In those cases, since we're the local utility, they've turned to us and asked us for resources, information about these units, access to transmission lines, and things like that. So it's been more of a technical advisory role for the communities, just like we do for any type of economic development project as we work with our

allies at the local level.

MS. McFAWN: So you were assisting those developers in possibly building peakers?

MR. KEARNEY: We don't assist those developers. We respond to the community questions about that type of development.

MS. McFAWN: Oh. Thank you.

MR. KEARNEY: And they've taken on each of their own local controls, zoning, and water, and things like that.

MS. McFAWN: So those would be the communities of --

MR. KEARNEY: Neoga and Beecher City, and there's a number of other projects that have looked at our area and would have them move forward.

MS. McFAWN: Thank you for explaining those differences.

MS. McFAWN: Also, at Gibson City -- that's all right. I'm pretty loud.

At Gibson City, you said that you added 400 megawatts to available generating capacity?

MR. SMITH: Yeah.

MS. McFAWN: Could you explain that to me?

MR. SMITH: Sure. Let me clarify briefly. We did actually add to the system this last summer. We commissioned four units at the Pinckneyville site via our aero-derivative simple cycle units. They're each rated roughly 45 megawatts. Gibson City we installed to machines that are each rated in the range of 150 megawatts. All six units were commissioned within the last several months and have been operating from time to time this summer.

The Petoka site that Mr. Kearney mentioned is under construction at this point. We expect to commission two 115 megawatt units there first and second quarter of next year. These are all -- I would classify all of these as peakers under the context of what you're investigating.

MS. McFAWN: Thank you.

MS. KEZELIS: In the old traditional utility context, there was something known as the useful life of a generating electricity producing plant. That's not a term that's appropriate

anymore in the independent producer context from a rate base perspective, but do these peaker plants have useful lives and can you tell me what they are?

MR. SMITH: There certainly is a useful life of this type of equipment from a physical operability viewpoint. What that useful life is will depend upon the mode in which it's operated, the number of hours, the number of starts, the fuel it uses, and so forth.

From time to time, equipment failures occur for a variety of reasons which can also shorten the useful life. We aren't really assigning useful lives to these pieces of equipment from an engineering viewpoint at this time.

MS. KEZELIS: Thank you.

HEARING OFFICER JACKSON: Anyone else?

MR. KEARNEY: We'll file this with the clerk.

HEARING OFFICER JACKSON: Thank you very much. Your pre-filed testimony will be admitted into the record.

MR. KEARNEY: Thank you.

HEARING OFFICER JACKSON: We have one more presenter on our agenda for this afternoon, Richard Trzupek from Huff & Huff Environmental Consultants.

MR. TRZUPEK: I'm here today as the air quality manager for Huff & Huff, and although myself and our firm has represented some people peaker plants in their permitting process and testing process, I'm not specifically here representing any one of them, but rather because our concern over the focus of these plants have been under is that in our feeling they represent a positive environmental good for the state, and with the microscope that peakers have been under in the press and through communities, we feel that there may be a lot of misinformation that we can assist the Board in helping to assemble.

It's, I think, a view from the trenches that we hope the Board might find useful. My area of expertise is strictly in air pollution, both in permitting these facilities as a consultant and in the days gone by when I

actually worked for a living in doing stack testing on these facilities and measuring the

emissions from them, as well as a number of industrial facilities.

So I'll limit my remarks strictly to air issues and try to be brief because a lot of the issues that I comment on in my written testimony have been commented on already. I think it's useful to look at the air pollution issues on a macroscopic basis and then come down to the community level because that's -- that's really the areas that EPA addresses in the permit process. How do emissions from these facilities affect the environment as a whole and then what risk and what risk exposures is the community exposed to as a result of their emissions.

In the broadest regional view, I think it's useful to look at MAIN as a whole and what is the demand within MAIN because the general theme we can develop here is certainly that demand will be met by some means, and no more electricity will be generated than demand demands.

There is a power export issue, but I am convinced through everything I know of the industry and I would hope you would be convinced

that power export is a very minor source of generation demand. If we look at generation within MAIN and assign some peak demand for them, we can look at a certain amount of the capacity that is going to be fulfilled through nuclear power, and I've given you some figures on nuclear power availability. I think that's generally accepted to be the cheapest form of power that provides a great deal of baseload.

After that, if you look within MAIN and you look within Illinois, the next most popular option is coal. So the availability of gas-fired units, which without having any -- doing any disrespect to coal are unquestionably far apart cleaner than coal-fired units. It simply means to MAIN and to Illinois that demand can be met if those units are dispatched in a fashion that's much cleaner than we currently know. They represent, in my view, if you accept the fact that demand is going to be constant and

demand must be met, they represent pollution reductions, not additions to pollution.

Further, and what I've given you in my analysis, is that if you look within Illinois,

you have a second level of control that is coming within Illinois beyond the control that demand provides you, and that it is the NOx SIP calls. We have been told by Illinois EPA that NOx SIP regulations are coming, that there's going to be a hard cap on NOx emissions from these facilities, and certainly I think we can all accept that the on air pollutant of real consequence from these facilities is NOx emissions.

The generation on a per megawatt basis is far lower than the practical alternative, coal, and the NOx SIP calls means that we are going to have an absolute limit of the number of tons that can be emitted from electrical generating units within the state of Illinois.

So the question then will become, how much electricity can we need, how much

electricity can we generate to meet the demands that we've heard about today. The availability of units that generate more electricity with less NOx emissions means we can generate and meet that demand more reliability, more easily, and more

cheaply, and certainly gas turbines and peaking facilities provide that opportunity to the state.

When he come down from the issue from MAIN and from Illinois and we come to the community level, as a participant in these hearings for clients and also as an observer of these hearings, as a correspondent for a community newspaper on the side, I see issues of risk are the primary issues that are brought up in terms of air pollution emissions. I think the risk issues are easily overblown with the microscope that these plants are put under. It's far, far easy to overblow them.

You seen some very good data, I think, on Indeck using NO2 as a model and how low for a criteria pollutant that risk issue is for local communities. That's also true, and I think

it would be self-apparent, the SIPs reporting natural gas for toxic emissions. The fact that we can measure any toxic emission at all from natural gas, as a chemist, as a scientist, is a tribute to the technology that we can measure down that low.

The fact that we can read parts per billion to parts per trillion does not imply that that's a health risk, and I don't know that that information is communicated. When you compare the level of emissions, the generation of toxic emissions per BTU for natural gas-fired as opposed to coal as opposed to wood-burning, as opposed to the other myriad of the sources we're exposed to every day, and I've given you some of that data, you see that the generation rates are by far the lowest. I think that overall even though this forum is focusing on peakers, we are really talking about a technology. We're talking about gas turbines. That's overwhelmingly the technology used to fill this demand.

I think that technology has developed as a result of what the Board and what he Agency

has done. Industry has responded to the need for cleaner power. They've done so very effectively. They've reduced emissions enormously. I can recall as a testing person 15 years ago much higher NOx emissions. I can recall not being able to hear myself think when I was next to a gas turbine. Today, they are as

quiet as everyone says, and the emissions are practically undetectable.

The fact that industry has responded in this way I think is something that the Board and the state should encourage. This is a step in the right direction. These are emission reductions. These are by far, I think, the best thing to happen in the power market for quite some time, and I think the only real reason that there has been such a focus is because the microscope that they've been placed under on the community level, that's certainly appropriate, but any project of any type, the small internal combustion engines that go into schools and go into commercial facilities, if you put them under that kind of a microscope, I think you would be

able to elicit the same reaction.

From our view, this is an educational process and the people should understand that these are a boon to Illinois and they're a boon to the environment. That is my testimony.

HEARING OFFICER JACKSON: Thank you. Any questions from the Board? Okay. Thank you.

It appears then that we've reached

the end of our proceedings for today. I want to thank you all for your patience and your attention yesterday and today. We are looking forward to hearing from everyone else, the general public, local municipalities, citizens groups, anyone else who is interested in testifying before the Board at any of our following hearings.

I want to remind you that there is no pre-filing requirement for any of the following hearings in September or October, but I do want to encourage you to contact me in advance if you know you will be at one of the hearings and do want to give comment. I will keeping lists of those people who want to testify at those

hearings, and those people on my list will be given priority of presentation; meaning, if you are on my list, you will get to go first, and we may have a large number of people that are wanting to talk. So it will be to your benefit to get in contact with me first.

I neglected to introduce a couple of the pre-filed testimony items into the record, and I just want to do that right now. All of the

pre-filed testimony from the presenters today is admitted into the record and will be marked as an exhibit by the court reporter and attached to the transcript from today's hearing.

The next hearing in this matter will be held on Thursday, September 7th, at the Naperville City Hall City Council Chambers and will begin at 3;00 in the afternoon and will continue into the early evening hours in order to accommodate those persons who may be working during the day and who would want to come after work and speak to the Board.

Do any of the Board members wish to make any statements before we conclude today?

Okay. That will do it. Thank you very much. We're adjourned.

(Whereupon, the proceedings in the above-entitled cause were adjourned.)

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, GEANNA M. IAQUINTA, CSR, do hereby state that I am a court reporter doing business in the City of Chicago, County of Cook, and State of Illinois; that I reported by means of machine shorthand the proceedings held in the foregoing cause, and that the foregoing is a true and correct transcript of my shorthand notes so taken as aforesaid.

_____

Geanna M. Iaquinta, CSR
Notary Public, Cook County, IL
Illinois License No. 084-004096

SUBSCRIBED AND SWORN TO
before me this_____day
of_____, A.D., 2000.

_____
Notary Public