BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PROPOSED AMENDMENTS TO 35 ILL.) R-01-16
ADM CODE 217, SUBPART V,)
ELECTRIC POWER GENERATION.)

The following is a transcript of the above-entitled cause taken before TERRY A. STRONER, CSR, a notary public within and for the County of Cook and State of Illinois before HEARING OFFICER BOBB BEAUCHAMP, at Room 9-040, 100 West Randolph Street, Chicago, Illinois, on the 28th day of November, A.D., 2000, commencing at 11:10 o'clock a.m.

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

ILLINOIS POLLUTION CONTROL BOARD,
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(312) 814-6926
BY: BOBB BEAUCHAMP, HEARING OFFICER

POLLUTION CONTROL BOARD MEMBERS:
Marili McFawn, Dr. Ronald Flemal, Kathy Glenn, Alicia Liu, Joel Sternstein

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY:
Vera Herst, Robert Sharpe, Robert Kaleel, Dennis Lawler, Yoginder Mahajan, Berkley Moore, Christopher Romaine, Laurel Kroack

OTHERS WERE PRESENT BUT NOT LISTED ON THIS APPEARANCE PAGE.

THE WITNESSES:

HEARING OFFICER BEAUCHAMP: Good morning. My name is Bob Beauchamp and I'm the hearing officer in this proceeding. I'd like to welcome you to this hearing being held by the Illinois Pollution Control Board in the matter of Proposed Amendments to 35 Illinois Administrative Code 217, Subpart V, Electric Power Generation.

Today's hearing is the first day of the first of three scheduled hearings in this rulemaking. Present today on behalf of the Illinois Pollution Control Board and seated to my right is Board member Marili McFawn, the Board member coordinating this rulemaking and on my left is Board member Dr. Ronald Flemal. Also, present today are several members of the Board's staff starting with Dr. Flemal's left is Kathy Glenn, Dr. Flemal's assistant, starting from Board member McFawn's right we have Alicia Liu of the Board's technical staff and on her right Joel Sternstein, attorney assistant to Board member Nicholas Melas.

We have placed copies of the notice and service list sign-up sheets in addition to current copies of the notice and service lists by the table

by the entrance. Please note that if your name is

on the notice list you will only receive copies of the Board's opinions and orders and all hearing officer orders. If your name is on the service list not only will you receive copies of the Board's opinions and orders and all hearing officer orders, but you will also receive copies of all documents filed by all persons in this proceeding. However, also keep in mind that if your name is on the service list, you are also required to serve all persons on the service list with all documents you file with the Board.

Copies of the Board's October 19th, 2000, opinion and order containing the proposed rule and the October 27th, 2000, hearing officer order are also located by that table. In addition, you will also find copies of the Agency's prefiled testimony there.

On October 16th of 2000, the Illinois Pollution -- excuse me, the Illinois Environmental Protection Agency filed this proposal for a rulemaking to amend 35 Illinois Administrative Code, Part 217, Subpart V, Electric Power Generation.

On October 19th of 2000, the Board adopted the first notice of the Agency's proposal. This

proposal was published in the Illinois Register on November 3rd, 2000, at page 16,200. This proposal was filed pursuant to Section 28.5 of the Environmental Protection Act entitled Clean Air Act Rules Fastrack. Pursuant to Subsection (g) of that section, the Board is required to proceed within set time frames for the adoption of this regulation. As stated in the Board's October 19th, 2000, opinion, the Board has no discretion to adjust these time frames under any circumstances.

Pursuant to Section 28.5 of the act, the Board scheduled three hearings. As announced in the October 27th of 2000 hearing officer order today's hearing is confined to testimony by the Agency witnesses concerning the scope, applicability and basis of the rule. Pursuant to Section 28.5, this hearing will begin today and continue on the record from day-to-day if necessary until completed.

The second hearing is currently scheduled for Tuesday, December 19th, 2000, at 11 a.m. in Room 9-040 of the James R. Thompson Center in Chicago.

That's this room that we're sitting in. It will be devoted to economic impact considerations and presentation of testimony, documents and comments by

affected entities and all other interested parties. Prefiling deadlines for the second hearing may be found on the October 27th, 2000, hearing officer order.

The third hearing currently is scheduled for Tuesday, January 2nd, 2001, at 11 a.m. in Room 9-040 of the James R. Thompson Center, again, here in Chicago. It will be devoted solely to any Agency response to the material submitted at the second hearing. The third hearing will be canceled if the Agency indicates to the Board that it does not intend to introduce any additional material. If the third hearing is canceled, all persons listed on the notice list will be so advised through a hearing officer order.

As stated in the October 19th, 2000, opinion, the Board is holding today's hearing consecutively with the hearings in Docket No. R01-17 in the matter of Proposed New 35 Illinois Administrative Code 217, Subpart U, NOx Control and

Trading Program for Specified NOx Generating Units, Subpart X, Voluntary NOx Emissions Reduction Program and Amendments to 35 Illinois Administrative Code 211.

The hearing in R01-17 is scheduled to begin at 9:30 tomorrow in this room. In the event that today's hearing carries over into tomorrow, the hearing for R01-17 will begin at the conclusion of this hearing. However, we do not anticipate that today's hearing will require more than this afternoon to complete.

Today's hearing will be governed by the Board's procedural rules for regulatory proceedings. All information which is relevant and not repetition or privileged will be admitted. All witnesses will be sworn and subject to cross questioning.

Again, the purpose of today's hearing is to allow the Agency to present testimony in support of this proposal and to allow questioning of the Agency. The Agency will present any testimony it may have regarding this proposal.

At the conclusion of the Agency's testimony, we will allow for questioning of the

Agency regarding its testimony. I would prefer that during the questioning period any person wishing to ask a question would raise their hand and wait for me to acknowledge you. Once I have recognized you, if you could please state your name and the

organization you represent, if any, before proceeding with your question.

Are there any questions regarding the procedure we will follow this afternoon? All right. Seeing none, I'd like to go off the record for a moment and discuss our break schedule and when we're going to break for lunch, if we may.

(Whereupon, a discussion was had off the record.)

HEARING OFFICER BEAUCHAMP: While off the record we just discussed our lunch plans. We're going to try to press through with the Agency testimony and complete that before we break for lunch and possibly reconvene this afternoon if we need to.

At this time I'd like to ask Board member McFawn if she has anything else she would like to add to my comments?

MS. McFAWN: Just a few comments. I would like to thank the Agency for bringing such a wonderful panel to this hearing. It's a great collection of their Bureau of Air and we have a pretty large task in front of us. We have two rulemakings, not one, and we are discussing three subparts, not one, and

we hope to do so in the next three days and then another set of hearings of three days and a third hearing in January if need be. So we are doing things in sets of three, aren't we?

With your help and through questions from the participants in this rulemaking here in the audience with us, I hope that we can make a clear record as to how these three subparts will work in the Board's air rule regulations as they stand alone and also in the context of the current -- the NOx rules that are currently at second notice, that would be R01-9, which was sent a second notice under the direction of Dr. Flemal just last Board meeting, and we also have pending before the Board another NOx rulemaking having to do with cement kilns and that is under direction of member Melas and that is currently only at first notice, but it is my hope

that we can make clear on the record how all these NOx rules work individually and collectively. With your help, I'm sure we can do that. Thank you again for coming. In advance I want to thank you because I know it will be a hard set of hearings.

HEARING OFFICER BEAUCHAMP: Thank you, Board member McFawn. At this time, Ms. Herst, do you have

an opening statement?

MS. HERST: Yes, I do. I'd like to say good morning to everyone --

MS. McFAWN: Good morning.

MS. HERST: -- hearing officer, the Board, regulating committee, we're pleased to see everyone here today. A slightly smaller group than for Subpart W, which is also fine. I'd like to introduce myself and the representatives of the Agency here today. I'm Vera Herst, assistant counsel in the division of legal counsel, to my left is Dennis Lawler, who is manager of the division of air pollution control, to his left is Robert Kaleel, who is manager of the air quality modeling unit, and to Mr. Kaleel's left is Yoginder Mahajan, who is in the air quality planning section and then to my

right is Robert Sharpe, deputy counsel, Bureau of Air, to his right is Berkley Moore, who is in the air quality planning section, Christopher Romaine, who is manager of the utilities unit in the permit section who is sitting kind of behind me and the other person trying to hide in the back is Mr. Forbes, who is manager of the ozone regulatory unit.

As Hearing Officer Beauchamp stated, the Agency is proposing amendments to Subpart V of 35 Illinois Administrative Code, Part 217. These amendments are proposed to control the emissions of nitrogen oxides or NOx as we will refer throughout this proceeding and they will control -- proposed to control the emissions during the control period of May 1st through September 30th of each year beginning in 2003. The proposed amendments are intended to meet Illinois' obligation under the Clean Air Act to submit control strategies necessary to demonstrate attainment in the one-hour ozone standard ozone of National Ambient Air Quality Standards for the Metro-East/St. Louis moderate ozone nonattainment area. These proposed amendments

are also intended to address concerns related to litigation that could result in a bump up of the Metro-East/St. Louis area from a moderate to a serious nonattainment area.

And at this time I would like to submit the prefiled testimony of Mr. Lawler and Mr. Kaleel into the record as if read.

HEARING OFFICER BEAUCHAMP: Thank you.

MS. HERST: They will be presenting truncated

versions of their testimony and will also be using overheads and at the end of their testimony I will submit copies of their overheads into the record.

Mr. Moore and Mr. Mahajan will be reading their testimony into the record. I have provided copies of the overheads to Board members, Hearing Officer Beauchamp and the court reporter. There are additional copies of the testimony and overheads available on the table to the audience's left.

Mr. Romaine and Mr. Forbes will not be testifying, but will be available to answer questions during the comment and question period as appropriate. With that, I turn the proceedings back to you, Mr. Beauchamp.

HEARING OFFICER BEAUCHAMP: Thank you, Ms. Herst. You move to admit the prefiled testimony of Mr. Kaleel and Mr. Lawler into the record so we will mark the testimony of Mr. Kaleel as Exhibit 1 and the testimony of Mr. Lawler as Exhibit 2. We'd also like to mark the copies of the overheads that you submitted as 1A and 2A so that when we refer to them during your presentations and admit them into the record.

MS. McFAWN: So that would mean the one

entitled One-Hour Ozone Attainment Demonstration St. Louis Nonattainment Area by Rob Kaleel dated November 28th, 2000, would be marked as Exhibit 1A and EGU Rulemaking Proposal by Dennis Lawler would be marked as Exhibit 2A?

HEARING OFFICER BEAUCHAMP: 2A.

MS. McFAWN: Thank you.

HEARING OFFICER BEAUCHAMP: Very good. At this time I ask the Agency if you'd like to offer any testimony then?

MS. HERST: Mr. Lawler will begin.

HEARING OFFICER BEAUCHAMP: You may begin after you're all sworn in. We will have the court

reporter swear the witnesses in as a panel.

THE REPORTER: Do you all swear to tell the truth, the whole truth and nothing but the truth so help you God?

THE WITNESSES: We do.

HEARING OFFICER BEAUCHAMP: Very good. Mr. Lawler, proceed with your testimony, please.

MR. LAWLER: Good morning. I've done a series of overheads that I'm going to use this morning and they're also available back on the table for everybody to get a copy of. A lot of these folks

have already been at earlier hearings, there's familiar faces on the Board side and familiar faces in the crowd so a few things I'm not going to spend much detail on. There's a few things that are unique to this particular rulemaking that I'll spend a little bit more time, but I'll try to go through it all in a fairly succinct fashion.

The purpose of my testimony this morning is to explain the purpose of the rulemaking itself and then to give you a little bit of detail on the development of the proposal. There is a lot of background in all this, but I'm going to try to

summarize it just as much as possible in going through this.

It also would be probably good to mention that EGU that -- for those of you that haven't been at earlier hearings or involved in any of the processes the last couple of years stands for electrical generating unit. Generally, it's associated with electric utilities. NOx that you already heard this morning, nitrogen oxides, you will hear the term used and as we go through the rest of it we'll try to define the terms that you may hear during the rulemaking. You'll also hear us

refer to this as Subpart V and it might be worth just taking a second to mention, Subpart W is the rulemaking that -- you'll hear us refer to Subpart W and that's the rulemaking that had to do with the -- the other rulemaking that had to do with utilities, that's at second notice now. Subpart T, that's the Subpart that deals with cement kilns and Subparts U and X and they're the ones that address the non-EGUs, nonutility components of the NOx SIP Call and again, I'll just mention those now and you'll probably hear us use those terms for the next hour

or so as we talk about things.

The purpose of this rulemaking is to satisfy the obligations of the state to submit the control strategies to demonstrate ozone attainment for the Metro-East area.

The second purpose is to address concerns relating to a potential bump up of the Metro-East area because of a lawsuit that was filed in the U.S. District Court for the District of Columbia. The state's intent -- initially, we had intended --

MR. RIESER: Excuse me, Mr. Lawler.

MR. LAWLER: Yes.

MR. RIESER: Mr. Lawler, Mr. Hearing Officer, I

notice this issue come up in the Subpart W in the hearing. It will be useful if the witnesses -- I think for purpose of the record the witnesses could refer to the fact that they're changing slides --

MR. LAWLER: Oh, good point.

MR. RIESER: -- and either identify the heading of the slide or the number of the slide or something so that somebody following the transcript and looking at the exhibit will know which slide they're referring to as part of their presentation. I don't

mean to burden the presentation, but it's easier when you're looking at the transcript.

MR. LAWLER: No, that's no burden. That's a good point.

MS. McFAWN: Mr. Rieser, could you identify yourself for the record?

MR. RIESER: Mr. Rieser with the law firm of Ross & Hardies and I'm here on behalf of Ameren Corporation.

MS. McFAWN: Thank you.

MR. LAWLER: This particular chart is the third one in Exhibit 2A and it's entitled State Intent for Metro-East. Again, on this one -- at this point we have intended to address attainment for Metro-East

through the NOx SIP Call portion rulemaking that dealt with EGUs and this is the rulemaking that we would call Subpart W. This was submitted to the Board last July and is going through the process right now.

In late August -- on August 30th, the U.S. Court of Appeals, D.C. Circuit, changed the SIP Call date -- the effective date of the SIP Call or the compliance date from 2004 -- from 2003 to 2004 and

because that was done, we now need Subpart W to address this change that was brought about by a Court decision.

MS. McFAWN: Mr. Lawler, did you mean Subpart V or Subpart W?

MR. LAWLER: Subpart V is the last one I referred to. Did I say subpart W?

MS. McFAWN: That's fine. Thank you.

Also, can I ask you a question, when you refer to the court case in the D.C. Circuit, are you referring to Michigan versus EPA as it's commonly referred to?

MR. LAWLER: Yes.

MS. McFAWN: Thank you.

MR. LAWLER: The next overhead is entitled the

Two EGUs Rulemakings and it's intended to help people to distinguish between Subpart W rulemaking and this Subpart V rulemaking.

First of all, Subpart W is a NOx trading program for EGUs and is generally considered to be one that will be multi-state in nature. It has a state NOx budget in it and the budget is based on a limit of .15 pounds per million BTU applied to all

the BTUs, but it is a state-wide budget. It's based on the NOx SIP Call -- the requirements of the NOx SIP Call and intended to meet the requirements of the NOx SIP Call and the compliance date for Subpart W is now May 31st, 2004.

Subpart V, which is the subject of this particular rulemaking, is a rate-based rule for EGUs and that rate-based limit is .25 pounds per million BTU and it has state-wide applicability. It's also to address attainment, as I mentioned earlier, and address the bump up possibility in the Metro-East and the compliance date is May 1st, 2003.

So that's kind of the overall purpose for this particular rulemaking. I think this will help. You have copies of these overheads. This particular one is entitled Ozone Formation Process and it's

here to illustrate that ozone is formed through a chemical process that involves generally nitrogen oxide emissions and volatile organic materials. When those materials are heated like in the summertime on very hot days, you get ozone formation and the sources of emissions for those particular materials are industrial sources, mobile source, the

common cars that everybody has, and normal products that we use around the house. A lot of those also emit VOCs. Also, it's worth mentioning that you'll hear us use the term VOCs and VOMs sort of interchangeably. VOCs are volatile organic compounds. VOM is volatile organic materials and again we end up using the terms pretty much interchangeably.

I always have to put this chart here for anyone who isn't aware of this, the good ozone and the bad ozone. It's the same ozone that's in the stratosphere that protects us from the sun's radiation that also causes a problem for us -- us humans at ground level if we inhale it, but it's the same ozone.

HEARING OFFICER BEAUCHAMP: Mr. Lawler, for the record your referring to which slide?

MR. LAWLER: I'm referring to the slide called Ozone in the Atmosphere.

HEARING OFFICER BEAUCHAMP: Thank you.

MR. LAWLER: The next overhead is called Ozone Air Quality and again, this is some background information. The rulemaking that we're proposing is

for the purpose of the one-hour ozone National Ambient Air Quality Standard. We need to meet that standard. The standard itself is -- the level is .12 parts per million or 125 parts per billion. The fourth high value at an individual monitor over a three-year period is the critical value. If that value exceeds the levels that I mentioned above, you have a violation of the standard.

The Clean Air Act, Section 181, provides for classifications of nonattainment areas. Nonattainment areas are those areas that don't achieve the National Ambient Air Quality Standards.

In Illinois we have the Metro-East/St. Louis area, that's a moderate area, the Chicago area and the rest -- and some other areas around Lake Michigan are a severe nonattainment area. The attainment dates for these areas, the Metro-East was initially 1996 and for the Lake Michigan area it's

2007.

Now, referring to a chart called Lake Michigan Region One-hour Nonattainment Areas. This indicates the areas that I mentioned earlier that are nonattainment around Lake Michigan and in the

St. Louis area both on the Illinois side and Missouri side. We need to point out here that the state does have an obligation to provide for attainment in any areas that we affect.

Specifically, in Illinois and I refer to the chart called Illinois Ozone Nonattainment Areas. The nonattainment areas as indicated here in the Chicago area is a six-county -- six complete counties and parts of two others and in the Metro-East there's three counties that are nonattainment.

We have an extensive -- I'm referring to the chart called Illinois Ozone Monitoring Network. We have an extensive monitoring network in the state for measuring ozone, 40 monitors. The little dots shown on the chart indicate where the monitors are. You'll notice a lot of them are in the Chicago area, in the Metro-East area again because those are the -- our nonattainment areas in the state.

In looking at -- let me give you the name of the chart, Metro-East Ozone Trends Average Maximum One-hour Concentrations. In looking at the monitoring data from the monitoring data from the

network in the Metro-East area, you'll notice that from the late 1970s to the current time there's been a substantial decrease in the ozone levels and this particular chart averages all of the monitors that are in the St. Louis area and it shows a pretty drastic decline. So the control measures that have been in place in the Metro-East area and those generally reflect VOC controls, controls on VOC sources, have worked. We've got a substantial increase -- or decrease in ozone levels, but we're still not in attainment in those areas.

This is a very busy chart called Tracking the Ozone and I don't believe there's a copy of that in the material that you have just because it's a very difficult chart to copy, but I will -- it's put up here for a couple of reasons. First of all, the state of Illinois working jointly with the states of Wisconsin, Indiana and Michigan and with USEPA formed an organization called LADOC, Lake Michigan Air Directors' Consortium in 1989. In the early

1990s, there was some extensive studies that were done in order to look at the air quality that was in the area around Lake Michigan and as this chart

shows there were aircraft, boats, balloons, a lot of measurements were taken. The point that I want to point out to you is along the southern edge of this little map that kind of shows the Lake Michigan area, if you look at the southern edge there were aircraft flights that took place between central Indiana and central Illinois during this study and the results of those were fairly significant to looking at the way that we needed to -- what we need to do to reduce ozone further.

The next chart entitled Ozone Concentrations Measured Along the Southern LMOS Boundary gives an indication of what those aircraft measured along that southern boundary that I showed you on the other chart. If you consider this a slice of air, you're in southern Illinois looking northward and you can just take a slice of the air across these two states and you can get an indication of what the ozone values were at ground level and above the ground. The numbers showing up on this chart indicate ozone values as high as 90 to

100 to 110 parts per billion being transported into the nonattainment area from the south on this

particular day and many other days that look just like this. All this indicated to us that while we need to get reductions of VOCs in the nonattainment area itself there's also a substantial amount of ozone and ozone precursors that are being transported into the Chicago nonattainment area as well.

Out of all that and similar work that was being done in other parts of the country, and this next chart is called OTAG Participating States, the Ozone Transport Assessment Group was formed involving states, the federal government, industrial groups and environmental groups and many others to study the ozone transport in the eastern part of the country.

The next chart called OTAG Findings are the results of that particular study and a couple of these specifically indicate that regional NOx reductions are effective in reducing ozone values in the nonattainment areas. Also, that essentially the more NOx you can get reduced, the more of an effect you have on the ozone. Ozone benefits diminish with

distance, that VOMs controls are still effective

locally and that some indication of how far the NOx itself travels and that you can have some disbenefits in the local area.

Again, the important thing that came out of all this was a recognition that we needed to control NOx emissions that was being transported into our nonattainment areas in the eastern part of the country.

The next chart is called Metro-East/St. Louis NAA Attainment Demonstration moves us now into a requirement that we have to be able to demonstrate attainment. The state has to be able to show how we'll get attainment in the Metro-East of the National Ambient Air Quality Standards for ozone. We were not attaining the standards and as part of the requirements that we needed to do, the state provided an attainment demonstration to USEPA in October of 1999 and we supplemented that in February of 2000 and that was provided to USEPA as part of our demonstration for attainment in the Metro-East.

In April of 2000, the USEPA proposed federal approval of our submittal, although it was -- the approval was based on us submitting

regulations that achieved the reductions that we needed as part of the attainment demonstration and later I think Rob Kaleel will explain a little bit more about the particular attainment work that was done here.

In July of 2000 we submitted Subpart W to the Pollution Control Board. Again, at that point the idea that that would be the rule that would take care of this particular need that we had to fulfill and as I mentioned earlier, a court action at the end of August required us -- or we ended up needing to submit Subpart V to the Board to supplement that earlier work that was done because the rule -- the court proceeding in the end of August changed the effective date for the NOx SIP Call leaving us vulnerable beginning in 2003 when our attainment demonstration showed attainment.

The last point on here is the -- we had expected that the adoption by the Board of Subpart V in December -- or near the December time frame again would take care of the obligation, but it's not going to completely.

I've got a couple overheads dealing with the NOx SIP Call. This first one is called NOx SIP

Call Chronology and I'm not really going to go into any detail in that because we have done so in other proceedings. The important point here is that as we've gone through the SIP Call, there's an interaction between the attainment demonstration and the SIP Call requirements and some of the important dates that are relevant to the SIP Call are shown on this particular chart.

The elements of the -- of the required NOx SIP Call, it affected 23 jurisdictions in the eastern part of the country. There are four different types of sources that need to be addressed in the NOx SIP Call. The one that's most relevant to this proceeding is the requirement on EGUs. It's indicated on this chart.

HEARING OFFICER BEAUCHAMP: Mr. Lawler, could you identify the chart you're looking at, please?

MR. LAWLER: Yes. It's NOx SIP Call Elements.

HEARING OFFICER BEAUCHAMP: Thank you.

MR. LAWLER: And the SIP Call itself encourages participation in a National Cap and Trade Program.

This chart called the Road to the Illinois Regulatory Proposal, I'll take a couple of minutes and kind of go through this, but this is what led us

up to kind of where we are today.

In late 1998 the Agency began meetings with interested groups on the NOx SIP Call, which had just at that time been published in the Federal Register. We ended up meeting with various groups. We had a group of folks called the Policy Group. We had many meetings with affected sources and we had a technical group of folks that were more interested in the inventories and modeling that met essentially on a monthly basis for the next year after this point.

The Court issued a stay for the NOx SIP Call on May 25th, 1999, based on requests by a number of different groups. At that point the Agency shifted most of our efforts away from the NOx SIP Call and this was based on discussions that we had with all the folks participating on the different groups and focused more on the attainment demonstrations both for the Metro-East and for the Lake Michigan area.

The next chart is entitled Continued Road to Illinois Regulatory Proposal. As I mentioned on an earlier chart, based on the work that was done then, the state submitted for the

Metro-East/St.Louis area the attainment demonstration, October 1999, and supplemented it in February of 2000. This attainment demonstration was based on a limit of .25 pounds per million BTU for EGUs in the state of Illinois. The Agency is working -- continuing to work with -- LADCO has worked on the attainment demonstration for the Lake Michigan area and in March of -- March 3rd of 2000, the SIP Call was upheld by the courts and at that point, the Agency again shifted direction back to addressing the SIP Call itself. We resumed meetings that we had earlier and we were notified by USEPA that we did, indeed, have to meet the requirements of the SIP Call and then that gets us into the various rulemakings that I talked about earlier including the ones for the EGUs.

In this chart entitled Purpose of Proposed Rulemaking, again, this particular rulemaking, Subpart V, is intended to satisfy the obligations of the state to submit control strategies to demonstrate attainment for the one-hour ozone NAAQS and to address concerns regarding the potential bump up in the Metro-East area, and from the other testimony that will be given this morning, you'll be

given more of an explanation of the rulemaking itself, of the modeling that went into this to develop it and the technical support information associated with those.

HEARING OFFICER BEAUCHAMP: Thank you. Before we proceed with the Agency's next witness, I think it might be helpful to enter for the record the docket numbers of the other rulemakings that you referred to during your testimony. Subpart W is being -- is before the Board in Docket No. R01-09 and Subpart T is before the Board in Docket No. R01-11.

MS. McFAWN: And that has to do with cement kilns.

HEARING OFFICER BEAUCHAMP: The Agency, you have another witness?

MS. HERST: Do we need to submit a copy of the overheads into the record?

HEARING OFFICER BEAUCHAMP: Yes. His overheads.

MS. HERST: 2A.

HEARING OFFICER BEAUCHAMP: Would you like to have those submitted as Exhibit 2A?

MS. HERST: Yes, please.

HEARING OFFICER BEAUCHAMP: Okay. Who is your next witness?

MS. HERST: Our next witness is Robert Kaleel.

HEARING OFFICER BEAUCHAMP: Mr. Kaleel, again, I'd ask to remind you to identify the title of each overhead as in going through it in your testimony.

MR. KALEEL: I'll try to remember to do that.

HEARING OFFICER BEAUCHAMP: Thank you. If I might interrupt just before we move on, Ms. Herst, will Mr. Lawler be presenting a copy of the slide that was not in the package, the Tracking the Ozone slide?

MS. HERST: We can do that.

HEARING OFFICER BEAUCHAMP: Thank you.

MR. KALEEL: My name is Rob Kaleel. I'm with the air quality planning section modeling unit in the Bureau of Air. I have been involved with the performance or the preparation of the one-hour ozone attainment demonstration for the St. Louis area. I've also been involved with the one for Chicago. I'm going to present the results, hopefully, briefly -- the results for the St. Louis nonattainment area, which includes the area in Illinois referred to as the Metro-East area.

This slide is referred to in the package that was submitted to the Board. Hopefully, there's extra copies still available for other interested people. I'd like to begin the discussion with a comparison of air quality levels observed in the St. Louis area between 1987 through 1989 and present conditions, 1997 to 1999.

The chart shows -- first off, the shaded area on both sides of the Mississippi River, the Missouri side and the Illinois side. The area shaded in blue or I guess it looks more like gray is the extent of the nonattainment area referred to as the St. Louis nonattainment area.

HEARING OFFICER BEAUCHAMP: Mr. Kaleel, just for the record, I'd like to identify that you're referring to Figure 1 in his submitted testimony.

MR. KALEEL: Yes, sir.

The area in the little darker shade is the area that encompasses the locations of ambient monitors in the St. Louis nonattainment area that exceeded the level of the one-hour standard in two different time periods, 1987 to 1989 on the left and more recently, the '97 to 1999 period on the right.

Three years of data are used to be able to compare

to the level of the ozone standard and in particular the fourth high value at any given site recorded in three years is the level that is compared to the standard. Net value is referred to as the design value or the design concentration. So the numbers that appear on the slides reflect areas where the design value exceeds the level of the air quality standard.

In 1987 through 1989 there were 13 monitoring stations throughout the nonattainment area that were exceeding the level of the ozone standard. The highest design value in the region occurred in northern Jefferson County, Missouri. The level of that violation, that level of air quality of the design value, was 156 parts per billion. In the more recent three-year period, the area that is still in violation of the air quality standard is greatly reduced showing a definite improvement in air quality levels in the region. There were only two monitors in the nonattainment area. Actually, this one in Jersey (sic) County is not in the nonattainment area, but is immediately

downwind. These two monitors are the only ones that still record concentrations in excess of the

standard. The highest design value in the region currently is 131.

So over the ten-year period we've greatly reduced the spacial extent of the violation and the number of people that are exposed to levels of air quality in excess of the standard and we've reduced the magnitude of those concentrations from 156 down to 131. As Mr. Lawler had mentioned, the programs that we have in place are working, but violations in the region are still occurring so we still need to do more.

This slide is referred to simply as Chronology. As Mr. Lawler mentioned, there's been a long history of involvement by the Agency and the Board and the state of Missouri in trying to deal with air quality issues in the St. Louis region. I won't take you all the way back to the beginning, but at least the events that have taken place since the 1990 Clean Air Act Amendments.

The 1990 Amendments required that the St. Louis region, which is considered a moderate

nonattainment area, be able to demonstrate attainment and, in fact, reach attainment by 1996. The 1990 Amendments also required the states to

begin planning and to put together an attainment demonstration based on the use of air quality models by 1994. The use of models in the context of attainment demonstration are in a predicted sense. We try to track emission changes that are anticipated in the future years to be able to see whether or not those emission changes are going to be sufficient to attain the standard by the deadline. So in this case, November 1994, the states of Illinois and Missouri jointly prepared an attainment demonstration using models to look at 1996, the attainment year, to look at all control measures that were expected by that time to see whether or not those measures would be sufficient to attain the standard. What we found at that time was, in fact, we could not achieve the air quality standards by 1996 with the local measures that -- mostly VOC measures that were anticipated at that time. The model concluded that the transport of ozone and ozone precursor emissions, particularly

NOx and some VOCs, would prevent the area from reaching attainment in 1996.

Other areas of the country were making the same finding that ozone transport have not been

properly dealt with, that many areas in the eastern United States could not attain without looking upwind into areas that were actually classified as attainment.

The Ozone Transport Assessment Group was formed in 1995 by the environmental commissioners of the states east of the Mississippi River and a few western states to look at the phenomenon of ozone transport and try to recommend mitigative measures to USEPA. Their findings, as Dennis Lawler had mentioned the finding from the OTAG group, their findings were made public in 1997 to follow shortly thereafter by USEPAs proposal of the NOx SIP Call which we've tried to deal with ozone transport.

I mentioned before that this St. Louis area was to be in attainment by 1996 and couldn't make it as a result of ozone transport. The EPA never bumped the area up in 1996, which was the prescribed sequence that was supposed to happen

based on the Clean Air Act. They recognized that because of transport, the area could not attain and they basically were silent on the issue of attainment dates from 1996 until July of 1998. At that point they issued a new policy called the

Extension Policy for areas whose attainment dates had already past. These were areas affected by transport and I'll talk a little bit more about the Extension Policy.

Missouri and Illinois both agreed that St. Louis was such an area that should have an extension of the attainment date for some future time. We had both requested an extension under this policy in December of 1998. One of the requirements of the Extension Policy as we revised our attainment demonstration to look beyond the 1996 time frame out to the time frame when upward reductions were to occur, and we have submitted the revised attainment demonstration in October of 1999 as required by that policy.

This slide is called the Policy on Extension of Attainment Dates. I mentioned the guidance was issued -- I believe I got that date

wrong. There's a typo on that -- the policy was issued in July of 1998. This guidance was issued by USEPA to specifically deal with areas like St. Louis and there are a few others in the eastern United States where -- these were moderate areas that had earlier attainment dates, but were affected

by ozone transport. The basic idea of the policy is to move the attainment date back to some point in time when upwind reductions in particular NOx reductions would have occurred to allow the region to come into attainment. In the case of the St. Louis area what we had projected or what we anticipated when we began this modeling process was that all these reductions would be in place by the year 2003.

This slide is just called Assumptions and I'll try to walk you through the assumptions that we used to develop and implement the air quality model that is used to predict air quality concentrations for the future attainment year.

The modeling is -- the model in particular that isn't shown on the slide is called the Urban Airshed Model, Version V or Version 5. It's the

same model that was used for the Chicago attainment demonstration, the same model used by OTAG, the same model used by USEPA in their technical support efforts for the NOx SIP Call. So it's a very widely used photochemical model.

We had implemented the model just for a Midwestern region to really focus in on the very

high resolution, very high level of precision just on the Midwestern region most likely to affect Illinois, both St. Louis and Chicago. This area is referred to as Grid M and I'll show you a picture of that in a moment. We did model an area outside of the Midwest called the OTAG coarse-grid to try to look at the effects of future emission changes outside of the Midwest to see whether or not those areas would have a substantial affect on air quality levels in St. Louis.

We originally began this effort using three episodes. I think in my testimony it refers to the use of two episodes. We dropped one episode because it just didn't work very well and I'll mention which one that is in a moment.

We also applied, getting a little

technical I guess, a correction to USEPA's biogenics emissions model. Biogenics being the amount of naturally occurring VOCs from things like trees and in particular in the Missouri Ozarks, there are a very high percentage of oak trees in the Missouri Ozarks and the predictions of EPA's Beis-2 model was found to be greatly overstating the amount of VOCs in the region. So we had worked with USEPA to

perform a specific field measurement program in that region to try to fine tune those emission factors and we and USEPA agreed that some correction was needed.

This figure is called Figure 2, Midwest Modeling Domain or Grid M. I've mentioned before that we had developed a modeling domain that covers most of the Midwest, the areas that we think are contributing the greatest amount to the ozone transport problem. This area is modeled with a resolution, a grid spacing if you will, of only four kilometers, which is a very high resolution way to implement the model, but we've also accounted for the effects of emission changes in areas surrounding Grid M. This larger domain is called the OTAG

domain. The grid cell spacing or resolution, if you will, in this larger domain is a 36 kilometer spacing. That's the same way that OTAG developed this grid back in '95 through 1997. So we are looking at emission changes within Grid M with a very high resolution and then again emission changes outside of that region. The areas right along this edge here are referred to as boundary conditions I think on the previous slide.

HEARING OFFICER BEAUCHAMP: Mr. Kaleel, could you specifically describe which edge on that chart you were referring to just now?

MR. KALEEL: The edge that I intended to meet my boundary conditions are shown on this slide in red is the boundary or the edges of the Grid M domain.

HEARING OFFICER BEAUCHAMP: Thank you.

MR. KALEEL: This slide is called Modeling Episodes and you can't see the colors very well. We had originally started to look at three historical ozone episodes using the air quality model. Historical episodes are used to evaluate the performance of the model. You would try to

reproduce with the model events that actually occurred in historical time periods during high ozone events. July 16th through 19th, 1991, and July 10th through 14th, 1995, these are both episodes very representative of the kinds of conditions that occur in St. Louis when ozone levels are elevated. This period in June of 1996 was also a very good episode as far as high concentrations observed in the St. Louis region. I'm showing this one in red, however, because this is the one that we

weren't able to get to work very well when we did our Basecase evaluation of the model. We were not able to reproduce with the model the ozone levels that were actually observed in St. Louis. So we abandoned the use of that one and finished our attainment demonstration with the July '91 and July 1995 episode.

HEARING OFFICER BEAUCHAMP: Again, just to clarify the record, the red time period that you referred to is the third time period on this slide?

MR. KALEEL: Yes. It's the one on the slide from June 27th to the 29th, 1996. That's the episode that we did not use for the final attainment

modeling.

This slide is called Modeling Scenarios. Once we're able to evaluate the performance of the model and have some level of comfort that the model was actually accurately reproducing the ozone and precursor concentration fields throughout the St. Louis region for the Basecase and in this case we're using the 1995 emissions inventory as the Basecase inventory, we used the model then in a predicted way for the year 2003, which is the year that we anticipated that the NOx SIP Call would be

in place. We evaluated three different emission scenarios using the model for both of the episodes that I mentioned previously. One scenario, the first one, referred to here is just CAA 2003. CAA is the Clean Air Act scenario. It reflects all the emission changes that are required by the Clean Air Act, things like the state's 15 percent rate of progress plan are included in there. They're requirements for enhanced I/M in the nonattainment areas. Those are included in there. There was an initial phase of title four control measures that were implemented by that time. So those are

examples of the types of control measures that are included in the Clean Air Act scenario.

The next scenario assumes that all EGUs, electric generating units, are meeting a level of .25 pounds per million BTU. This is for NOx. This is an assumed NOx control scenario and when I say all EGUs what I'm referring to are all EGUs in the area identified by USEPA's NOx SIP Call. So it's 22 states, most of which are east of the Mississippi River, but it also includes the state of Missouri.

Finally, for the year 2003 as an additional scenario we model the actual NOx SIP Call

scenario which include the EGUs controlled to a level of .15 pounds per million BTU. There are also other requirements of a NOx SIP Call affecting cement kilns, nonEGUs and other source categories.

This slide is entitled Figure 3, Domain-wide Total Anthropogenic Emissions. What I'm comparing on this particular slide are emission levels evaluated using the model both for NOx emissions on the left and for VOC emissions on the right. Each of the four bars on this chart show emission levels for each of the scenarios. The

Basecase, the Clean Air Act level of controls, the .25 pounds per million NOx control and the NOx SIP Call. So that each of the four scenarios I've just mentioned are shown on there.

Looking at the part of the chart that's on the left which reflect NOx emission changes tested in the model, and again, these are emissions throughout the entire Grid M domain, not just in the St. Louis nonattainment area.

From this chart each successive scenario results in successively lower levels of NOx emissions. The 1996 Basecase emissions for the entire Grid M area was in excess of 16,000 tons of

NOx per day. The Clean Air Act Amendments and in particular the requirements of the title four Acid Rain Control Program would reduce those NOx emissions in the Grid M domain by over 2000 tons to a level almost 14,000 tons per day. The .25 scenario reduces emissions by about another 2000 tons to a level of about 11,000 tons per day and finally, the NOx SIP Call brings those levels of emissions down about another 1,600 tons to a level almost 10,000 tons per day in the Grid M domain.

So each successive scenario looks at tighter and tighter levels of NOx control or lower levels of NOx emissions.

On the VOC side, the predominant VOC strategy evaluated is the Clean Air Act strategy with fairly dramatic reduction of the VOC emissions shown between the Basecase and the 2003 Clean Air Act scenario. These are the reductions referred to before, things like the 15 percent control plans, efforts to reduce the amount of VOCs emitted from automobiles, the enhanced I/M program, low RVP fuels in the Metro-East area, reformulated gasoline on the Missouri side, those are all contained within the scenario called Clean Air Act scenario. Again,

the .25 and the NOx SIP call scenarios are NOx strategies. VOC levels really are not changed in those subsequent scenarios.

HEARING OFFICER BEAUCHAMP: Mr. Kaleel, on this current slide, Figure 3, you have one of your scenarios listed as '96 Basecase. On the previous slide, Modeling Scenarios, you have identified it as 1995 Basecase?

MR. KALEEL: Yes. I should explain that.

When we refer to the scenarios that we call our Basecase it, in a way, is reflected of '95 slash '96. I apologize for the confusion. Most of the inventory reflects 1995, but through the process of developing this inventory we worked with utilities in the USEPA's Acid Rain Program to look at the results of their continuous emissions monitors for NOx and for utilities. We're really reflecting more of the 1996 case. So both terms are right. I should have been consistent on the way I referred to them.

HEARING OFFICER BEAUCHAMP: Okay.

MR. KALEEL: This slide is called Figure 4, Peak One-hour Ozone Concentrations. I apologize the colors are not showing up real well, but what this

four-panel plot is trying to show is the results of each of the four emission control scenarios that I described previously for one example day. In this case the day that we're trying to reflect is July 18th, 1991. We're not trying to reproduce 1991 here, but rather we're using the meteorology that occurred on that day to look at emission scenarios for each of these subsequent periods. In this case,

the base year period versus the three scenarios for 2003. The color scales are a little difficult to see, but basically on this one particular day the model is showing predicted violations, levels of air quality, ozone air quality above the level of the one-hour standard, above .25 to exceed downwind of the St. Louis nonattainment area. Areas of other -- of elevated concentrations of ozone, but below the standard are shown here in yellow. If you can kind of compare visually the red area, the most central contour area, to subsequent scenarios you can see that the area gets successively small -- areas of elevated ozone concentration gets successively smaller indicating that each of the successive strategies would yield air quality benefits. Actually, on this particular day, the Clean Air Act

levels of control reduce concentrations to below the level of the standard. Again, this is just one day out of several that we looked at and unfortunately, the Clean Air Act scenario didn't solve all the days, but to illustrate the improvements I've used this day. Comparing the Clean Air Act contours to the .25 scenario, again, further reductions in the

size of each contour again indicating successively better and better air quality predicted by the model. There isn't a lot of difference between the .25 and the NOx SIP Call scenario. In fact, in comparing those two charts you see very little difference at all. On other days and even on this day what we've seen is about a one to three part per billion improvement in predicted ozone near the St. Louis region when you look at the difference between NOx SIP Call scenario and the .25 scenario.

HEARING OFFICER BEAUCHAMP: If I could just clarify for the record, the chart that we have is in black and white. The red area that you referred to appears to be showing up on your chart as the darkest color and the yellow appears to be showing up as the lightest color on the exhibit that you submitted?

MR. KALEEL: I think that's right.

MS. McFAWN: Also, for the record, note that this figure as well as the other ones designated as figures are attached to your testimony which I believe would be admitted into evidence and they are shown attached at least on our copies of your

testimony in color.

MR. KALEEL: In color.

MS. McFAWN: This is for benefit of the reader more than the panel.

MR. KALEEL: On the previous slide we indicated that really there wasn't a lot of difference in air quality predicted in St. Louis between the .25 scenario and the NOx SIP Call. In fact, the difference was in the range of about one to three parts per billion. What we were able to find and I think this slide, which I forgot to mention is Figure 5, the Attainment Strategy Modeling Results. What we, in fact, found is that the .25 pounds per million BTU NOx scenario was, in fact, adequate to demonstrate attainment for the St. Louis region. The NOx SIP Call scenario maybe provides more reductions than are needed specifically to meet this test of demonstrating attainment. I think this

slide shows it pretty well. What this slide is trying to show is not just the results on an individual day, but the results on all of the days in kind of a relative context. This particular analysis was included in the attainment

demonstration as a quote, weight of evidence, type of demonstration, and again, the -- what this particular slide is trying to show is the difference in measured air quality, in this case the '95 to 1997 ozone design value. This is the measured value not modeled. When we used the model in a relative way look at the percent change from the base year to each of the strategies, use that percentage change to apply it to the design value to predict what the future design value would look like or the 2003 design value. What we see in looking at each of the successive bars on this chart is that the Clean Air Act measure is commensurate with the amount of emission reductions that we showed to provide ozone benefits. Concentrations should come down based on just implementation of the Clean Air Act control measures. However, we don't expect that the Clean Air Act measured by themselves will yield attainment for the region. Predicted concentrations will still

exceed the level of the ozone standard of .125 or 124.9. The .25 scenario does reduce predicted concentrations to below the level of the air quality standard. That is the level that we chose for the

attainment demonstration that we submitted to USEPA, and again, the NOx SIP Call provides a little bit more air quality benefit giving air quality levels slightly lower than the .25 scenario.

This slide is called the Attainment Strategy Control Measures and this is just kind of a final review of the measures that were contained in the attainment demonstration submitted by both Illinois and Missouri originally last October, October 1999, with some updates in February and June of this past year. The strategy includes both VOC measures and NOx measures. The VOC measures implemented locally include the 15 percent plans, the enhanced I/M program, Missouri's reformulated gasoline program. In addition to that not shown is Illinois' low RVP gasoline program and all other measures required by the Clean Air Act by the year 2003.

In terms of regional measures the attainment demonstration assumes that electric

utilities or EGUs would be controlled -- NOx emissions would be controlled to a level of .25 pounds per million BTU in Illinois and the eastern

one-third of Missouri. In the western third of Missouri, the EGU control level is .35 pounds per million BTU and all other EGUs in the NOx SIP Call states east of the Mississippi River would be controlled to a level of .25 pounds of NOx per million BTU. That concludes my testimony.

HEARING OFFICER BEAUCHAMP: Thank you. At this time would you like to move to admit the copies of your slides as an exhibit?

MS. HERST: Yes.

HEARING OFFICER BEAUCHAMP: We will admit those as Exhibit 1A. Let's take a few moments off the record.

(Whereupon, a discussion was had off the record.)

HEARING OFFICER BEAUCHAMP: Does the Agency have another witness they would like to present?

MS. HERST: Yes. Mr. Moore is going to read his testimony.

HEARING OFFICER BEAUCHAMP: Mr. Moore, please proceed with your testimony.

MR. MOORE: Good afternoon. My name is Berkley L. Moore. I'm a licensed professional engineer in

Illinois and since 1970 I have been employed as an Environmental Protection Engineer or as an Environmental Protection specialist in the Illinois Environmental Protection Agency's (the Agency) Bureau of Air.

I have a bachelor of science degree majoring in chemical engineering which I received from Grove City College in Pennsylvania and have completed all the course work for a master's degree in environmental engineering from Southern Illinois University.

The purpose of my testimony today is to discuss the technical aspects, section by section, of the Agency's Part 217, Subpart V, Electric Power Generation, proposal for regulating the emissions of nitrogen oxides, (NOx).

Section 217.700 simply states that the purpose of Subpart V is to control NOx emissions during the May 1 through September 30 control period, beginning in the year 2003. Control of NOx during the control period will have the effect of reducing ambient concentrations of ozone because it

is the chemical reaction of NOx, in the presence of

heat and sunlight, with volatile organic compounds that are also emitted to the atmosphere, which is the primary mechanism leading to the formation of ozone in the lower atmosphere.

The May 1 to September 30 dates denominating the control period are, of course, dates that encompass the period of most intense sunlight during the year. The year of applicability is 2003.

Section 217.702. This section simply states that if any section, subsection or clause of Subpart V is found invalid, such finding shall not affect the validity of any of those portions of Subpart V not found invalid.

Section 217.704, applicability. This section sets forth the type of emission unit to which Subpart V applies. It is written to apply to all fossil fuel-fired stationary boilers, combustion turbines or combined cycle systems that serve a generator with a nameplate capacity exceeding 25 megawatts of electricity, if such electricity is sold. This section excludes the nonEGUs listed in Appendix D to Subpart W, which was filed with the

Board on July 11th, 2000, and docketed as R01-9.

Subpart V also applies to any fossil fuel-fired unit with a maximum design heat input of greater than 250 million BTU per hour if the unit has the potential to use more than 50 percent of its potential electrical output capacity of the unit.

Subsection (a) provides that if the generator served by these emission units exceeds a capacity of 25 megawatts of electricity for sale, the unit is subject to Subpart V unless the unit is located at a source listed in Appendix D to Part 217 of the Board's air pollution regulations. The sources listed in Appendix D are sources whose primary business is not the production of electricity, and that are not being modeled as part of the proposed Subpart V NOx emission rate in the Agency's attainment demonstration for the Metro-East/St. Louis ozone nonattainment area.

Subsection (b) applies to emission units commencing operation after January 1, 1999, and provides the method to determine whether a large; that is, more than 250 million BTU per hour heat capacity unit is designed primarily for the production of electricity rather than to provide

steam or heat for process emission units. The 0.0488 factor by which a unit's heat input is to be multiplied to determine the primary purpose of the unit is based on standard conversion factors relating British thermal units per hour, the preprinted testimony inadvertently omits per hour, to watts. The fact that only one-third of a unit's heat input is ordinarily converted into electricity and that if a generator requires more than one-half of the unit's heat input to generate the electricity at full capacity, the emission unit's primary purpose must be for the production of electricity.

Two sources indicated that there should be a low emitter exemption for units with low; that is, five percent or less capacity factors that burn natural gas or oil. The concern appears to be the higher cost of requiring controls and continuous emissions monitors for units that operate infrequently. Units with such low capacity factors are usually peaking units. As I noted earlier, the proposal already excludes smaller units those serving a generator with a nameplate capacity that is 25 megawatts of electricity or less.

The Agency believes it is reasonable for

the proposal to include large units with a low capacity factor.

Section 217.206 (sic) emission limitations. This section would limit NOx emissions from affected units to 0.25 pounds per million BTU as well as to any more stringent limit that might also apply. The Subpart V limit of 0.25 pounds per million BTU must be achieved by each individual unit or alternatively by participating in an averaging demonstration via the provisions of Section 217.708.

HEARING OFFICER BEAUCHAMP: Mr. Moore, I believe when you were speaking you said Section 217.206 and in your prefiled testimony it says 217.706.

MR. MOORE: Okay. Yes. 706 is correct.

Section 217.798, NOx averaging. This section applies only to those emission units listed in Appendix F to Subpart W, and to any unit at Soyland Power that commenced commercial operation before January 1st, 2000. Units listed in Appendix F are units that commenced commercial operation before 1996. Therefore, units that commenced commercial operation after this date and units at Soyland Power that commenced commercial operation

after January 1st, 2000, will have to meet the 0.25 pounds per million BTU limit on an individual basis.

The units to which Section 217.708 applies, however, will be able to meet the Subpart V limit in a more cost-effective manner averaging their emissions rates with other units under Section 217.708. The mathematical representation of the averaging formula is given in Subsection (b).

A simple illustration of the Subsection (b) formula is to consider two boilers each of 1,500 million BTU per hour heat input capacity. If one of those boilers had an average control period NOx emissions rate of 0.15 pounds per million BTU and the other an average control period emissions rate of 0.35 pounds per million BTU, then taken together their average emissions rate would be 0.15 plus 0.35, that quantity divided by two or 0.25 pounds per million BTU, just enough to meet compliance.

Use of the 217.708 formula would give the same result and more importantly would give a correct result regardless of any varying heat inputs of the units or number of units in the averaging plan and regardless of operating for a different number of hours, the illustration assumes operating

for the same number of hours during the control period.

Subsection (c) provides that emission averaging must be conducted via federally enforceable permit conditions and Subsection (d) allows each unit to be included only once in a NOx averaging demonstration during a control period. This latter provision is designed so as to prevent double counting of over-complying emission units; that is, the difference in allowable and actual emissions from each averaging unit can be used only one time by other undercomplying units.

Subsection (e) requires compliance by averaging to be demonstrated within two months of the end of the control period while Subsection (f) provides that should compliance not be demonstrated by averaging, each unit participating in the averaging demonstration shall be treated as though it were attempting to comply on an individual basis. Thus overcomplying units would be deemed to be in full compliance, while undercomplying units would be deemed to fall short by the actual magnitude of their undercompliance.

Section 217.710, monitoring. This section

requires affected units to demonstrate compliance with NOx emission limits by using continuous emissions monitors that meet the requirements of 40 Code of Federal Regulations Part 75, Subpart B. There is an exemption in Subsection (b),however, allowing oil or gas-fired peaking units to use the emissions estimations protocol of 40 CFR Part 75, Subpart E. This emissions protocol provides that other kind of monitoring systems may be used so long as they can be shown to be of equivalent precision, reliability, accessibility and timeliness.

Thus, this section imposes on affected units identical with monitoring requirements to those imposed by the proposed Part 217, Subpart W regulations that would apply to the same affected units that are currently before the Board -- the regulations are currently before the Board, but for the fact that Subpart V monitoring will be required approximately a year earlier, and that such monitoring will entail an additional calculation step; that is, the step of determining emissions in pounds per million BTU.

Section 217.712. Reporting and

to comply with the recordkeeping and reporting requirements of 40 CFR Part 75, but only insofar as these requirements are related to NOx emissions during the control period; to certify that the report is true and accurate; to show that the unit complies with the control season average NOx emissions rate not exceeding 0.25 pounds per million BTU, either individually or as part of an averaging demonstration; to keep and maintain for five years all records and data necessary to demonstrate such compliance and to have such records and data available for submittal to the Agency within 30 days of any written request by the Agency. These records and data must be available or submitted by November 30 of each year beginning in 2003. This concludes my testimony.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Moore. Any rebuttal for Mr. Moore?

MS. HERST: No.

HEARING OFFICER BEAUCHAMP: Do you have any other witnesses you'd like to present today?

MS. HERST: Yes. We have one more,

Mr. Mahajan. He will also read his testimony into the record.

HEARING OFFICER BEAUCHAMP: Mr. Mahajan, please proceed with your testimony.

MR. MAHAJAN: Good morning. My name is Yoginder Mahajan. I am employed as an environmental protection engineer in the air quality planning section in the Bureau of Air of the Illinois Environmental Protection Agency hereafter called Illinois EPA. I have been employed in this capacity since March 1992.

HEARING OFFICER BEAUCHAMP: Mr. Mahajan, could I get you to slow down for the court reporter, please?

MR. MAHAJAN: Prior to my employment with the Illinois EPA I worked for various metal fabrication industries for nine years. My educational background includes a bachelor of engineering degree in mechanical engineering from Bhopal University at Bhopal, India.

As part of my regular duties in the air quality planning section, I have prepared emission estimates for various source categories used in the

development of the 1990 ozone season weekday emissions inventories; evaluated control technologies applicable to volatile organic

materials hereafter called VOM emissions sources utilized in the preparation of the Rate-of-Progress plans for the Chicago and St. Louis ozone nonattainment areas; and assisted in the development of regulations for the control of VOM emissions from source categories included in the Rate-of-Progress plans.

Regarding the proposal before you today, I have been involved in the development of the NOx regulations for electrical generating units hereafter called EGU, and I have prepared the Technical Support Document hereafter called TSD for this proposal.

As the TSD points out, the rotary motion of the turbines through a magnetic field generates the electricity that is produced by the utility industry. A large output of electricity, the amount that is required every day of the year is ordinarily generated by the turbines turned by a flow of steam produced in boilers. This more or less constant

electrical load is termed base load. Base load units are supplemented, as needed, by cycling units which may be gas- or oil-fired. An extra amount of electricity, such as that required to run many air

conditioners during very hot summer days, is generated in turbines turned by a flow of steam produced in gas- or oil-fired boilers that can be quickly brought on line, or in gas- or oil-fired gas turbines, wherein the same turbine that is making the electricity is turned by the flow of combustion gases produced from burning gas or fuel oil. Units producing electricity that are required only on high demand days are called peaking units or simply peakers. Smaller coal-fired units are also sometimes used as peakers, although they cannot come on line as quickly as gas- or oil-fired units.

Combustion of fuel in the boilers and gas turbines produces nitrogen oxides hereafter called NOx. The ambient air consists of about 20 percent oxygen which when heated to elevated temperatures will combine with the elements of coal, fuel oil, or natural gas, carbon and hydrogen, to yield carbon dioxide and water vapor, and to generate still more

heat which will sustain combustion. Ambient air, however, also contains almost 80 percent nitrogen, which does not react with its oxygen component to form NOx at ambient temperatures, but will do so at the elevated temperatures that occur during a fuel's

combustion. This reaction takes place at an increased rate as the temperature of combustion rises, and also with increasing amounts of excess air. In addition, coal and fuel oil contain appreciable amounts of nitrogen that can also combine with oxygen to form still more NOx at combustion temperatures.

Today's proposal is to control NOx emissions from the large fossil-fuel-fired EGUs that have nameplate capacities greater than 25 megawatts of electricity. As part of the evaluation of the control of NOx emissions from EGUs, the Illinois EPA identified several sources of guidance. The United States Environmental Protection Agency, hereafter called USEPA, published two Alternative Control Techniques, hereafter called ACT, documents regarding control of NOx emissions from utility boilers and gas turbines. These ACT documents

contain detailed information which describe the sources of NOx emissions, various techniques for controlling NOx emissions, and the costs of these controls. The Illinois EPA used information contained in the ACT as background information, but relied on the information contained in the

Regulatory Impact Analysis for the NOx SIP Call published as part of the regulatory docket for the NOx SIP Call, 63 Federal Register, 57356, October 27, 1998, the proposed Federal Implementation Plan, hereafter called FIP, published at 63 Federal Register 56394, October 21, 1998, and USEPA's proposed findings on the various petitions filed under Section 126 of the CAA, Section 126 Petitions, published at 65 Federal Register, 2674, January 18th, 2000, for the costs and economic impacts of today's proposal.

To determine the NOx emissions for the existing large Illinois EGUs, the Illinois EPA used the actual 1996 heat input data reported by the existing emissions units to the Acid Rain Division of the USEPA. The heat input of the fuel burning equipment is the amount of heat energy, usually as

measured in millions of British thermal units, hereafter called MMBTU, produced by the burning of the fuel for a given period of time, usually an hour. Base 2003 heat input values were calculated by multiplying actual 1996 heat input with a 1996-2003 growth factor, which was calculated based on the 1996-2007 growth factor of 1.08 as predicted

by the USEPA's Integrated Planning Model, hereafter called IPM. The 2003 base emissions were calculated by multiplying the unit's base 2003 heat input with an emission rate in pounds per million BTU and divided by 2,000 pounds per ton. The emissions rates used for calculations were the Acid Rain Control limits and when the unit was not subject to Acid Rain Control limit, an actual average 1996 emission rate reported by the sources to the USEPA was used. The total 2003 base NOx emissions from the existing impacted 103 EGUs were calculated to be 113,340 tons per control period.

The 2003 controlled NOx emissions from the 103 affected units by the proposal were calculated by applying a proposed emission rate of 0.25 pounds per million BTU to each unit's 203 -- sorry, 2003

heat input. The total regulated 2003 control period NOx emissions were estimated to be 49,790 tons. This represents a reduction of 63,550 tons of NOx emissions or an average reduction of 56 percent from the base 2003 NOx emission levels. Attachment A to the TSD identifies each of the 103 impacted EGUs and each unit's associated NOx emissions data.

The largest number of units affected by

the proposal are coal-fired units which can be classified as either dry bottom pulverized coal-fired boilers or as cyclone boilers, with the pulverized coal-fired boilers further classified as to firing method either as tangentially-fired or as wall-fired. These classifications are important because each classification has different characteristics uncontrolled NOx emissions and control costs.

The units having the highest total NOx emissions in Illinois are cyclone boilers. Cyclone boilers are those in which crushed coal is fed tangentially in a stream of primary air to a horizontal cylindrical furnace. In a cyclone boiler, much of the ash forms a liquid slag on the

furnace walls and must be drained to the furnace bottom where it can be removed through a slag tap opening. There are 22 cyclone boilers affected by the proposed regulations, having projected base 2003 NOx emissions of 56,579 tons during the May 1 through September 30 control period.

The units having the second highest total NOx emissions are tangentially-fired dry bottom pulverized coal boilers having uncontrolled NOx

emissions. Tangentially-fired units fire fuel in burners mounted in a corner or in opposing corners of a furnace with a rectangular cross section. The fuel is called pulverized coal because the coal is pulverized to the consistency of talcum powder in mills designed for that purpose. The term dry bottom refers to the fact that the furnace is designed so that no ash collects in a liquid state on its walls. There are no wet bottom pulverized coal boilers in Illinois. Projected base 2003 NOx emissions from the 34 tangentially-fired dry bottom pulverized coal boilers affected by the regulatory proposal total 43,047 tons during the control period.

Wall-fired dry bottom pulverized coal boilers are the third largest NOx emitting category of units affected by the regulatory proposal. Wall-fired units are similar to tangentially-fired units except that the burners are mounted in a wall, or in opposite walls, of the furnace rather than in the corners. There are only eight wall-fired dry bottom pulverized coal boilers affected by the proposal with projected base 2003 control period NOx emissions of 9,130 tons.

The fourth NOx emitting category of EGUs affected by the regulatory proposal is gas- and oil-fired boilers. There are 25 gas- and oil-fired boilers impacted by the proposal and which account for 2,234 tons of 2003 base control period NOx emissions.

The last category of EGUs affected by the regulatory proposal is gas turbines. There are 14 existing gas turbines affected by the proposal and they are generally used to meet peak electricity demand. The total NOx emissions from this category are 2,351 tons per 2003 base control period.

A number of NOx control technologies are

available to reduce NOx emissions from EGUs. They can be either combustion controls or post combustion controls. Combustion controls consist of changing the circumstances of boiler or turbine combustion so as to minimize the amount of NOx generated during that combustion, while post combustion control treats already generated combustion gases so as to reduce those gases' NOx component to nitrogen and water vapor.

Most combustion controls are designed to prolong combustion at lower temperatures rather than

quickly completing it at higher temperatures (called stating the combustion), by creating combustion zones that are fuel rich and thus oxygen poor, and by creating lower overall temperatures. Combustion control techniques include taking burners out of service, hereafter called BOOS, to maintain a staging atmosphere within the furnace, using low excess air, hereafter called LEA, so as to limit the contact between oxygen and nitrogen, and staging combustion via biased firing, hereafter called BF, of air-fuel rations in some burners, flue gas recirculation, called FGR, which lower peak flame

temperature by adding a large mass of cool, inert gas to the fuel air mixture, reducing air to the primary burners and adding ports for overfire air, and providing for reburning wherein a portion of the fuel is burned in a second combustion area above the main combustion area.

The most common single combustion control technique, however, is the low NOx burner or LNB, a burner especially designed to stage combustion and to provide for lower combustion temperatures. LNBs can achieve a 35 to 45 percent NOx reduction when installed on tangentially-fired pulverized coal

boilers, a 40 to 50 percent reduction when installed on wall-fired pulverized coal boilers, and a 30 to 50 percent reduction when installed on gas- or oil-fired boilers. The burner's NOx reduction efficiency can be improved still further when used in conjunction with other control techniques such as OFA. LNBs, however, are not available for cyclone boilers.

The only other single combustion control technique that can equal, or even exceed, the efficiency of Low NOx burner is reburn. Reburn with

natural gas is usually a more suitable technique than reburn with coal or oil, even if those latter fuels are the boiler's primary fuel. Reburn alone is capable of achieving a 50 to 60 percent NOx reduction from gas- to oil- and coal-fired boilers, including cyclone boilers.

The other combustion control technique besides reburn is low NOx burner, which can allow gas- and oil-fired boilers to meet the proposed regulatory requirements.

Gas- or oil-fired gas turbines can be controlled by the injection of either water or steam into the intake of the turbine. This control

technique retards NOx formation by lowering the operating temperature of the turbine and can provide a 70 to 90 percent reduction in NOx emissions, which may be sufficient to meet the requirements of the regulatory proposal. A special retrofit firing configuration, known as the low NOx combustor, is available for some gas turbines. This technique can provide a 60 to 90 percent reduction in NOx emissions.

Two post-combustion control techniques

that are available for fossil-fuel-fired boilers are selective non-catalytic reduction, hereafter called SNCR, and selective catalytic reduction, hereafter called SCR. Both these techniques are called reduction techniques because the NOx is reduced back to elemental nitrogen and oxygen with the oxygen combining with hydrogen to form water in the process.

Both techniques are called selective because both specifically select NOx for reduction unlike the catalytic reduction that is applied to the exhaust of motor vehicles and which reduces a wide variety of pollutants. In both SNCR and SCR, ammonia, a compound of nitrogen and hydrogen, is

made to react with NOx in order to liberate the nitrogen from each reactant and produce gaseous nitrogen and water. In SNCR, urea, another nitrogen and hydrogen compound, which also contains carbon, is often used instead of ammonia.

The advantage of SNCR over SCR is cost, because the SNCR reactions take place without the use of a catalyst, the chief component of the cost of an SCR system. The disadvantages of SNCR are

that it effectively operates over a rather narrow range of temperatures which may not be appropriate for some boilers, that it is difficult to control the loss of ammonia, an air pollutant in its own right, to the ambient air atmosphere, and that its NOx removal efficiencies, 30 to 60 percent, compare unfavorably with SCR's 75 to 85 percent NOx removal efficiencies for coal-fired boilers.

In general, gas- and oil-fired boilers SNCR's reduction efficiencies are even poorer, 25 to 40 percent, while SCR's efficiencies are even better, 80 to 90 percent. SNCR may not be suitable for gas turbine applications, while SCR is capable of providing 90 percent NOx reductions for such turbines.

Th TSD for this proposal has a summary of the costs of various NOx control technologies and their combinations under various load conditions based on the information contained in the ACT documents. The costs of combustion controls for gas- and oil-fired boilers vary widely depending upon the size of the unit, the load conditions, and the type of control technology employed. Table 5-2

in the TSD provides a summary of the large variety of cost effectiveness values for the NOx control options for these boilers. For gas turbines that continue to operate as peakers, the most likely control that would be utilized is water and steam injection. The cost effectiveness range for this control option is $1,210 to $2,350 per ton of NOx removed. If these units are used more often than as peaking units, the cost per ton would be less.

Control costs for coal-fired boilers relying on SNCR technology also vary widely for base load units with an average range of cost effectiveness of $725 to $880 per ton of NOx reduced. Control costs relying on SCR technology have a similar average range of cost effectiveness of $1,035 to $2,035 per ton for base load units.

In order to estimate the cost effectiveness of the proposal, Illinois EPA is relying on USEPA's cost data presented in the Regulatory Impact Analysis for the NOx SIP Call. USEPA analyzed the results of cost effectiveness based on the .15 uniform alternative without trading between sources within state boundaries. The cost

difference between uniform alternative with interstate trading and without interstate trading is approximately two percent. If states adopt rate-based approaches, the cost could be expected to be higher. The RIA document indicated that costs could be as much as 30 percent higher if trading is restricted.

Table 5-4 of the TSD shows the various NOx emissions reductions levels and the annual costs and cost effectiveness that the USEPA estimates for the potentially affected part of the electric power industry in the years 2003, 2005, 2007 and 2010. As shown in the table, the average costs per control season ton of NOx is removed under the 0.25 uniform alternative with trading for 2003 is $1,127 per ton of NOx removed. The Illinois EPA used this information and estimated the cost effectiveness to

comply with its proposal of 0.25 pounds per million BTU rate-based NOx emission standard with no cap and trading program to be $1,465 (1990 dollars) per ton of NOx reduced in a 2003 control period, an increase of 30 percent in the average cost effectiveness under the 0.25 uniform alternative with trading.

The Illinois EPA believes that the cost estimates are conservative. The proposal allows emission averaging among the Appendix F EGUs and certain units at Soyland Power. The Illinois EPA anticipates the cost effectiveness of this proposal to be much less than the estimated cost effectiveness of $1,465 per ton of NOx reduced when the affected sources participate in the mutually agreed upon NOx averaging plans.

In summary, the results of Illinois EPA's modeling and analysis indicates that an emission rate of 0.25 pounds per million BTU for large EGUs is sufficient to demonstrate attainment of the one-hour ozone standard in the Metro-East/St. Louis area. All of these controls are assumed to be in place by May 1, 2003.

The Illinois EPA has relied on the information contained in the NOx SIP Call and

USEPA's guidance documents in developing the proposed Subpart V that requires the NOx emissions from large EGUs greater than 25 megawatts of electricity capacities to meet a rate-based NOx emission limit of 0.25 pounds per million BTU. The

requirements of the proposed regulations will impact 103 existing emission units in Illinois and will result in an overall 56 percent reduction in base 2003 NOx emissions or a total of 63,550 tons of NOx reduced per ozone season. A number of control technologies are available to allow sources to meet the required level of control, although it is anticipated that the most likely control will be the use of combustion controls and some SCR or SNCR or some combination of such technologies. The cost effectiveness of NOx controls to meet the reduction requirements of the proposed rule has been determined to be, in 1990 dollars, $1,465 per ton of NOx reduced. Thank you, Mr. Mahajan.

HEARING OFFICER BEAUCHAMP: All right. Ms. Herst, does the Agency have anything further they'd like to offer in support of this proposal?

MS. HERST: No.

HEARING OFFICER BEAUCHAMP: All right. We're

going to break for lunch then. I have ten after one on my watch now. An hour and 15 minutes from now will be 2:25 and we'll break for lunch and reconvene at 2:25. I guess we'll break for lunch and we'll

reconvene at 2:30 to make it even.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICER BEAUCHAMP: Before we enter the question period, Ms. Herst, does the Agency have any other matters they'd like to introduce before?

MS. HERST: Yes. Mr. Lawler is going to speak a little bit on our economic and budgetary analysis.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Lawler.

MR. LAWLER: Yes. We had a few words we wanted to say about the document entitled "Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking" and the statement we wanted to make is contrary to the original submittal of this document, the Agency does anticipate that the rulemaking will result in an increase in costs to the Agency in the implementation of these regulations.

The Agency did not originally indicate that there would be additional costs to the Agency because we did not believe that we'll be able to

obtain additional monies to pay for the implementation efforts and because no specific technical support or equipment is needed. However, it is more accurate to indicate that these costs will occur and to make a general estimate of the cost.

The Agency will submit a formal change to this document after completion of the first round of hearings. The preliminary estimate based on full-time equivalent work years and other materials is 300,000 to $400,000 the first fiscal year expected to be the state fiscal year FY03. This represents time spent in revising permits, monitoring compliance, reviewing reports and so forth. This should decline somewhat after the first year.

As I indicated, a more refined estimate will be submitted later. The other aspects of the submittal will be unchanged and are based on cost estimates performed by the USEPA.

HEARING OFFICER BEAUCHAMP: Very good. Thank

you. Any other matters before we go to the question period?

MS. HERST: No.

HEARING OFFICER BEAUCHAMP: Thank you. As a preliminary matter, I note that you've got a few members up on your panel who have not yet been sworn in. If we can have the court reporter swear them in before we begin.

MS. HERST: I think they were all sworn the first round. They didn't testify, but they --

HEARING OFFICER BEAUCHAMP: Okay. Well, then that's taken care of.

We will now proceed with questions for the Agency witnesses. As I previously mentioned, if you have a question for the Agency witnesses, please raise your hand and wait for me to acknowledge you. When I do acknowledge you, please state your name and the organization you represent, if any.

Are there any questions for the Agency witnesses? And let me apologize at the outset, I'm a little bit newer to the whole process than maybe some of the other Board members are so I'm not so familiar with people. I'm sure after the three days here, I will be. Your name first?

MR. MILLER: My name is Scott Miller, Midwest

Generation, Chicago.

When the rule was being drafted, we commented on combustion turbine peaking units and exemptions being provided in the rule. Part of the testimony mentions 14 existing gas turbines. I think we own 12 of those.

THE REPORTER: Could we have them step up if they are going to speak?

HEARING OFFICER BEAUCHAMP: Could we get you to step up or move your chair towards the center or speak up so the court reporter can hear you a little better?

THE REPORTER: Thank you.

MR. MILLER: My question concerns existing combustion turbines. The testimony stated there were 14 that are affected by the rule. I think we own 12 of those. I've looked at the records over the last few years. They've only operated about one to 200 hours per year each. That's why we asked for an exemption based on a capacity factor of less than five percent.

If we put them in, we probably wouldn't put in control technologies. We have averaged those

using the averaging rule. However, the monitoring is very strict, Part 75 monitoring, require fuel full filled monitors and a lot of electronics all hooked up to a data acquisition system. Since Part 75 reporting is the protocol, it would add an additional burden of keeping all the records and doing all the recording on our Part 75.

HEARING OFFICER BEAUCHAMP: I'm sorry, Mr. Miller. Could I ask that we pause for a moment so that the court reporter can swear you in? Please swear him.

THE REPORTER: Do you swear to tell the truth, the whole truth and nothing but the truth so help you God?

MR. MILLER: Yes.

HEARING OFFICER BEAUCHAMP: Sorry. Thank you. Please continue.

MR. MILLER: So I guess I thought it was reasonable to at least exempt these small peakers using an exemption similar to a 1992 draft rule for NOx RACT. That would exempt these small turbines. My calculations show that they only emit about 200 tons per year. I think the testimony had a couple thousand tons per year for all four units. So I

thought five percent was a reasonable cut off, but I know there's another rule that would require us to put it in the SIP Call, but I think you have to look at this rule. It's a .25 rule for a one-hour nonattainment. We don't know the future of the SIP Call. It would be a large burden to have these low capacity factor units into the coal combustion turbine peaking units, which we own 14. I'm sure it's most of these 12 out of the 14. The Agency mentions that it was reasonable to include these large units in the program, the low capacity factor.

MR. LAWLER: The point you raised is one that we did consider seriously and we talked with you about it and others as we went ahead with this rulemaking, but I think you raised one of the points which is that it will be required by Subpart W also as part of the SIP Call and so we think it's reasonable from that standpoint.

Also, these are -- they're large units and they certainly could operate more often than a few hundred hours a control period and so rather than take the chance that we don't -- that we aren't monitoring -- that we aren't sufficiently monitoring for these, we thought it was reasonable to go ahead

and put them in. Again, they're big units and they have the potential to operate a lot more than they do.

MR. ROMAINE: And I could supplement one other point, because these are peaking units, the rule in Section 217.710 does specifically allow that they determine their NOx emissions by fuel-filled monitors. They are not required to install the more expensive continuous emission monitoring. So they are subject to a less extensive methodology for determining emissions. So that factor is already in there as well.

MR. MILLER: I agree with that. The recordkeeping and the reporting are also another factor for Part 75. You have to have the computer operating system, you have to do electronic reporting with certain record types and then all the data has to be checked before it's submitted if you are going to use a Part 75 protocol and for 12 units for measuring only a few hundred tons, it's a huge burden. I'd rather spend the money on my 20 large units. It would be a better bet on those. Probably the noise of the air of the 16 of my 20 units would be -- wouldn't be worth the time in general for a

few hundred times on a smaller unit.

I could recommend that maybe we add another protocol to the monitoring. If we submit a monitoring plan that's similar to Part 75, that would capture the information. Part 75 does give you a default emission rate for the NOx. I could take that times 100 hours and come up with a real accurate number instead of spending hundreds of thousands of dollars to follow Part 75 protocol. That's another option, something other than Part 75 to monitor emissions for low emitting units.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Miller.

MS. McFAWN: Oh, Mr. Miller, before you leave, did you have any other questions for the Agency?

MR. MILLER: No.

MS. McFAWN: Could I just ask, I was listening and I might not have grasped everything you had to say. You mentioned the cost for the monitoring and that's seems to be one of your major if not -- is that your major concern?

MR. MILLER: Yeah. That's the major point.

MS. McFAWN: And then you said it would cost hundreds of thousands of dollars. Would that be per

unit or collectively?

MR. MILLER: That would probably -- for each site, I would say 100,000 per site.

MS. McFAWN: Per site being per peaker unit or --

MR. MILLER: One site has eight peakers. One site has four. The rule does allow to not measure fuel at our common site. So you wouldn't have to monitor eight separate fuel meters. The electronics to get all that into a computer based system that has to follow the EPA protocol for Part 75 is where the manpower dollars go.

The capital cost would be about 100,000 per site, but the O & M would be burdensome. You're adding maybe a half -- you're doubling the work of the -- of each site to track these emissions. When you're in Part 75, you have to record not only when the one unit is operating, but when it's not operating. Those hours -- you have to have -- send a signal to the computer to tell that the unit is off for every hour during the ozone season. All I'll ask is that it be quality assured before it's submitted to the Agency if you're going to use Part 75 recordkeeping and reporting. There's a lot

easier ways to do it for the amount of emissions since they're such low emitters. That's why I recommended five percent cut off for capacity factor.

MS. McFAWN: All right. And you said there's an easier way to do it. You mean the exception or an exemption or do you mean that there's an easier way than Part 75?

MR. MILLER: Yes. There's an easier way than Part 75.

MS. McFAWN: To part 75?

MR. MILLER: An easier way.

MS. McFAWN: And you mentioned you could propose such an alternative to the Agency and to the Board?

MR. MILLER: Yes.

MS. McFAWN: Is that something the Agency could entertain?

MR. LAWLER: Yes.

MS. McFAWN: Yes. Perhaps through the course of these hearings, you could work together on that and maybe propose something to the Board or submit it to the Board independently or collectively and also, I think the Board would be very interested in

the costs you estimated because even just in these few questions, I learned a lot more, but not the hard dollars.

I also have another question. The Agency mentioned that you will be subject to the NOx rules, the NOx SIP Call rules. I think you mentioned the same thing. I assume that means to Subpart W. Is that what you were referring to?

MR. MOORE: Yes.

MS. McFAWN: The Agency is indicating yes.

So does that mean the money you invest, should you equip these with monitors, fuel monitors, these sites, would that be money that you will have to invest in 2004 because of Subpart W?

MR. MILLER: With Subpart W there's no option. So I guess I would have to invest the same amount of dollars.

MS. McFAWN: Okay. So you're just really seeking to put that off a year?

MR. MILLER: Yeah. And I mentioned that you have to look at this rule as a separate rulemaking. We don't know the future of Subpart W.

MS. McFAWN: That's correct.

MR. MILLER: One way you could look at it, yes,

I'm putting the costs off for a year and another way I'm looking at it as it's burdensome to put this monitoring on a peaking unit, an existing peaking unit.

MS. McFAWN: That's a valid point.

MR. MILLER: Subpart W had some options. I'd probably pursue that --

MS. McFAWN: Okay.

MR. MILLER: -- Part 96 protocol so...

MS. McFAWN: Versus the Part 75?

MR. LAWLER: Yes. Part 96 and 75 work together with Subpart W, so there's really no options for more monitoring. However, this rule the Agency -- Part 75 is a good rule. It's going to give you real accurate emissions. That's probably what the Agency was thinking with this rulemaking, but I think for units that run maybe one or 200 hours a year at low capacity factors there can be alternatives.

MS. McFAWN: All right. And that would be what you would be investigating if you and the Agency were to talk about alternatives to Part 75?

MR. MILLER: Yes.

MS. McFAWN: Thank you for answering those questions.

MR. MILLER: Sure.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Miller.

Other questions for the Agency? Mr. Rieser?

MR. RIESER: David Rieser with the law firm of Ross & Hardies. I'm here on behalf of Amerem. Can you hear me okay?

I have a couple of questions about the language in the proposal and some other issues. Turning to 217.706A the standard is based on a, quote, control period average, unquote, for that unit.

What's the definition for a control period average? Is that defined in the rules? Are there rules adopted by the Board?

MR. MOORE: Okay. Well, that is -- the control period average would be the average emissions in pounds per million BTU over the entire control period. So that it would be determined -- for an individual unit, it would be determined by dividing

the number of pounds of NOx that were emitted during a control -- during the entire control period by the number of million BTU of heat input sustained

throughout the entire control period.

MR. RIESER: Thank you. With respect to the NOx averaging described in 708, how is that intended to work administratively?

MR. ROMAINE: I guess, do you have specific areas that you're interested in or just very generally?

MR. RIESER: Well, for example -- let's start with the general and let's go to the specific. I mean, you've got two -- is it two sources come to an agreement and then go to the Agency and have permits written for each of them that embody that agreement or how is that going to work in practice?

MR. ROMAINE: I think I'm going to back up and say we believe that there's nothing in these rules that really requires us to review a particular averaging plan as such.

Our concern is simply to make it clear that a particular unit qualifies for averaging, it's on the list and that there's an understanding of how

relevant information has to be submitted. So the thought would be that they would apply to us in a federally enforceable permit, we review that they're on the list, we'd agree what the appropriate

procedures would be for confirming data substitution and also the administrative details of the process and beyond that, the identification of particular averaging plans could be something that could be submitting for the actual compliance report.

So it's really an authorization to perform averaging that would be made in the permit. It would not be a review of a particular averaging plan.

MR. RIESER: So the permit itself would specify an emission rate that might be different than .25?

MR. ROMAINE: No. There's no reason even for the permit to do that. It would simply say this unit is qualified to perform averaging. It's on the list. There are some fine, you know, clarifying conditions to make it as data substitution provisions and the Acid Rain Program apply and that averaging compliance reports have to be submitted by a responsible official. If there are several

parties, you need responsible officials from all the parties, but there wouldn't be as elaborate averaging provisions as you might find in the Acid Rain Program.

We're trying to keep this very simple and

we have confidence that the Acid Rain Program gives excellent emission data. The data should be there, if we could just have the appropriate reports and signatures filed with us by November 30th of each year.

MR. RIESER: So the averaging really isn't embodied in the permit other than the authorization to use it as a method for evaluating and determining compliance that the November 30th report date that you got set in this rule?

MR. ROMAINE: That's correct.

MR. RIESER: Subpart -- excuse me, Subsection (f) of 708 says if averaging is used to demonstrate compliance, the effect of the failure to demonstrate compliance shall be the compliance status of each EGU pursuant to Section 217.706A as if the NOx emission rates of such EGU were not averaged.

What is that intended to do, that section?

MR. MOORE: As I said in my testimony, it simply provides that overcomplying units are in compliance with the rule and undercomplying units are undercomplying by the magnitude of their undercompliance.

For example, I talked about a unit that

might average .35 pounds per million BTU and a unit that might average .15, but suppose it turned out that one of the units emitted a little more, say, the 0.15 pound unit emitted 0.16, that would throw the undercomplying unit out of compliance.

Similarly, of course, the overcomplying unit could be emitting its authorized -- expected, let's say, 0.15, but the undercomplying unit would be emitting at a little more than .035 (sic). It could work either way, but if compliance is not shown by averaging, the overcomplying unit is home scott-free as long as it's not in itself above .25 and the undercomplying unit is undercomplying by whatever its actual emission rate differs from 0.25.

MR. RIESER: So would the undercomplying unit in that example, say the unit that's emitting a .25 rate, be treated for enforcement purposes exactly

the same as another unit that was emitting .25 that hadn't -- didn't include an averaging plan as part of its permit?

MR. MOORE: Yes.

MR. RIESER: So even though it had worked with another company to develop the averaging plan used as a compliance methodology, it would be treated the

same as --

MR. MOORE: Right. It's grievance would be against the company that failed to provide sufficient --

MR. ROMAINE: I guess that's the answer in terms of how it would be treated under the rule. Obviously, we can't speak to how the actual enforcement action would be pursued in this particular case.

MR. RIESER: Okay. Well, if you can't speak to that, what's the purpose of this particular section because it seems to identify a particular -- make a particular statement about units that use certain compliance methodologies and how they're to be treated as opposed to other units that are also out of compliance for entirely different reasons?

So I guess the point is what's -- why are these companies singled out in this way and this particular statement made?

MR. LAWLER: I guess, maybe to follow through on the other answers, the options you would have here would be to say that both entities that participated in this averaging could be considered out of compliance because the average itself was out

of compliance and what we're trying to do here is say that obviously if there was one of the companies or one of the units that is overcomplying, there's no reason to think he would be enforced against or, you know, that would be the logical approach and so it would be the unit that really is not meeting the .25 limit that's at risk, if they do something like this.

MR. RIESER: So there really is not an attempt by the Agency to include as one of the factors for evaluating, say, penalties that one company had an averaging plan that didn't work and another company didn't have an averaging plan at all?

MR. LAWLER: We're not trying to get into -- in -- by this particular statement what penalties

would or wouldn't be -- you know, would or wouldn't be applied to the situation, but we want to try to differentiate between the two different units because one made it and one didn't.

MR. RIESER: So what you're really saying is it's the -- just reminding people that the overcomplying unit that was subject to an averaging plan that failed, as long as they're meeting the .25 limit, they're still in compliance?

MR. LAWLER: That's right.

MR. RIESER: Looking again at 708C, you say averaging under the subpart must be authorized through federally enforceable permit conditions for such EGU. Am I correct, Mr. Romaine, based on your statement that what those conditions will be is a section in the permit that will simply authorize the use of averaging not the establishment of the different emission level than .25?

MR. ROMAINE: That's correct. That's my understanding and that's what the language specifically says, averaging must be authorized. It does not provide for review of a specific averaging plan. It certainly does not provide for an

averaging plan that has to be reviewed and revised every time the plan changes.

MR. RIESER: Thank you.

MS. McFAWN: Do you have to identify who you'll be averaging with?

MR. ROMAINE: No. Well, not in times of the permit. Obviously, when you submit your compliance demonstration we'll obviously have to know who the team is.

MS. McFAWN: Thank you, Mr. Romaine.

MR. RIESER: Well, let me clarify that, so when you submit your permit application or modification that says you intend to use averaging as a compliance methodology, you don't have to say in that modification who you're averaging with or whether or not you have an averaging agreement? You're simply saying that that will maybe be one of the mechanisms that you would use for achieving compliance, is that correct.

MR. ROMAINE: That's my understanding, yes.

MR. RIESER: And so the only time you really have to identify who you're averaging with is if at the November 30th report date, of course, that

person can't average with somebody else or use the same credits for averaging.

MR. ROMAINE: That's correct.

MR. RIESER: I think you addressed the Agency about the statement of reasons, but I need to ask it here anyway, why is the averaging limited to Appendix F sources?

MR. LAWLER: I think this was -- probably was addressed, but it's limited to Appendix F sources because these are the larger sources in the state from one standpoint. Secondly, the air quality

analyses that were done assumed that it was these sources that met the .25 limit in the modeling that Rob explained a little bit earlier.

MR. ROMAINE: And I can add to that, the purpose of this rule is to reduce emissions. If we allowed averaging from new units that are developed, they almost certainly will have emission rates that are well below .25 pounds per million BTU. So by adding a new unit that adds emission to the atmosphere would -- if it were allowed to average, perpetuate higher emissions and our goal is, in fact, to average across existing emission units to

get reductions overall to .25 pounds per million BTU pursuant to this rule.

MR. RIESER: What happens with this rule if and when Subpart W becomes effective? Is there any coordination between the two or how would things work?

MR. LAWLER: The rule is written that it will stand. This rule, once adopted, would just become effective.

MR. RIESER: When -- if and when Subpart W becomes effective, are there issues of coordination between the two rules?

MR. LAWLER: I'm not sure I understand your question. Are there -- is there coordination between the two rules, but a company would have to meet both rules. Our general thought is that if they meet the .15 rule -- they meet -- I'm sorry, they meet the NOx SIP Call rule, which is Subpart W rule, in almost all instances they would be meeting this one, too, or we would assume that they'll be meeting this one also.

MR. RIESER: Certain provisions are made in the rule for Soyland Power. I am interested in who they

are and what the basis for this specific identification of them is.

MR. ROMAINE: Soyland Power is a real cooperative entity. Recently it developed its own peaking station in Alsey, Illinois, which is a little bit southwest of Jacksonville. They, in fact, purchased used turbines from I think a utility in Arizona. Their turbines, given their age, cannot comply with the .25 pounds per million BTU per hour limit. They would otherwise qualify as new units for purposes of Illinois. The only realistic way for them to operate in compliance with this rule would be to undertake emission averaging. We would

not expect it to be feasible for them to do the measures to actually reduce the emissions from their units given their age and again, they're in the operations of peaking facilities. So the purpose of this was to accommodate that very special circumstance of this real cooperative and purchased used equipment that for Illinois purposes counts as new, but will nevertheless have to average to demonstrate compliance.

MR. RIESER: Did any of their units commence

operation as of January 1st, 2000?

MR. ROMAINE: I believe so.

MR. RIESER: There was testimony from Mr. Kaleel this morning regarding part of the attainment demonstration for Metro-East was -- included in that was in the necessity for Missouri to adopt its own standards applying both to the eastern west half or two-thirds of the state. Where is Missouri in that process?

MR. KALEEL: Missouri has completed their rulemaking that would implement or require the limits that I had shown on my slide, the .25 pounds per million BTU in the eastern one-third, .35 pounds per million in the western two-thirds. They

completed that rulemaking this past spring and it requires an implementation date of 2003, and effective date.

MR. RIESER: In Mr. Lawler's last statement he talked about the potential for additional costs associated with the adoption of those -- of this rule. I, unfortunately, I don't recall from Subpart W proceedings whether these are more different in addition to the Subpart W anticipated costs or how

they relate to what costs were anticipated with the implementation of Subpart W.

MR. LAWLER: Well, the point that I was making was that the cost to the Agency to implement the regulations -- I don't remember what we had in there for Subpart W, but the concept would be the same that -- I mean, obviously there will take -- there will be some resources within the Agency that would have to be dedicated to implementing this particular set of rules, but we may not be given any additional resources from either the state or the federal government to do that. So it makes it a little hard to make these estimates when you're just going to have to absorb it. That was the point that I wanted to make in that.

MR. RIESER: I don't have anything further. Thank you very much.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Rieser. Are there any other questions for the Agency? Yes, sir?

MR. MURRAY: My name is William Murray. I'm with the City of Springfield office of public utilities and we're affected sources.

THE REPORTER: Could you please stand up here? Thank you. There's an echo.

MR. MURRAY: I'd like to try to clarify a couple of the items in the prefiled testimony. Mr. Kaleel, in the last sentence of the first full paragraph of page five of your prefiled testimony you say implementation of the NOx SIP Call in 2004 should help to maintain ozone levels in years after the area's 2003 attainment date. Are you inferring that this proposal would not be sufficient to maintain attainment after 2003?

MR. KALEEL: I guess what I was saying there is that the NOx SIP Call will provide additional benefit to the area and it will help keep the area in attainment.

MR. MURRAY: A cushion so to speak?

MR. KALEEL: Kind of a cushion, yeah.

MR. MURRAY: Okay. Mr. Lawler, I have a couple questions on your testimony that was prefiled. On pages two and three you discussed the possibility of USEPA extending the attainment deadline to May 2004. If this extension was instituted and how does that relate to the pending litigation regarding the bump

up? I believe it's the Sierra Club case.

MR. LAWLER: First of all, you're correct or at least our understanding of what USEPA is considering at this point is whether to change attainment dates for areas like St. Louis to the 2004 date instead of the 2003 date and it is something that they're working on and they're considering and their legal folks are trying to figure out whether it's the right thing to do or not the right thing to do, but even if they should end up doing that as far as the court case that you mentioned, the Sierra Club court case, we don't know if the Court would end up accepting that 2004 date as the new attainment date for Metro-East. So we feel that the state would still be at risk for getting a bump up in the Metro-East because the Court could do -- end up doing anything. The Court may not listen to EPA

even if EPA ends up doing this. So we sort of think that we're taking maybe the responsible position or prudent position at this point to keep the area from being bumped up.

MR. MURRAY: Okay. So in other words, even if the extension were to be granted, barring the Court

making some rulings on that extension, you would think the Board would still need to proceed with Subpart V?

MR. LAWLER: That's correct.

MR. MURRAY: Okay. And continuing on a line that Mr. Rieser was asking you about the interplay between Subpart V and Subpart W assuming all the contingencies that would bring Subpart W in full effect for example 9.9 of the Equal Protection Act -- or the Environmental Protection Act, in Illinois if all of those contingencies played out I believe your testimony was that in all cases you thought that if you -- a utility was in compliance with Subpart W that they would be in compliance with Subpart V?

MR. LAWLER: Well, you changed my words a little bit there, but --

MR. MURRAY: Well, you said in most instances.

MR. LAWLER: We probably never should say never, but we think certainly in almost all cases or maybe all case --

MR. ROMAINE: I want to jump in. I'm sure you can come up with an exception where that wasn't the

case.

MR. MOORE: Right.

MR. MURRAY: Then I understand the answer to be that in spite of the budget number that we have under Subpart W that's based on an 8 percent growth factor and I believe there was a lot of testimony in the Subpart W hearings to the effect that in Illinois the utilities would actually be in compliance with a level or emission rate much lower than .15, and your opinion would still be there might be a possibility that there will be somebody out there that still could not have to comply with Subpart V and still comply with Subpart W?

MR. MOORE: Sure.

MR. LAWLER: I guess it's possible.

MR. MURRAY: So would it be your testimony that there would be no need to repeal Subpart V at any time or include sum sort of self-repealing provision within it should Subpart W become fully effective?

MR. LAWLER: Well, we think that Subpart V should end up staying there and for a number of reasons that we've all been either talking to or talking around. There are a lot of -- there are

legal challenges that are still out there for the NOx SIP Call and there's a lot of other reasons that -- it's probably good from the Metro-East standpoint to have a certain degree of certainty out there because we don't know.

MR. MURRAY: I understand that. I was referring to if all those contingencies had come to pass and we have Subpart V, full proof, unchallenged with Subpart W, would there still be a need for Subpart V?

MR. LAWLER: I guess we believe we'd be more comfortable with it staying, yes.

MR. ROMAINE: Given the nature of things I think it would be appropriate to do it with a separate rulemaking if you did decide to repeal it. Just the nature of the legal system is such that who knows what the circumstance will be in the future.

MR. MURRAY: And just so the record will kind of reflect what I'm getting to, would you agree there would be two sets of recordkeeping, reporting

requirements under the rules that are different for the regulated community?

MR. ROMAINE: Yes. Clearly one of the problems

with saying you wouldn't have contradictions is the budget is based on a mass number of tons, allowances, where the rate-based rules is intact, the rate in terms of pounds per million BTU, you might meet the pounds per million BTU and not meet the times. You might meet the times and slightly go over the rate.

MR. MURRAY: Yeah. But in the reports that the utilities would have to file would be actually different for each rule?

MR. ROMAINE: Yes.

HEARING OFFICER BEAUCHAMP: Do you have any further questions, Mr. Murray?

MR. MURRAY: No. Are there any other questions for the Agency witnesses?

THE REPORTER: Could he step up?

HEARING OFFICER BEAUCHAMP: You might have to step up, sir.

MR. RODRIQUEZ: I just have one question. For the record Gabe Rodriguez, I'm an attorney for Dynergy Midwest Generation. The only question I

have really is a follow-up to Mr. Rieser's as well as about this interplay between Subpart V and

Subpart W. The question is is whether the reductions that are achieved through compliance with this rule whether it's going to have any impact on your ability to -- the availability of early reduction credits under the other rule if the other rule does go final?

MR. ROMAINE: I think the answer is obvious, but maybe we want to confer a little bit.

MR. LAWLER: We should know the answer to that.

HEARING OFFICER BEAUCHAMP: Let's go off the record.

(Whereupon, a discussion was had off the record.)

HEARING OFFICER BEAUCHAMP: We're back on the record.

MR. LAWLER: I think Mr. Romaine's answer that it's obvious, but we just kind of wanted to make sure it was obvious, but there is -- they would be able to use early reduction credits.

MR. RODRIGUEZ: They would be?

MR. LAWLER: Yes.

MR. RODRIGUEZ: It would not affect your -- the

availability of claiming reductions achieved in 2002

or 2003 to comply with this rule? This rule wouldn't have an impact on the ability to --

MR. LAWLER: That' correct. It's a separate rulemaking.

HEARING OFFICER BEAUCHAMP: Okay. Thank you. Thank you, Mr. Rodriguez. Mr. Rieser, again.

MR. RIESER: Well, if I could briefly follow-up on that point. My recollection is that the Subpart W ERC provide only for reductions 30 percent below permitted levels. So as of 2003 the permitted level would at least be .25 -- .25 rate. So would they only provide -- would the rule only provide for early reduction credits in 2003 to the extent that they reduced 30 percent below that rate -- to the extent there are any ERCs available in 2003?

MR. LAWLER: Let us just respond to that maybe in comments or at a later time.

MR. RIESER: Perhaps at the next hearing. Maybe something we can discuss at the next hearing.

MR. LAWLER: That would be fine.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Rieser. Are there any further questions for the Agency witnesses? Any questions from the members of

the Board present or staff?

MS. McFAWN: I have some questions. I'm going to have to backtrack a little bit and maybe we've covered some of this ground, but my first question is -- I just want to verify that this rule is not filed under Section 9.9, is that correct?

MR. LAWLER: That's correct.

MS. McFAWN: Your statement of reason says that it is, but I couldn't see any nexus between the two.

MR. LAWLER: The statement of reason says it is filed under 9.9 --

MS. McFAWN: Yes.

MR. LAWLER: Or 28.5?

MS. McFAWN: Both.

MS. HERST: It shouldn't be under --

MR. LAWLER: If it says -- it's a misstatement that we'll check over that.

MS. McFAWN: That's fine. I just want to verify that. Then this is a much broader question. I was curious as to why this rule is being imposed state-wide since a number of the sources are a downwind from East St. Louis? They don't seem to be contributing to the problem in East St. Louis and this rule, as I understand it, is intended to

address the nonattainment of that area.

MR. LAWLER: Actually, the -- I think we made in discussing the modeling this morning and in other statements that we've made, we tried to stress that the regionalness of the -- of getting the NOx reductions, that it isn't necessarily one particular plume from an individual plant, but the whole group of sources that are -- that contribute to the ozone problem and it, to some degree, there's an ozone soup out there and everybody is adding to the soup and so the analyses that have been done, we don't try to draw a distinction or magic line in the state that says this particular source contributes and that particular one doesn't because when you get into individual sources that's very difficult -- you know, a very difficult thing to do. So there's no magic line that we can draw and from that standpoint and from an equity standpoint this would apply to all the sources in the state and the modeling that was done essentially assumed all the sources in the state would be at that level.

MS. McFAWN: So you didn't do any modeling that would just assume, like, the impact of the Missouri sources and maybe down state Illinois sources?

MR. LAWLER: No. That's correct.

MS. McFAWN: But when you studied Lake Michigan you had a boundary line, didn't you? The Lake Michigan ozone area.

MR. LAWLER: When we studied, and Rob may want to add to this, but when we studied the Lake Michigan area we drew boundaries that were out away from the areas far enough that anything coming in from outside that area, while it still could come into the area, it still comes into from outside the square that Rob showed us as Grid M, it will come in, but the area that's inside contributes more and again, even in none of that modeling did we try to say that this group of sources does contribute and that group of sources doesn't contribute because in effect everybody is contributing to the problem and so when you go back and take that down to an Illinois level you really can't get into individual sources and try to say that this person is causing or not causing the problem because of the soup situation.

MR. KALEEL: I would agree with the way Dennis characterized it and I guess I'm a little confused by the one question about dividing Illinois for the

Lake Michigan region. We did not do that. The applicability of the NOx reductions for the Lake Michigan attainment plan rely on state-wide application of emission limits as well.

MS. McFAWN: Maybe I misunderstood some of the overheads that Mr. Lawler relied on; namely, the one that you didn't have a copy of in your attachment.

MR. LAWLER: Yes.

MS. McFAWN: We just note that for the record. I have seen it before at other NOx hearings, but I thought for sure you told us there was a boundary there and it was drawn in blue and it was where they took the readings to distinguish between an area south of Lake Michigan and further down state of Illinois?

MR. LAWLER: This was -- there was a particular focus that was part of the LADCO study back in the early 90s and for purposes of that study we put in a very dense monitoring network in the area right around Lake Michigan and that's probably what you're thinking of on the chart. That's where we ended up because that's where we really wanted to get the dense measurements of the ozone and the ozone precursors because, to some degree, we are also

trying to figure out the impact of the lake at that point. So we put a very dense network of the monitors in the areas right around the lake and to kind of go with that we put these aircraft -- the aircraft ended up flying in the same area and to the south, the aircraft had to cut across someplace to take their measurements and that's where they took them and we were able to find out from those aircraft measurements that you did have this, I'm going to say soup, that was coming in from the -- in that case that was the southerly wind. It was coming in from the south into the area.

So that particular chart didn't mean to say that -- there's two points, it didn't mean to necessarily say that that was a beginning point or an ending point or anything else, and then the second point is it was also done almost ten years ago now and the modeling -- we can model much bigger areas also right now, but the main point is there was no particular reason for that line.

DR. FLEMAL: Do we ever encounter ozone exceedances on other than southerly wind conditions?

MR. LAWLER: Yes.

DR. FLEMAL: So it is not true that the

exceedances always occur in a roughly northerly direction from the main source?

MR. LAWLER: And maybe some of the confusion is because of that example that I used with what Ms. McFawn was talking about was a southerly wind and southerly wind is probably the most common, but we do get exceedances and violations with winds from other directions also, but that particular example was a southerly wind.

DR. FLEMAL: Okay. And you also choose to show us when you were talking about Grid M the southern line and I think you were talking at that stage about this showed that there was movement from south to north into Grid M, that it was an outside source and having a southerly boundary and the implications were that things come from the south and go towards the north and are you telling us that that is maybe common, but it's not an exclusive situation?

MR. LAWLER: That's correct. It's probably an oversimplification on our part for purposes of trying to explain the concept and we may have said it a little stronger than we should have, but it's the concept that we are trying to explain. So

that's yes to answer your question.

MS. McFAWN: Now, I have a series of very detailed questions so anybody jump in if they have a bigger question that's related to the one I'm going to pose. I was reading over the parts in the language of the rule and because when push comes to shove sometimes we want to modify language in the rule, but we are reluctant to do so from that proposed by the Agency unless we fully understand the ramifications of such changes. That's why my questions may be somewhat detailed.

Beginning with the purpose statement, in other sections; namely, Subpart W and the subpart you will discuss tomorrow you talk about the control period in the purpose sections as being the ozone control period. Would that be proper to do so in this case? You modify control period with the word ozone is what I'm asking.

MR. LAWLER: It's an ozone control period so...

MS. McFAWN: Okay. So we could parallel the language of the other two parts with no problem?

MR. LAWLER: Yes.

MS. McFAWN: Subpart W also has a further

explanation of the purpose which is -- explains that the purpose is more than just to control NOx and I

wonder if the Agency could consider either a phrase or a second sentence that would summarize what this Subpart V is intended to do. I won't ask you to do that now, but maybe in the future for the next hearing. Then also as part of this, I find it curious that we have defined control period here as May 1 through the 30th beginning in 2003. That would seem to work, but we do have a definition of control period currently proposed in Subpart W at Part 211 which will cause a problem.

MR. LAWLER: If we understand your question correctly, Subpart W now identifies a period for the first year of May 31st through September 30th to make it consistent with what the court decision was on the -- when the NOx SIP Call should begin and then after that we say that it's -- it would be applicable that the control period for purposes of that is May 1st through September 30th, and the reason we put this in here is for purposes of this subpart. We wanted to make sure it was clear that the control period is May 1st through September 30th

for this subpart.

MS. McFAWN: Well, what I guess I'm asking you to look to is the language proposed at Section

211.1515 and make sure that it doesn't apply to this Subpart V because it does have that caveat about the year 2004.

MR. LAWLER: Okay. We'll check that.

MS. McFAWN: Okay. Another general question about definitions, as I can determine we have never defined the word EGU, electric generating unit, and I'm wondering if that would not be prudent to do. I couldn't find it as far as the definition goes.

MR. LAWLER: We'll check that.

MS. McFAWN: Would you like to answer that tomorrow?

MS. KROACK: Certainly.

MS. McFAWN: That was Laurel Kroack.

THE REPORTER: Could you spell the last name?

MS. KROACK: Could you spell your last name to make sure it's correct?

MS. KROACK: K-r-o-a-c-k.

MR. LAWLER: She's a little hoarse today.

MS. McFAWN: That's fine. It will be relevant

tomorrow. Sometimes in the rules you say person, sometimes you say owner/operator and sometimes you say responsible person. I assume that there are reasons for using each one of those terms as opposed

to just using the owner/operator throughout. I shouldn't assume that, I'm asking. Is there a reason for each one of those terms being used? If you'd like, I can cite you to the sections.

MR. LAWLER: Maybe we can get the cites from you and we'll check it.

MS. McFAWN: Sure. Okay. The cite where person is used is Section 217.706 and the responsible person is the one about concerning certification which is -- actually, it's a responsible official, at Section 217.712.

MR. ROMAINE: Responsible official certainly has a very specific usage. It identifies a particular person that has submitted Title 5 application for a facility and provides an authoritative signature for the filing of the report from the Agency.

MS. McFAWN: And that is a better person than the owner or operator of the source?

MR. ROMAINE: Yes, it is. For that particular -- for purposes of reporting, it is certainly much more appropriate to use the term responsible official.

MS. McFAWN: Thank you. That answers a large

part of my question.

At Section 217.708, the NOx averaging rule, Subparagraph (a) the last clause defines that the units must have commenced commercial operation on or before January 1st of 2000. Someone asked you if that's actually a fact at Soyland Power and you responded yes, that there were some that commenced prior to that date and so maybe my question is moot, but I was wondering when I read that, does that clause just modify units at Soyland Power or units at other EGUs?

MR. ROMAINE: It simply modifies Soyland Power.

MS. McFAWN: Thank you.

MR. ROMAINE: Soyland Power actually has five peaking units there. Only two of them are above the about 25 megawatts. When I questioned when they started operation, they certainly have had trouble actually keeping them operating. So they've met the

date, but I'm not sure if they're operating at the present time or they're back under repair again.

MS. McFAWN: Can they average -- they can't average across those five then, can they?

MR. ROMAINE: The smaller three units don't qualify as EGUs for the purpose of this rule --

whatever this thing is.

MS. McFAWN: Thank you.

MS. LIU: Good afternoon. As I understand it, this is a rate-based rule versus a rule based on total emissions. I was wondering is there a mechanism in place that would limit the total BTUs and therefore limit the total pounds of NOx?

MR. LAWLER: No, not in this rule.

MS. LIU: Could you describe to me the rationale or the history behind why this was made a rate-based rule versus a rule based on total emissions?

MR. LAWLER: Actually, most of our rules -- let me rephrase that. Typically, our rules are rate-based rules and most rules probably in other states are rate-based rules and unusual -- the NOx SIP Call is the one that's a little more unusual

because it actually does limit -- provide a state limit, a state budget, on it and that was the way the federal government decided to do it and there is some -- certainly some rationale for doing that, but to make this one more consistent with the rules that we have in the state at this point and which we have found, you know, generally effective, we made this

one a rate-based rule and it will be easier for -- for people to read and I think it will have maybe more meaning to some of the industrial sources in that kind of an approach.

MS. LIU: To follow-up on some of what Mr. Rieser said about companies cooperating to average their emissions, could you help me to picture how owners and operators would contact each other so that they could begin the averaging process? Will they need to register with the IEPA? Will they set up their own network?

MR. LAWLER: We won't, ourselves, be in any kind of a position to suggest to any of these companies that they should be considering averaging with another company or not. It will be totally up to the companies themselves and the utilities in the

state are very well aware of all these rulemakings and are very knowledgeable on this, and I think probably it's a situation where the companies will end up contacting each other. Conceivably, there could be middle men on this. I don't know if it would get to that point or not, but the companies do contact each other and have discussions on different things and they're aware of these rules. So I would

suspect that they would just work it out between themselves.

MR. ROMAINE: Obviously, we also expect that most averaging will simply kind of occur within a single company. Obviously, many of these facilities have multiple plants, multiple units and simply having the ability to average among your own units is a great benefit.

MS. LIU: Mr. Mahajan had testified that the cost effectiveness of adding control options was around $1,465 per ton. If companies do trade amongst each other for the averaging, how much would the Agency estimate a ton of NOx would go for?

MR. MAHAJAN: This rule is based on the emission rate. It is not a Cap and Trade Program.

There's no -- the Agency don't expect any -- you know, cannot predict any costs for that trading.

MR. LAWLER: What we've given you is the -- to some degree I guess from that standpoint more of a worse case scenario. If they do averaging within the plant or averaging with another plant, we assume the cost would be less, but because we don't know exactly what they'll do and what options are open to them, we've not made an estimate of that.

MS. LIU: Again, to follow-up on what Mr. Rieser had said about singling out units that were participating in the averaging for applying penalties if they were undercomplying, could you describe what those penalties might be?

MR. LAWLER: I don't think we've -- for purposes of this rulemaking, we really haven't got into exactly what penalties would be, you know, imposed on people. For this rulemaking they would be -- a company could end up being out of compliance and then it would kind of go through the state enforcement process where there's an Agency component and then if it goes on from there maybe an attorney general's component of an enforcement case.

We just -- we couldn't address that because it generally -- you know, the particular instance that somebody is out of compliance is generally unique and it just has to be worked out.

MS. LIU: Mr. Mahajan also referred to a growth factor of 1.08 for the years from 1996 to 2007 and that that same growth factor was applied for this rulemaking. Is that a linear growth factor?

MR. MAHAJAN: Yeah.

MS. LIU: There was also a description in the

statement of reasons about a term called potential electrical output capacity and an equation used to derive that. I was wondering, in the equation itself they take the maximum design heat input and divide it by three and then apply a conversion factor. I was wondering where that divided by three part comes in?

MR. MOORE: That comes from the fact that on the average only one-third of the heat output of a fuel combustion device is available to become electricity and two-thirds of that heat is lost in the process. So that's the typical efficiency of an electrical generating unit.

MS. LIU: Mr. Miller was also talking about a five percent capacity factor. Could you explain what that is a little bit, please?

MR. ROMAINE: A capacity factor is a way to evaluate how much a generating unit operates. One hundred percent capacity factor would assume that the unit operated at full load continuously 8,760 hours per year. A five percent capacity factor indicates that compared to what maximum could do, in fact, it's been operating at a load in hours to be a five percent utilization.

In terms of -- a simple example is if there's 8,760 hours in a year and if it operated at full load whenever it was operating that would result in operating at full load for 438 hours would be a five percent capacity factor.

MS. LIU: Okay. Thank you. There's an existing section in Subpart V that's going to be left unchanged. It deals with the Lake of Egypt Power Plant. That provision actually gives relief to that plant from meeting certain requirements for new emissions sources, and I was just wondering if they would be giving special treatment under the

proposed new sections of this Subpart V or if they'd be required to meet the .25 pounds per NOx -- or pounds of NOx per unit each year like all the other sources would?

MR. MOORE: The special provision for Lake of Egypt Power Plant is merely a reflection of the new source performance standard emission limit for that plant. When it burns more than a certain percentage of coal waste, then there is no new source performance standard. So the exemption for them is an exemption from an existing new source performance standard and it's not an exemption from Subpart V.

So our regulations proposed that that plant does comply with Subpart V.

MS. LIU: Mr. Moore, you also spoke about reporting and recordkeeping requirements. A simple question, would they be required to keep their records in hard copies or would electronic form be acceptable?

MR. MOORE: Well, I'm sure electronic recordkeeping will be very acceptable at which -- at the time that the Agency is on line and is able to receive it that way, which my understanding is right

at the present moment we wouldn't be able to handle that way of reporting electronically, but we hope that will change in the near future such that they can submit it whatever way they wish to submit it as long as the data is accurate, et cetera, and we have the wherewithal to receive the report.

MS. McFAWN: Could they keep it electronically on site so that when your inspectors are there they could make it available to them or do they have to keep hard copies on site?

MR. ROMAINE: There's nothing in this rule that would require them to keep hard copies on site. Data that is generated electronically could be

stored electronically. Our concern, as Berkley has said, is to make sure that we can have access to the data as we need, which could require that they print it out for specific areas, days, types of information.

MS. McFAWN: Can they -- do they have to keep the records? If they are providing averaging from a different location, a unit at a different location or from a different owner/operator, do they have to keep those records for five years or just the

company that -- or the site that is -- where the unit is located?

MR. ROMAINE: I think we'll take that under advisement.

MS. McFAWN: To follow-up on one of Ms. Liu's questions, she was talking about it being a rate-based rule and one question we had was if it's rate-based there's no mechanism in place, is there, to limit emissions?

MR. MOORE: Well, yes. The capacity of the unit to generate heat input. I mean, they all have -- they cannot run at over 100 percent capacity for a very long time.

MS. McFAWN: Correct, that is correct. That

would be the maximum?

MR. MOORE: Right.

MS. McFAWN: Is that what you used in the modeling then?

MR. KALEEL: Yes. We assumed full operation of all the sources in the state plus growth.

MS. McFAWN: Okay. Thanks.

Mr. Lawler, when you submitted our SIP demonstrations, did -- especially those that were

submitted for the Metro-East area, did they include rules such as this rate-based rule or did those SIP attainment demonstrations just anticipate trading?

MR. LAWLER: What we submitted as part of our attainment demonstration was an indication of -- like in the case of the Metro-East that if we had a .25 limit on the sources, we would be able to demonstrate attainment.

So either with a .25 rule or the NOx SIP Call we would be able to demonstrate attainment and that's -- that would be -- I believe that answers your question. The actual demonstration that we submitted showed that a .25 limit would also demonstrate attainment.

MS. McFAWN: So it was an either or

proposition?

MR. LAWLER: We didn't submit it as an either or. We just said that at least a .25 limit would be needed to show attainment.

HEARING OFFICER BEAUCHAMP: Why don't we take a brief five-minute break and we'll reconvene at five minutes to four.

(Whereupon, after a short

break was had, the following proceedings were held accordingly.)

MS. McFAWN: I just -- thank you for that time-out. I needed to find some more questions for you, Mr. Lawler.

I was listening very closely to your testimony and I have some questions about your slides.

On slide 12, which is one that says OTAG Findings on page three of the attachment --

MR. LAWLER: Yes.

MS. McFAWN: -- you had the last sentence which says urban disbenefits from NOx controls is one of the findings. I was at a different hearing and I heard testimony that that has been discredited. Is

that still a valid finding by OTAG?

MR. LAWLER: Yes, it is.

MS. McFAWN: I just wanted to verify that.

MR. LAWLER: And there's -- at one time I think we didn't -- I guess a complete answer to your question is there are days where there's disbenefits and there are days when there's not disbenefits and

that's probably why -- that may be what you heard and somebody only presented part of it to you. I'm not sure.

MR. ROMAINE: I have been at hearings where members of the public has suggested that's been disproved by the OTAG process, but that is not our belief or our understanding of what OTAG decided.

MR. LAWLER: Right.

MS. McFAWN: Okay. And this phrase, just to make sure I understand it correctly, you are saying that there actually -- that controlling NOx cannot be beneficial because that ozone formation might occur at a greater rate if the NOx is not present?

MR. KALEEL: What I think we're referring to is if you were to control NOx within the urbanized area not the areas further upwind of an urban area, but there is a phenomenon where ozone actually

increases as a result of reductions of NOx.

MS. McFAWN: It's very localized?

MR. KALEEL: Those are very localized.

MS. McFAWN: Thank you.

DR. FLEMAL: And that's because NOx scavenges some of the ozone?

MR. KALEEL: Right. NOx is actually two components of it; one component is nitrogen oxide or NO and it has a tendency to break down the ozone molecule fairly close to the source.

MR. ROMAINE: Let me further clarify that when NOx is formed by emission units, the general rule of thumb is about 90 percent of it comes out as NO so it then further oxidizes the atmosphere. So that reaction has to cook in the soup before the NOx takes the chemical form where it then participates in the ozone reactive formation.

MS. McFAWN: Thank you. This kind of backtracks to a question I asked you earlier, slide 13, which is labeled Metro-East/St. Louis Nonattainment Area Demonstration there is a bullet point there that says in October of 1999 and February 2000, Illinois EPA submitted attainment demonstrations to USEPA, is that a correct

paraphrasing of that bullet?

MR. LAWLER: That's correct.

MS. McFAWN: Okay. And that was -- in those submittals we did propose a rate-based rule of .25, is that correct, to demonstrate achievement for East

St. Louis?

MR. LAWLER: In those particular submittals, since we didn't have any rule that we could submit with them, we didn't specify exactly, but had we done it at that time, we could have submitted a .25 rate-based submittal as part of that, that's correct.

MS. McFAWN: The proposed federal approval, which was issued in April, said that we needed to submit rules and it was in response to that proposed approval that we went forward with the trading rule?

MR. LAWLER: We went forward with the NOx SIP Call rule for several different reasons, but the NOx SIP Call rule itself would take care of this requirement.

MS. McFAWN: Okay. I think I understand you. In other words, the Agency opted to submit to the Board the trading rule believing it would take care of the Metro-East area as well as our entire SIP

approval process?

MR. LAWLER: Correct, that's correct.

MS. McFAWN: The last bullet in that slide says that our docket rules are due to the USEPA by the

end of this year and we are on track, hopefully, to do that with our trading rule. It doesn't seem possible to do that with this set of rules and are we, in fact, obligated to propose -- or adopt it as final this set of rules to USEPA by the end of December?

MR. LAWLER: Well, you're -- like you say, we couldn't have this done by the end of September to submit to EPA -- I'm sorry, the end of December to go to EPA and so what we have done is we're trying to do as much with EPA to kind of show our good faith at this point. They know we've got Subpart W and they know where that stands and that's being submitted to them and a final rule will be submitted to them. We have submitted -- this Subpart V when we submitted it to the Board, we also sent it to USEPA for parallel processing, again, to indicate good faith that it's going through the state process, and so I think what our hope is that come the end of December EPA will use some discretion to

say look, the state is doing everything they can at this point. Something changed at the end of August that the state is now addressing, they're doing

everything they can and so we'll cut the state a little slack on this.

MS. McFAWN: Okay. And do you think the court case where you made the commitment to do this rule will have the same -- do you think the Court will have the same attitude?

MR. LAWLER: It's harder to say what a Court will do. I think at this point what our -- at least a view of it is the state needs to make as much of a good faith effort as possible and hope to convince -- you know, hope that the Court is convinced of that also.

MS. McFAWN: Is the state obligated to make status reports to the Court on this proceeding?

MR. LAWLER: No. You're asking a little bit more of a legal question than maybe I can answer, but we -- I know we're -- USEPA is the one that makes -- that's obligated to make responses to the Court. We're an intervenor and we can make responses, but we've been comfortable with what EPA has been saying on our behalf at this point on this

issue.

MS. McFAWN: Okay. Thank you for that

clarification.

At slide 15, NOx SIP Call and the elements of it, it says the elements of control program and there are four things listed, and the last is large internal combustion engines at 90 percent control. Which part of our rulemaking does that refer to?

MR. LAWLER: This particular element was one that was remanded back to USEPA in one of the court proceedings, in Michigan versus EPA, and so it will be a future requirement that the state will have to meet, but at this point it's back in EPA's court and so we have no real obligation to do anything right now as far as the SIP Call goes on that until EPA again moves that into the -- moves that into part of the SIP Call.

MS. McFAWN: Is this the same term as -- in using our -- stationary internal combustion engine?

MR. LAWLER: Yes, yes, it is.

MS. McFAWN: And under Section 9.9 we are obligated to do that, but that can also be stayed for this time being, do you believe?

MR. LAWLER: Yes.

MS. McFAWN: In slide 14 it makes a reference

at the last bullet point, which is -- that slide is NOx SIP Call Chronology, of a court stay being removed on June 22nd. That stay being removed, I assume, lifted the stay imposed by the Court on May 25th, 1999, which is referred to in the next -- in slide 16?

MR. LAWLER: That's correct.

MS. McFAWN: Slide 16 being labeled Road to Illinois Regulatory Proposal.

And then my question is for Mr. Kaleel, I was looking and listening to your testimony and at Figure 4, which is also slide 11 of your testimony -- attached to your testimony, it shows that there's not much difference between the reductions we'll achieve if we impose the rate-based rule and/or the NOx SIP Call rule, which I refer to as the trading rule. Why are they so comparable?

MR. KALEEL: Well, on this particular day there isn't a lot of change and I think we've seen it fairly consistently in St. Louis that the NOx SIP Call does provide additional benefits, but not a lot of benefit. A limit of three parts per billion is fairly typical and depending upon what scale we use

to show those results graphically it may or may not be enough to tip it into a different colored scale or different region.

MS. McFAWN: Will we -- I'm not sure that I understand this, but will we actually -- will they overlap or will we by implementing the .25 rule as well as the NOx SIP call rules will we achieve both reductions?

MR. KALEEL: Well, when we implement the NOx SIP Call the figure on the lowest right would be what we would expect air quality to look like under those meteorological conditions. So I think we typically think of the NOx SIP Call as being more stringent and providing greater benefit.

MS. McFAWN: So the effect is cumulative? It's not --

MR. KALEEL: It kind of supersedes it in a way -- I guess in my way of thinking since it's more stringent, we'll get slightly more benefit. We've kind of gone past the point too far.

MS. McFAWN: Just to make sure -- I probably haven't phrased this correctly -- to make sure I understand this, if we weren't to adopt the .25 rule, would we achieve the entire results predicted

by this bar graph under the NOx SIP Call rule?

MR. KALEEL: We're looking at the one called Figure 5 now?

MS. McFAWN: Yes.

MR. KALEEL: I guess the way I'm interpreting that is that the NOx SIP Call would provide greater benefit. We'd see lower ozone under the NOx SIP Call scenario than we would under just the .25 pounds per million BTU rule and that's because it's more stringent on utilities and there are some additional source categories that it will address. Am I missing your question?

MS. McFAWN: But if weren't -- maybe this is -- maybe I'm missing the point of the graph actually, but if we were not to adopt the .25, would we still see all the reductions that's reflected in the bar for the NOx SIP Call rule?

MR. KALEEL: Yes, we would.

MS. McFAWN: Okay. That was -- that was all the questions I have. Thank you for your patience.

HEARING OFFICER BEAUCHAMP: Dr. Flemal, do you have any questions?

DR. FLEMAL: No.

HEARING OFFICER BEAUCHAMP: Any others from

members of the Board?

MR. STERNSTEIN: I have a couple very short ones. Mr. Lawler, this is a follow-up to one of the questions that Board member McFawn was asking a couple minutes ago. On page three of the shrunken slides exhibit, Exhibit 2A, the elements of the control program, the large internal combustion engines, 90 percent control has been remanded back to USEPA. I recall this from an earlier hearing, are those internal combustion engines primarily used to push gas through gas pipelines?

MR. LAWLER: That's correct.

MR. STERNSTEIN: Okay. I just wanted to double check on that, and then a question for Mr. Kaleel. On the -- I think it's the fifth slide on the first page of Exhibit 1A under assumptions. I just wanted to make sure I heard you correctly. The last bullet point there that there was a correction applied to Biogenic emissions in the Missouri Ozarks and you had said something, and again I'm paraphrasing here, I just wanted to have you clarify it for me that you're subtracting ozone that comes from oak trees in the Ozarks?

MR. KALEEL: Well, no, not exactly. To back up

a step or two here, the model uses all categories of emissions in predicting ozone concentrations. The primary constituents of emissions inventory are three precursor compounds or family of compounds, VOCs or VOMs, NOx and carbon monoxide. Biogenic emissions are typically VOCs and in particular, one group of VOCs called isoprene. There are certainly other types of VOCs and even some nitrogen compounds that are emitted naturally from forest, from crops, from other types of naturally occurring vegetation, but the way we applied the correction was after performance of a measurement study where we measured VOCs and other meteorological parameters in the Ozarks in an area of very high density of oak forests, we found that the model emissions modeled that is prescribed by USEPA called Beis-2 overstates the amount of VOCs from oak trees. So we applied the correction to the VOC inventory before we ever put it into the air quality model.

MR. STERNSTEIN: And there's no other large forested areas that contribute -- contribute those kind of VOCs around the St. Louis nonattainment area?

MR. KALEEL: Not nearly to the extent that what

we saw there and again, it seemed to be a factor that was unique to the high percentage of oak trees in the Ozarks. It seems unique in the entire eastern United States to just that region of the Ozarks.

MR. STERNSTEIN: Okay. That's all I have. Thanks.

HEARING OFFICER BEAUCHAMP: Thank you, Mr. Sternstein.

HEARING OFFICER BEAUCHAMP: Any other questions from members of the Board or other staff? Are there any other questions from members of the public in attendance today? Seeing none, we move to wrap up the hearing today.

Please note that the second hearing for this rulemaking is scheduled to begin Tuesday, December 19th, 2000, at 11 a.m. in Room 9-040 in the James R. Thompson Center, this building, this room located at 100 West Randolph Street in Chicago.

The third hearing is scheduled to begin Tuesday, January 2nd, 2001, at 11 a.m. also in Room 9-040 in the James R. Thompson Center.

Once again, if the Agency does not request a third hearing, the Board will cancel that third

hearing.

We have requested an expedited transcript in this matter which should be available Friday. The Board will post the transcript to its website. The website is located at www.ipcb.state.il.us.

The transcript should be posted to the Board's website next week, either Tuesday or Wednesday. You may also obtain a hard copy of the transcript from the court reporter or you may request a hard copy from the Board, although the Board charges .75 cents a page.

I'd like to remind the Agency that any issues which the Agency has agreed to address at the request of any of the parties present today should be answered at the beginning of the second hearing on December 19th.

We will see you all again on that date. We have a question from Laurel?

MS. KROACK: Yes. Prefiled testimony that they have to file before, we'd like the Board to ask that that testimony be served on us the same manner it was served to the Board because we were receiving some of that rather late in the last set of W hearings, in fact, so it was difficult to prepare

for that second set of hearings.

MS. McFAWN: Let's go off the record for a moment if you don't mind.

HEARING OFFICER BEAUCHAMP: Sure.

(Whereupon, a discussion was had off the record.)

HEARING OFFICER BEAUCHAMP: The Agency has requested that members of the public who are wishing to prefile testimony for the second hearing serve those copies on the Agency in the same manner as they do so for the Board and members of the public who are present have indicated that they'd be willing to do so.

I'd like to state for the record that prefiled testimony is due on December 8th to be filed with the Board and the mailbox rule does not apply to that date. So it needs to be here within the date stamped by the clerk on the 8th.

Are there any other matters that need to be addressed at this time? Hearing none, this matter is hereby adjourned. Thank you very much for your attendance and participation in this hearing.

(Whereupon, no further

proceedings were had.)

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

I, TERRY A. STRONER, 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.

_____

Terry A. Stroner, CSR

Notary Public, Cook County, Illinois

SUBSCRIBED AND SWORN TO
before me this ___ day
of _____, A.D., 2000.

_____

Notary Public