1	ILLINOIS POLLUTION CONTROL BOARD October 10, 2006
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3	IN THE MATTER OF:)
4	PROPOSED NEW CAIR SO2, CAIR) R06-26 NOX ANNUAL AND CAIR NOX) (Rulemaking - Air)
5	OZONE SEASON TRADING) PROGRAMS, 35 ILL. ADM. CODE) 225, CONTROL OF EMISSIONS)
6	FROM LARGE COMBUSTION) SOURCES, SUBPARTS A, C, D)
7	and E)
8	
9	RECORD OF PROCEEDINGS BEFORE JOHN KNITTLE
10	HEARING OFFICER
11	
12	This records of proceedings was before the
13	Illinois Pollution Control Board taken on October 10, 2006, at 9:00 a.m., at the offices of the Environmental
14	Protection Agency, Springfield, Illinois, before Holly A McCullough, an Illinois Certified Shorthand Reporter, a
15	Missouri Certified Court Reporter, a Registered Professional Reporter and a Notary Public.
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1	APPEARANCES:
2	MEMBERS OF THE ILLINOIS POLLUTION CONTROL BOARD: Mr. John Knittle, Hearing Officer
3	Dr. G. Tanner, Girard, Board Member Mr. Thomas E. Johnson, Board Member
4 Mr. Amand Rao, Board Staff	·
5	COUNSEL FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY: Ms. Rachel Doctors
6	Mr. John Kim
7	COUNSEL FROM SHIFF-HARDIN: Ms. Kathleen Bassi
8	Mr. Stephen Bonebrake
9	COUNSEL FROM McGUIRE-WOODS: Mr. David Rieser
10	COUNSEL FROM BAKER & McKENZIE FOR ZION ENERGY:
11	Mr. Steven J. Murawski
12	COUNSEL FROM ENVIRONMENTAL LAW & POLICY CENTER: Ms. Faith E. Bugel.
13	
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1	HEARING OFFICER KNITTLE: Let's go on the record
2	then. My name is John Knittle. I'm the hearing officer
3	for this rulemaking proceeding, R06-26, Proposed New CAIR
4	SO2, CAIR NOx annual and CAIR NOx Ozone Season Trading
5	Program, 35 Illinois Administrative Code 225, Control of
6	Emissions From Large Combustion Sources, Subparts A, C, D
7	and E.

Present with us from the Illinois Pollution Control
Board today are Board Member Tom Johnson to my left and
your right, Chairman Tanner Girard to my right and your
left, And we have rulemaking coordinator, Erin Conley,
back there, as well as Connie Newman, who has just raised
her hand.

On May 30th, the Board received a rulemaking as proposed by the Agency that proposes a new Part 225 to reduce intrastate and interstate transport of sulfur dioxide and nitrogen oxide emissions from fossil fuel-fired generating units on an annual basis and on an ozone season basis for each calendar year. The Agency proposes the adoption of the Clean Air Interstate Rule, SO2 trading program, CAIR NOx trading program and the CAIR NOx Ozone Season trading program to accomplish this objective.

Today's hearing is the first of several, during which

- 1 the Agency is going to present witnesses and answer
- 2 questions concerning the proposal filed with the Board.
- 3 We will proceed day-to-day until the Agency is finished or
- 4 until October 20th, whichever occurs first, and I'm hoping
- 5 that the Agency finishes before October 20th. We will
- 6 convene at 9:00 a.m. each day and proceed until close.
- We're going to shoot for 5:00 p.m. as a target. During
- 8 breaks, I'll be available to answer procedural questions.
- 9 I want to emphasize that the Board and staff cannot
- 10 discuss the substance of this procedure -- or the proposal
- 11 off the record. Substantive items should be raised during
- 12 the hearing. If you're not sure whether your issue is a
- 13 substantive issue, please ask me about it during a break,
- 14 and I'll let you know.
- 15 The purpose of today's hearing is to do a prefiled
- 16 testimony of the Agency and to allow anyone who wishes to
- 17 ask questions of the Agency to do so. It's my
- 18 understanding the Agency is going to offer the prefile
- 19 testimony as if read to be entered as an exhibit, and I
- 20 understand that the Agency wants to give a brief overview,
- 21 and we will then proceed to questions. Anyone may ask a
- 22 question. We have people filtering in and out. I'm just
- going to keep going. You may raise your hand and wait for
- 24 me to acknowledge you. I'm going to want to know your

questions. Please speak one at a time. If you're

speaking over each other, the Court Reporter will not be

able to get the questions on the record, which is what we

want, everything on the record. Please note that any

questions asked by a Board member or a member of the Board

name, your affiliation, and then you can begin your

staff is not intended to express any preconceived notion or bias by the Board or staff, but is merely an attempt to have a complete record.

At the side of the room -- actually, it's more the front of the room, near the door up there is sign-up sheets for the notice and service lists. If you wish to be on the service list, you will receive all pleadings and prefile testimony in this proceeding. In addition, you must serve all your filings on persons on the service list. If you wish to be on the notice list, you will receive all Board and Hearing Officer's orders in this rulemaking. If you're filing a public comment, however, and you're not on the service list, you need not serve that comment on the service list personnel. So, if you have any questions about the list, talk to me at a break. You may also sign up on either list.

And at this time, unless there is something else that I've forgotten, I've introduced Board member Thomas

Johnson, who is the supervising Board member for this
rulemaking.

MR. JOHNSON: Thank you, John. I want to welcome you all and thank you for coming and assure you that as always the Board is going to give this rulemaking all the attention it deserves. With that, let's get started.

HEARING OFFICER KNITTLE: I did forget one thing.

Department of Commerce and Economic Opportunity, Section

27(b) of this Act, requires the Board to request that the

DCEO to conduct an economic impact study on certain

proposed rulemakings, such as this. Prior to the adoption

of the rules, if the DCEO chooses to conduct the economic

impact study, the DCEO has 30 to 45 days after such

request to produce the study of the economic impact of the

proposed rules. The Board must then make the economic

impact study or DCEO's explanation for not conducting the

study available to the public at least 20 days before

public hearing on the economic impact of the proposed

rules.

The Board requested by letter dated June 28th, 2006 that the DCEO conduct an economic impact study for this rulemaking. In that letter, the Board asked DCEO to provide a decision as soon as possible. The DCEO has not responded to that letter. Based on this non-response and

1	the DCEO's past assertion that it does not have the
2	financial resources to perform the economic impact

3 studies, the Board considers that the DCEO decided not to

conduct a study 30 days after the letter was sent on July

28th. The Board's letter and the documents consisting of

the DCEO's response has been available to the public for

more than 20 days prior to the hearing as required by

3 statute.

Does anybody have any comments or questions on the DCEO's position not to conduct an economic impact study?

(No response.)

HEARING OFFICER KNITTLE: I see none, nobody raising their hand. So, we're going to consider this portion of the hearing closed.

A written public comment period will be set, and if anyone here does not want to testify after the close of this hearing or the hearing the following subsequent days but wants to provide comment, you can do that via that avenue.

That's all I have. I'd like at this point in time to have the Agency -- Let me rephrase. Also present today here from the Board is Board's technical staff, Anand Rao, and he'll be sitting up here and asking question. In the same caveat, questions by Mr. Rao that I said earlier

- 1 apply to us, no preconceived notion applies to Mr. Rao, as
- 2 well.
- 3 So, with that being said, Ms. Doctors, would be like
- 4 to introduce who you have here today and yourself?
- 5 MS. DOCTORS: Yes. My name if Rachel Doctors, and I
- 6 am representing the Illinois EPA, and John --
- 7 MR. KIM: John Kim also representing the Illinois
- 8 EPA.
- 9 MS. DOCTORS: And today starting -- we'll start with
- 10 James Ross, manager of air pollution control, and with him
- in case there's other question is Rob Kaleel, unit
- 12 manager -- section manager of the air quality planning
- section, and Ross Cooper from the permit section.
- I'd like to start if I may. I spotted some
- 15 typographical-type errors that I'd like to put those on
- 16 the record so we can get them corrected.
- 17 HEARING OFFICER KNITTLE: I take it, you have an
- 18 errata sheet?
- 19 MS. DOCTORS: Yes.
- 20 HEARING OFFICER KNITTLE: You want to offer that as
- 21 an Exhibit?
- 22 MS. DOCTORS: Yes, I'd like to offer the errata sheet
- 23 as the first exhibit.
- 24 HEARING OFFICER KNITTLE: Before we do that, do we

- 1 have people from the department that want to introduce
- 2 themselves? Let's do that, and if you have any objections
- of the errata sheet, we can do that.
- 4 MS. BASSI: I'm Kathleen Bassi with Schiff-Hardin,
- 5 and I'm here today on behalf of Midwest Generation, Dynegy
- 6 and Southern Illinois Power Cooperative.
- 7 MR. BONEBRAKE: Steve Bonebrake, I'm also with
- 8 Schiff-Hardin, and I'm also here on behalf of Southern
- 9 Illinois Power, Dynegy and Midwest Generation.
- 10 HEARING OFFICER KNITTLE: Anybody else?
- 11 MR. RIESER: David Rieser from McGuire Woods. I'm
- here on behalf of Amren.
- 13 MR. MURAWSKI: Steve Murawski from Baker and McKenzie
- on behalf of Zion Energy.
- 15 MS. BUGEL: Faith Bugel from Environment Law and
- 16 Policy Center. I'm here on behalf of the ELPC.
- 17 HEARING OFFICER KNITTLE: I think that's it. Does
- 18 anybody have any objections to the Agency's production of
- 19 the errata sheet as Agency Exhibit 1, I take it, Ms.
- 20 Doctors.
- MS. DOCTORS: Yes.
- (No response.)
- 23 HEARING OFFICER KNITTLE: I see none. So, we'll
- 24 accept that. Ms. Doctors, do you have anything further

you want to -- You can bring that up. Did you guys get copies of that? 2. 3 MS. BONEBRAKE: We have not. 4 HEARING OFFICER KNITTLE: We have extra copies up 5 here if anybody wants them. Ms. Doctors, that was 6 admitted as Agency Exhibit No. 1. Do you have anything further before we get started. 8 MS. DOCTORS: I don't know how you'd like to do the 9 testimony. 10 HEARING OFFICER KNITTLE: You want to offer all that prefiled testimony as if read? Why don't we swear in all 11 the witnesses. 12 MS. DOCTORS: Let's do that. Let's see if everybody 13 14 is here. We've got all but one of them in. HEARING OFFICER KNITTLE: Pardon? 15 16 MS. DOCTORS: All but one of them is in. 17 HEARING OFFICER KNITTLE: Let's swear in who we have. 18 Are these all the witnesses who filed prefile testimony. MS. DOCTORS: Yes. 19 20 21 (Court Reporter sworn in the following witnesses: 22 Gary Beckstead, David E. Bloomberg, Roston Cooper, Rory

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Jacquelyn Sims.)

Davis, Robert Kaleel, Yoginder Mahajan, James Ross and

- 1 HEARING OFFICER KNITTLE: And you want to offer the
- 2 prefile testimony as an Exhibit as if read.
- 3 MS. DOCTORS: I wanted to just do it by witness. So,
- as the people testify. So, I'll start with Jim's.
- 5 HEARING OFFICER KNITTLE: Your witness. Before we
- 6 get started, though, is there anything from anybody else
- 7 before we get start with the Agency's testimony?
- 8 MR. BONEBRAKE: We have a preliminary comment, but I
- 9 think we'll wait until after Mr. Ross' opening
- 10 presentation.
- 11 HEARING OFFICER KNITTLE: Anybody else?
- 12 (No response.)
- 13 HEARING OFFICER KNITTLE: That sounds fine. Go
- ahead, Ms. Doctors.
- 15 MS. DOCTORS: I have two Exhibits. I've got Jim's
- 16 testimony that was prefiled and his presentation. I've
- 17 got colored copies of the presentation. So, this would
- 18 be -- His testimony would be Agency Exhibit 2, and the
- 19 presentation would be Agency Exhibit 3.
- MS. BASSI: Question.
- 21 HEARING OFFICER KNITTLE: Yes, ma'am.
- MS. BASSI: Have these changed since what was
- 23 prefiled or what you sent out in the e-mail of his
- 24 testimony?

- 1 MS. DOCTORS: The testimony I do not believe -- I
- 2 know the testimony has not changed.
- MS. BASSI: Okay.
- 4 MS. DOCTORS: The overheads, I'm pretty sure they
- 5 have not changed since I sent them out Thursday, Friday.
- 6 MR. ROSS: No, they have not changed.
- 7 HEARING OFFICER KNITTLE: And the overheads you want
- 8 to introduce as Agency Exhibit 3?
- 9 MS. DOCTORS: Yes.
- 10 HEARING OFFICER KNITTLE: Any objections to the
- 11 admission of those two Exhibits?
- 12 (No response.)
- 13 HEARING OFFICER KNITTLE: Seeing none, those are both
- admitted. Ms. Doctors, are you ready to go with Mr. Ross'
- 15 testimony?
- MS. DOCTORS: I'm ready to go with his short
- 17 presentation, yes.
- 18 HEARING OFFICER KNITTLE: So, you want to set up the
- 19 overhead? We should vacate then.
- 20 MR. ROSS: I'm not sure how you guys want to sit.
- 21 HEARING OFFICER KNITTLE: Ms. Doctors, whenever
- you're ready.
- MS. DOCTORS: Jim.

PRESENTATION BY JAMES ROSS:

It's a little deja-vu all over again. It seems like just yesterday the mercury hearings were held here. I appreciate the smaller number of people across from us.

2.

Again, my name is Jim Ross, and I am the manager of the division of air pollution control here at the Illinois EPA. I'll be giving a brief presentation that provides some background on the Clean Air Interstate Rule, which is more commonly referred to as CAIR, and the public health and air quality issues it addresses. In addition, I will provide a broad overview of how the Illinois EPA proposes that CAIR be implemented in Illinois, along with what we are expecting to see in the way of results.

I would, of course, like to thank the members of the Illinois Pollution Control Board for allowing us to give this brief presentation. We feel it is an important first step to frame the context of why we are here and what we are trying to accomplish with this rule.

Of special note is that CAIR, much like the proposed Illinois mercury rule, primarily affects Illinois' coal-fired power plants. Therefore, I'd like to begin by saying that the Illinois EPA recognizes the vital role our power plants play in supplying power to Illinois customers, as well as jobs and other economic benefits to

- 1 Illinois citizens.
- In regulating the power industry, we always keep this
- 3 in mind and in no way do we ever seek to impose
- 4 unreasonable standards that would create undue hardship on
- 5 the power sector or other related industries.
- 6 I'll start off with some very basic background
- 7 information. First, USEPA published CAIR on May 12th,
- 8 2005. CAIR is a regional cap and trade program involving
- 9 SO2 and NOx and includes up to 25 eastern states and the
- 10 District of Columbia. CAIR is a regional program because
- 11 it recognizes that air pollution can travel hundreds of
- 12 miles and cause health and environmental impacts very far
- away from the source where the pollution originated. And,
- 14 finally, this phenomenon of traveling air pollution is
- 15 known as interstate pollution transport. Air pollution
- simply does not recognize state boundaries.
- 17 CAIR targets reductions in the emissions of SO2 and
- 18 NOx. This is because CAIR's ultimate goal is to improve
- 19 the air quality in regards to PM2.5 and ground level
- 20 ozone. Both SO2 and NOx are precursors to PM2.5, and NOx
- 21 is also a precursor to ground level ozone. By reducing
- 22 these pollutants, CAIR will provide substantial human
- 23 health and environmental benefits. And, finally, affected
- 24 states, including Illinois, are required to comply with

CAIR has two phases for both NOx and SO2. However,

as can be seen here, Phase 1 begins at different times for

each pollutant. NOx Phase 1 begins in 2009, and SO2 Phase

begins in 2010. Phase 2 for both pollutants begins in

2015.

SO2 and NOx contribute to a wide range of air pollution issues, including air quality impairment, impact on public health, acidification of lakes and streams, damage to forest ecosystems, visibility degradation and acceleration of the decay of building materials and statues.

A number of health effects are attributed to PM2.5 and to ozone, including increased respiratory symptoms, such as irritation of the airways, decreased lung function, aggravated asthma, development of chronic bronchitis, irregular heartbeat, non-fatal heart attacks and premature death in people with heart and lung disease. Any one of these effects is very serious. Taken together they emphasize an impending need to take action. CAIR is expected to provide vast improvements to the air quality and have far reaching positive health impacts.

We'll now shift to how CAIR directly impacts Illinois and how the Illinois EPA is proposing to implement CAIR in

- 1 Illinois. EGU's are the largest source of SO2 and one of 2 the largest sources of NOx in Illinois. There are 59
- 3 coal-fired EGU's and 170 oil/gas-fired EGU's affected by
- 4 the proposed rule.

non-attainment areas.

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- The one, two and three of why CAIR is needed in

 Illinois in terms of regional and local air quality,

 number one, we contribute to the air pollution problems of

 other states in regards to areas that are not in

 compliance with the federal national ambient air quality

 standards or NAAQS. Such areas are categorized as
 - Number two, in the states that Illinois pollution affects, there are areas that are in attainment with the NAAQS, and we interfere with the ability of these areas to maintain the air quality and keep it in attainment.

And number three, the first two points address how
Illinois affects others, but we have substantial problems
right here at home. So, not only do we need to reduce NOx
and SO2 so that we reduce our interference with other
states, we need to reduce these emissions to address our
own non-attainment areas and help us maintain good air
quality in the areas that are in attainment in Illinois.

This slide, again, emphasizes reducing emissions in Illinois benefits others and vice versa, that is other

- 1 states are also required to reduce NOx and SO2 under CAIR,
- and these reductions will have positive benefits for
- 3 Illinois. Illinois sources significantly contribute to
- 4 fine particle pollution in other states, including
- 5 Pennsylvania, Ohio, West Virginia, Indiana, Tennessee,
- 6 Kentucky, Alabama and Michigan. Illinois sources
- 7 significantly contribute to ground level ozone pollution
- 8 in other states, including Ohio, Wisconsin and Michigan.
- 9 And Illinois fine particle air quality will improve
- 10 because of the reductions of SO2 and NOx in Illinois of
- 11 course, Iowa, Kentucky, Michigan, Minnesota, Missouri,
- 12 Ohio, Texas and Wisconsin.
- 13 This slide shows the current non-attainment areas for
- 14 Lake Michigan Air Director Consortium or LADCO states. In
- 15 particular, it shows that Illinois' ground level ozone
- 16 non-attainment areas are in the greater Chicagoland and
- 17 East St. Louis Metro areas. Both these areas are
- 18 designated as moderate non-attainment for ozone.
- 19 These are the non-attainment areas for PM2.5. Again,
- the same general areas with only small differences.
- 21 USEPA provides the following estimates of the impact
- 22 in Illinois of CAIR. The first table shows that CAIR is
- 23 expected to reduce SO2 emissions by 125,000 tons or
- 24 34 percent by 2015. The second table shows that CAIR is

- 1 expected to reduce NOx emissions in Illinois by
- 2 81,000 tons or 55 percent by 2015.
- Illinois is choosing to opt in to the federal cap and trade programs for SO2 and NOx. The annual trading programs are designed to address PM2.5 issues and consist of trading programs for both SO2 and NOx. The seasonal training program for NOx is designed to address ozone
- pollution. The ozone season consists of the five-month period of May 1st through September 30th of each year.
- 10 For the SO2 trading program, the Illinois EPA

 11 proposes to follow the model federal program, which is

 12 based on the acid rain trading program. For both the

 13 annual and seasonal trading programs, the Illinois EPA is

 14 proposing to also follow the model federal program.
- However, USEPA does allow some limited amount of
 flexibility in how the states allocate allowances, and the
 Illinois EPA is proposing to utilize this flexibility.

More on this in the next few slides.

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Specifically the Illinois EPA is proposing to utilize
flexibility in the following areas listed here. We have
proposed output based allocations instead of using heat
input. We propose that allocations occur three years in
advance of the date to be issued instead of six years in
advance. We will update allocations annually instead of

establishing a single, continuing baseline. We have

set-aside 5 percent of allowances for new sources in both

phases instead of reducing to 3 percent in Phase 2. And

we propose to set-aside 25 percent of allowances for a

clean air set-aside. I believe it's safe to say that this

use of flexibility is the primary area of controversy or

concern by stakeholders in the proposed CAIR.

Being more specific yet, it is also fairly safe to say that the Illinois EPA's proposed clean air set-aside or CASA as we refer to it is the primary area of interest. A set-aside is simply a pool of allowances that are taken from the total amount of budget to be used from a variety of environmentally beneficial goals. It is very important to note that a set-aside is not the equivalent of lowering the overall budget because the allowances usually remain in the market. While the recipients of the set-aside allowances are free to hold, sell or retire the allowances as they see fit, it is far more likely that they would offer to sell the allowances in the market in order to realize a financial benefit.

As a result, the recipients have an additional source of funding for their projects, and existing sources continue to have a pool of allowances they can utilize if needed to meet their requirements, and the total amount of

1 emissions remain at or below the budgeted amount.

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We have three main areas of the set-asides. First, we have an EE/RE or energy efficiency/renewable energy set-aside of 12 percent. Second, we have a set-aside for clean technology projects of 11 percent, and this includes clean coal and pollution control upgrades. And, finally, for the above-related projects that commence operation early, we have an early adopter set-aside of 2 percent.

Some important facts regarding CAIR: This first bullet point is that the more NOx reduced, the greater the benefits, a key concept as we move forward in the hearings. Second, the NOx CASA is expected to result in additional NOx reductions. The Illinois EPA is proposing to retire the NOx compliance supplement pool, and we also believe that this will result in some additional NOx reductions. And the last bullet point, USEPA modeling in support of CAIR shows that CAIR will not be sufficient for all of Illinois to attain compliance with the NAAQS for ozone or for PM2.5 and that more controls are needed.

We analyze any potential detrimental economic impact of our NOx allocation policy. We hired ICF Consulting to conduct modeling using the widely accepted immigrating planning model or IPM. This is the same model that USEPA

used and the same model that we used in development of our proposed mercury rule.

Of importance is that we, again, believe we modeled a more conservative rule than what we are actually proposing so that any detrimental impacts would be less severe than what the model found. ICF modeled the rule where all 30 percent of the set-asides were retired, which is not the case, as these allowances remain available for allocation. The principal findings included that overall the implementation of the NOx budget reduction policy has minimal effects both in Illinois and across the nation, and that the retail electricity prices and costs across all sectors, residential, industrial and commercial, remain unchanged as a result of the NOx budget reduction.

In closing, this slide summarizes some key results of CAIR implementation in Illinois as proposed by the Illinois EPA. CAIR results in cleaner air and improved health for Illinois and other states. Illinois will meet federal requirements, including satisfaction of Illinois' obligation under Section 110(a)(2)(D)(i) of the Clean Air Act for transport. CAIR will assist Illinois and downwind states in achieving and maintaining PM2.5 and eight-hour ozone NAAQS. And the proposed CAIR will provide incentives for EE/RE clean technology and early controls.

- 1 We urge the Board to adopt the proposed CAIR. Thanks
- for listening, and I'll turn it back over to the
- 3 appropriate person.
- 4 HEARING OFFICER KNITTLE: Thank you, Mr. Ross,
- 5 Ms. Doctors, do you have anything --
- 6 MS. DOCTORS: I have nothing further.
- 7 HEARING OFFICER KNITTLE: -- further with this
- 8 witness?
- 9 MS. DOCTORS: If there's questions for him.
- 10 HEARING OFFICER KNITTLE: We have questions on the
- 11 presentation.
- MS. DOCTORS: Or on his testimony.
- 13 HEARING OFFICER KNITTLE: Or on the testimony, which
- we have as Exhibit No. 2.
- 15 MR. BONEBRAKE: We will have some questions for
- 16 Mr. Ross, but, first, I just wanted to cover a couple of
- 17 preliminary matters --
- 18 HEARING OFFICER KNITTLE: Please do.
- 19 MR. BONEBRAKE: -- that I mentioned earlier. The
- 20 first preliminary matter, I wanted to mention that we
- 21 disagree with IEPA's conclusion as set forth in the
- 22 statement of reasons and as implied by Mr. Ross'
- 23 presentation that the IEPA has the authority to propose
- and the Board to adopt the proposed rule. The reason for

that is that the proposed SO2 regulations is inconsistent with Section 10 of the Illinois Environmental Protection Act, and as a result, the proposed rule is in firm. We plan to submit at a later date this position in writing, and at that time, we will set forth and explain in more detail our views of the proposed rule with respect to Section 10 of the Illinois Environmental Protection Act, but at this point in time, we did want to alert the Board and the Agency and other interested parties to our position pertaining to the proposed rule.

2.

HEARING OFFICER KNITTLE: Thank you, Mr. Bonebrake.

MR. BONEBRAKE: And the second preliminary matter, we have identified a number of questions related to the Technical Support Document, Statement of Reasons and the regulations themselves, and for some of those, we're not sure to whom on the IEPA panel we would direct related questions. We will attempt to cover those questions if we ask specific questions pertaining to witness testimony, but we may well be in a position toward the back end of this process where we have a collection of questions that haven't yet been presented. So, we would ask both the indulgence of the Board and the Agency with respect to questions perhaps at the back end of the process that we could present, and the Agency could let us know who would

1	be in the best position to address those questions. And
2	like I say, we'll try to deal with that on a going forward
3	basis, but I just wanted to, again, alert the Agency and
4	the Board to that possibility.
5	HEARING OFFICER KNITTLE: We appreciate that. And I
6	think the Agency has indicated on our pre-hearing status
7	conferences, they would try to make the available
8	witnesses to be available when they need them; correct?
9	MS. DOCTORS: Yes.
10	
11	E X A M I N A T I O N O F
12	Mr. James Ross:
13	BY MR. BONEBRAKE:
14	Q. And on a related matter, I guess just to kind
15	of help the process move forward, my first question for
16	Mr. Ross would be, Mr. Ross, would you please identify for
17	us who drafted the various sections of the Technical
18	Support Document?
19	A. Well, in general it was a collaborative effort
20	of many at the Illinois EPA. We had numerous staff
21	working on each and every section. It went through many
22	iterations before the final version was submitted. I
23	believe I can go through guickly right now and perhaps try

to identify who drafted each section or perhaps we could

- 1 provide a more detailed analysis, like we did for the
- 2 mercury rule, something in writing with names beside it,
- 3 if that's what you would prefer.
- Q. Well, I guess if we could get both, that would
- 5 be great. Some preliminary information from you, I think,
- 6 would help guide us in terms of our questioning, and then
- 7 something in writing would also be useful.
- 8 A. As far as Introduction, I believe that was
- 9 written by Rob Kaleel.
- Background Information, which is other programs, I
- 11 believe that was written with Gary Beckstead, Rob Kaleel,
- 12 and I think Gary Beckstead has submitted testimony on
- other regulatory programs, and Rob Kaleel, the manager of
- 14 air quality planning section, also participated in the
- 15 writing of that, I believe.
- 16 The third section, Section 9.10 and 10 of the Act --
- 17 okay -- the third section, Environmental and Health
- 18 benefits, I believe that was written by our air quality
- 19 planning section, again, a collaboration of many staff. I
- 20 can't pinpoint a single person.
- 21 Process Description and Sources of NOx and SO2
- 22 Emissions, that, again, was a collaborative effort of
- 23 several persons in our air quality planning section.
- 24 Technical Feasibility of NOx and SO2 Controls, I

- would have to say the same thing, several persons from our air quality planning section.
- 3 Economic Reasonableness of Controls, likewise.

participated in that section.

- Other Economic Considerations, that was written with
 myself, Rob Kaleel, I believe a portion of that section of
 the Technical Support Document is simply the publishing of
 the IPM modeling results that were provided to us by ICF
 Consulting. There were other staff as well that
 - Proposed Illinois Regulations For Existing EGU's, that was an effort of many Agency staff, much like the other sections.

And, again, just for some background information on this, we formed an internal group, the CAIR advisory group, which consists of a member from each of the --well, from many of the sections of the Bureau of Air, one from the permit section, one from air quality planning, one from the compliance section, and one from our legal staff. They provided input into the Technical Support Document. We also met, I would say, at least once a week or once every other week since early November of last year to discuss CAIR options, and during those meetings, a lot of notes were taken, and we discussed Technical Support Document issues. So, a lot of the Technical Support

- 1 Document, the point being was developed over time by many
- 2 Agency staff. There wasn't necessarily one person
- 3 assigned to a particular section.
- 4 Section 9, Affected Sources and Emission Allocations,
- 5 I would say, again, the primary parties involved in that
- 6 were personnel from the Agency's air quality planning
- 7 section.
- 8 Summary, likewise.
- 9 HEARING OFFICER KNITTLE: Yes.

- 11 BY MS. BASSI:
- 12 Q. Did anyone outside the Agency write any of the
- 13 TSD?
- 14 A. No, I don't believe so.
- 15 Q. Was any of the TSD reviewed by people outside
- the Agency before it was submitted?
- 17 A. Not to my knowledge, no.
- 18 HEARING OFFICER KNITTLE: Yes, sir?

- 20 BY MR. BONEBRAKE:
- 21 Q. You mentioned a number of sections where you
- 22 just generally identified staff in terms of authorship.
- Is there somebody on the IEPA panel that is going to be
- 24 testifying that was a participant in drafting each of

- 1 those sections?
- 2 A. Yes. Many of the people that submitted
- 3 testimony and that are available to testify also
- 4 participated in writing of the Technical Support Document,
- 5 and we tried to specify their areas of expertise or where
- 6 they focused on and provided the majority of input in
- 7 writing the TSD, and I believe that's available in the
- 8 synopsis of testimony that was submitted to the Board.
- 9 Q. You mentioned, I think, that Section 7
- 10 contains, I think you used the word, publication of the
- 11 ICF report. Do you recall that testimony?
- 12 A. Yeah. In general we contracted ICF to perform
- 13 modeling. They submitted to us a final report. We took
- 14 that report and incorporated it into the Technical Support
- 15 Document and did some modifications to it so that it read
- 16 better. They were, of course, developing the report for
- 17 the Illinois EPA. So, some of the terminology and the way
- 18 they presented it was directly at or for us to read and
- 19 not so much to be incorporated directly into a Technical
- 20 Support Document for everyone. So, we did take some
- 21 liberties and revised some of the wording of the final
- 22 report provided to us by ICF.
- Q. And so that the record is clear, when we're
- both talking about "the ICF report," are you referring,

- 1 Mr. Ross, to the March 25, 2006 report by ICF entitled
- 2 "Analysis of Illinois NOx Budget Reductions"?
- 3 A. Yes, I am. That's correct.
- 4 Q. And has that report been submitted to the
- 5 Board as opposed to the synopsis in the TSD?
- 6 MS. DOCTORS: Are we -- Are you referring to the
- 7 attachment 33 from the TSD?
- 8 MR. BONEBRAKE: I'm not sure of the number, but I
- 9 believe that's correct.
- 10 MS. DOCTORS: Yes, that was submitted to the Board in
- 11 May.

- BY MR. BONEBRAKE:
- 14 Q. And will anybody be testifying from ICF in
- 15 connection with this hearing?
- 16 A. No, they will not.
- 17 Q. When was ICF retained by the Illinois
- 18 Environmental Protection Agency?
- 19 A. I believe it was late December, early January,
- 20 February. I've been told likely in the December area.
- 21 Q. Was there somebody at the Agency that had the
- lead for working with ICF?
- 23 A. I would say it would be myself and Rob Kaleel
- 24 and -- Yeah, those two.

- 1 Q. And did you and Mr. Kaleel or others at the
- 2 Agency provide information to ICF?
- 3 A. We did.
- 4 Q. Can you generally describe for us what
- 5 information was provided to us?
- 6 A. Yeah. We had several conference calls with
- 7 ICF where we described the proposed CAIR rule to them and
- 8 went over the parameters and discussed with them how best
- 9 to model the CAIR rule, and whenever there was a question
- of -- You know, it's a modeling tool. So, it can't
- 11 exactly reflect the requirements of the rule. So,
- 12 whenever there was a question on how to best model our
- 13 proposed CAIR rule, we emphasized to them to take the most
- 14 conservative approach, which is why, as I mentioned in my
- presentation, for the 30 percent of the set-asides, IPM --
- or ICF, rather, modeled the entire 30 percent as being
- 17 retired, where in reality those allocations remain -- or
- 18 those allowances remain available for allocation.
- 19 Q. I'll have probably some follow-up on that
- 20 later, but I want to follow-up on the other statement you
- 21 made. In addition to the conversations that you had with
- 22 ICF, did the Agency provide any written materials to ICF?
- 23 A. I'd have to go back and review. I believe we
- 24 may have provided a lot of this. These discussions were

- in conjunction with them modeling our proposed mercury
- 2 rule. We did provide them information -- written
- 3 information on the mercury rule. I'm not sure if that
- 4 same document contained information regarding the CAIR.
- 5 My first inclination is that it did not, that they modeled
- 6 CAIR based on conference call discussions only, but I'd
- 7 have to go back and search my records.

9 BY MS. BASSI:

- 10 Q. Is it the case, though, that when you provided
- 11 written information to ICF for this modeling under the
- 12 umbrella of the mercury rule, that that same basic
- information would have applied to the CAIR rule?
- 14 A. In terms of input parameters, how they needed
- 15 to revise those in regard to coal usage and updating the
- 16 control configurations on the coal-fired power plants,
- 17 yes, they revised the input parameters in a like manner
- 18 that they did for the mercury modeling.

19

20 BY MR. BONEBRAKE:

- 21 Q. The ICF report itself contains a number of
- 22 findings, but I'm assuming that there are intermediate
- 23 outputs and other assumptions made by ICF that are not
- 24 reflected in this report, which raised the question in my

- 1 mind, Mr. Ross, of whether ICF had provided any other
- written materials to the Agency, other than the report
- 3 itself, in its support of the finding and conclusions in
- 4 its report.
- 5 A. Written materials? Not to my recollection.
- 6 We did have phone conversations with ICF after they
- 7 submitted the modeling results to discuss the results.
- 8 There were some e-mails traded. Most of it was on timing
- 9 of, "Is this report final? Will there be another
- 10 version?", stuff like that. I'd have to go back and check
- 11 my e-mails, but I don't think there was any significant
- 12 written back and forth on issues seeking answers to
- 13 certain issues like there was with the mercury rule.
- 14 There wasn't that kind of back and forth.
- 15 Q. Is it correct that ICF would have needed to
- determine a number of inputs and a number of assumptions,
- and that would be fed into the model to generate the
- 18 finding and conclusions reflected in the report?
- 19 A. Certainly they would need a lot of input, but
- 20 what they modeled was -- I mean, we are opting into the
- 21 federal trading program. We are only making -- using the
- 22 flexibility offered by USEPA for different allocation
- 23 methodology. So, we discussed those different
- 24 methodologies with ICF. They have vast experience with

- 1 modeling CAIR regulation for USEPA, and I believe they've
- 2 modeled it for LADCO, and they've modeled it for perhaps
- 3 other states or organizations that represent other states,
- 4 as well. So, they had a lot less, fewer questions for us
- on CAIR than they did for the mercury. So, we simply
- 6 explained to them the flexibility that we were using in
- 7 regards to allocation methodology. They seemed to
- 8 understand it. And the conclusion was if we wanted a
- 9 conservative model of our rule, that one approach would be
- 10 to retire the entire 30 percent of the set-asides, and,
- so, that's what they did.
- 12 Q. The electronic information -- Well, strike
- 13 that. Let me put it this way: The input and assumptions
- 14 that ICF put into its models would have included some
- 15 additional inputs and assumptions that relate specifically
- 16 to the Illinois proposal and deviations from the federal
- forum; is that correct -- including the CASA?
- 18 A. Yes, there would have been some different
- 19 inputs. Well, I'm uncertain.
- 20 O. Are the inputs and assumptions that ICF used
- 21 in its model either in the possession of IEPA or available
- 22 to IEPA?
- 23 A. Yes, I believe so. I believe they're similar
- 24 inputs -- Like I said, the main changes they made to the

inputs was to reflect the switch from bituminous to sub-bituminous coal for many of the coal-fired power plants and to re-collect an accurate picture of the existing control configurations on Illinois' coal-fired power plants. Previous IPM modeling, that is prior to we provided different inputs, had inaccurate information on those parameters. So, I believe we provided them one set of inputs, and that was for mercury and CAIR. So, the inputs as far as what I've discussed, changes to coal, changes to control configurations, were made for the mercury modeling -- the same changes were made for mercury modeling as were made for CAIR. We provided them that set of inputs, and they used it for both rounds of modeling.

2.

- Q. So, I just want to make sure I understand this, and maybe we could back up a step. The inputs and assumptions you just referred to for the mercury and the CAIR modeling, was that information presented to the Board and the interested parties in connection with the mercury hearing? I do recall we received some information pertaining to --
- A. Yeah, I believe I testified at the mercury hearings that we offered up in the stakeholder meetings that preceded both rules. We had joint stakeholder meetings. The stakeholder meetings were for the purposes

- 1 of presenting and discussing both the proposed mercury
- 2 rule and the proposed CAIR rule, and during those
- 3 stakeholder meetings, we offered up the inputs and the
- 4 preliminary results of the modeling at that time, and then
- 5 we said we would provide the final results of all modeling
- 6 as soon as we got it, and others requested it. So -- And,
- 7 again, going back, the inputs were the same. So, I
- 8 believe it's been provided as part of the mercury hearing.
- 9 If it wasn't provided as part -- I'm uncertain if those
- 10 same inputs were included as a reference or attachment.
- 11 Probably not, but they were previously provided, and we
- 12 can provide them again, yes.

- 14 BY MS. BASSI:
- 15 Q. Just to be sure, if we find there is
- 16 additional informational on this line that we need, can we
- 17 request it and get it fairly quickly?
- 18 A. We can provide all the information we have in
- 19 our possession to you.
- 20 Q. Okay.
- 21 A. So, if you ask for something and we have it,
- 22 we will provide it.
- MS. BASSI: Okay.
- 24 MR. BONEBRAKE: And I will also have some questions

1	for you a little bit later pertaining to some of the
2	details of the ICF report, and it may be that will help
3	flush out the issue of whether there's some information
4	that ICF has that the Agency might not be aware of that
5	might help us all understand the ICF report. We can
6	follow-up on that in just a little bit.

A. Okay.

MR. KIM: We can go back and go over the mercury exhibit list one more time and try and find the exhibit number that is associated with the input data that Mr. Ross is referring to. I believe it was on one of the compact disks that was submitted to the Board, but we'll go back and check that, and if nothing else, we can make that available on the record.

MR. BONEBRAKE: One of the critical issues from my perspective would be just making sure that we have an understanding, to the extent there were changes made to the data on that for purposes of the CAIR analysis in question here, if those are somehow identified to us.

MR. KIM: Certainly.

22 BY MR. BONEBRAKE:

Q. You mentioned, Mr. Ross, that no one from ICF will be testifying regarding its report. My question for

- 1 you then would be, in terms of the substance of the
- 2 report, to whom at IEPA that is planning to testify at
- 3 this hearing would be direct on our questions pertaining
- 4 to the ICF?
- 5 A. Direct them to this panel.

- 7 BY MS. BASSI:
- 8 Q. Mr. Ross, I have some questions about the
- 9 written testimony that you submitted.
- 10 A. Okay.
- 11 Q. And my first question is, where did you study
- 12 emissions and control of each of the criteria air
- pollutant caps? I think this is in one of the early,
- early paragraphs in your written testimony.
- 15 A. Over my 18 years with the Agency, I attended
- 16 numerous courses on each of the criteria pollutants and
- 17 CAAPP emissions. Oftentimes those courses are offered by
- 18 USEPA. Sometimes they're offered by consulting firms.
- 19 Sometimes they're offered by environmental organizations,
- 20 staff of LADCO sponsored courses. So, from a variety of
- 21 entities offering courses.
- 22 Q. But were any of those college-type courses for
- 23 which you would receive credit?
- 24 A. No.

- 1 Q. Okay. I was just curious actually if there
- was such a thing. What training on permitting did you
- 3 provide to USEPA?
- 4 A. I provided many types of training. In
- 5 particular to USEPA, I provided training on Title 5
- 6 permitting. I was manager of the Agency's Clean Air Act
- 7 permit program for many years. And the USEPA has
- 8 sponsored several seminars over the years where they
- 9 select members from different states who have knowledge on
- 10 permitting and hold a seminar where those people will come
- 11 up and give presentations and training on how to write a
- good Title 5 permit, how to write good federally
- enforceable permit conditions, etc., etc.
- Q. With this Title 5 training that you provided
- 15 to USEPA, were these for courses similar to the type that
- 16 you took on the air pollutant, on the criteria pollutants
- and so forth, or were they aimed at just USEPA?
- 18 A. I took some knowledge gained from those
- 19 courses and incorporated those into my presentation. I
- 20 wouldn't say they were based on previous courses. They
- were geared mostly toward writing good Title 5 permits,
- flexible, yet enforceable Title 5 permits.
- Q. Who were the types of people who would have
- 24 been in the audience?

- 1 A. I would say a wide variety of people. To my
- 2 recollection, there were USEPA staff members. They have
- 3 considerable turnover at USEPA. So, some newbies, so to
- 4 say, as well as some experienced personnel, permit writers
- or people affiliated with permit programs from other
- 6 states, consulting firms that are involved in permitting,
- 7 others as well. I think members of some environmental
- 8 organizations attended some of these seminars.
- 9 Q. Was your focus -- perhaps that's not the
- 10 correct word, but was your focus when you were explaining
- 11 the writing of federally enforceable permit conditions
- 12 power plants?
- A. Focus?
- 14 Q. Yeah.
- 15 A. I would say there was no specific
- 16 industry-type focused upon. It was writing good permits
- in general, which would encompass writing good Title 5
- 18 permits for power plants.
- 19 Q. Did your focus -- Was your focus Illinois, or
- 20 was it just general?
- 21 A. In general.
- Q. Were 6,000 permits issued while you were the
- 23 acting manager of the permit section?
- 24 A. I think I testified that there are some 6,000

- 1 permits or permitted facilities in Illinois where we could
- 2 have very well during my tenure as acting issued thousands
- of permits, construction, renewals, administrative
- 4 amendments, minor mods, significant modifications.
- 5 There's many different kinds of permits. So, I would
- 6 doubt that 6,000 permits were issued during the year and
- 7 some-odd months that I was acting permit section manager,
- 8 but there could very well have been thousands of permits
- 9 issued during that time.
- 10 O. With respect to the outreach, you say in your
- 11 testimony that the Agency held, quote, "substantial
- outreach to stakeholders, including five weekly
- 13 stakeholder outreach meetings." Would you describe please
- 14 the format that the Agency used at these outreach meetings
- 15 to learn the stakeholders' concerns with the proposed
- 16 concepts presented at the meeting?
- 17 A. At the stakeholder meetings, the Agency
- 18 typically gave a presentation at the beginning of these
- meetings summarizing how we were proposing to go forward
- 20 with the mercury rule and with CAIR, but we would follow
- 21 that up with a question and answer period until all
- 22 questions were answered. We did not leave until there
- 23 were no more questions. And then on several occasions, we
- 24 offered to meet with any and all interested parties

- 1 outside the stakeholder meetings, and we also set up
- 2 regular mail and e-mail addresses where stakeholders could
- 3 send in comments or questions regarding the proposed rules
- 4 that would be answered at the following stakeholder
- 5 meeting.
- 6 Q. And, so, when you were answering these
- 7 questions that were submitted between meetings at the
- 8 following meeting, would you describe how that process
- 9 worked, please?
- 10 A. Well, that particular process would be we
- 11 would read the question submitted. We also provided, I
- 12 believe, handouts of all the questions submitted. And
- 13 then we would provide the answer, and then we would --
- 14 There would oftentimes be follow-up questions based on the
- answer we provided, and we would answer the follow-up
- 16 questions until that answer was satisfactory and there
- 17 were no more follow-up questions, and then we would
- 18 proceed to the next question.
- 19 Q. Would you say that this actually -- this
- 20 process actually comprised the bulk of the stakeholder
- 21 meetings, particularly after the first week?
- 22 A. The bulk? I'd be hard pressed to say that.
- 23 During the -- Many of the stakeholder meetings -- Again,
- 24 based on a lot of the questions we received, we saw

- 1 similar questions coming in. So, we would provide a
- 2 presentation or handouts. The intent being to answer the
- 3 bulk of those questions all at once, although we would
- 4 proceed through them after the presentations and say, "We
- 5 believe we answered this question in the handout or in the
- 6 presentation. Is there any follow-up questions?" But it
- 7 certainly comprised a large time segment of the
- 8 stakeholder meetings -- the question and answer period.
- 9 Q. Would you call this a dialogue?
- 10 A. Yeah, there was give and take. I believe
- 11 that's a dialogue.
- 12 Q. There was give and take. Would you say that
- 13 there was some distance and time between the give and the
- 14 take?
- 15 A. Yeah. The stakeholder meetings were held
- 16 weekly, though. A lot of times we -- Based on the
- 17 previous stakeholder meetings, we received the questions
- 18 on Friday or Saturday, even Sunday and had to have answers
- 19 prepared by Tuesday. The stakeholder meetings were held
- 20 on Tuesdays. So, we worked a lot of nights and weekends
- 21 coming up with the answers to these questions so that we
- 22 would have them ready for the next stakeholder meeting.
- So, there was some time lapse that was minimal. And,
- 24 again, the stakeholder meetings were an open forum. There

- were no restrictions placed on anyone on what questions
- they could ask or when they had to stop asking questions.
- 3 The meetings went until there were no more questions.
- Q. Was there ever serious consideration given to suggestions as opposed to responding to questions?
- 6 A. Absolutely. We had many internal meetings
- 7 discussing many of the questions. The answers to the
- 8 questions weren't prepared in a vacuum. Oftentimes we had
- 9 to meet and discuss and arrive at the correct answer to
- 10 the question as a group rather than one single person
- giving their interpretation of the correct answer. So --
- 12 Q. Is there a reason why the Agency didn't invite
- 13 the regulated community as a whole to come in and talk
- 14 with it rather than relying on meetings with individual
- 15 members of the regulated community? You said several
- 16 times -- And just back that up a minute. You said several
- times that you always asked or offered the opportunity to
- 18 meet with anyone.
- 19 A. Right.
- 20 Q. But was there ever an invitation to the
- 21 regulated community as a group?
- 22 A. I believe, during the stakeholder meetings,
- 23 yes, there was. During those stakeholder meetings, we --
- 24 myself and Laurel Kroack --

- 1 Q. I'm sorry?
- 2 $\hspace{1cm} {\tt A.} \hspace{1cm} {\tt During \ the \ stakeholder \ meetings, \ myself \ and}$
- 3 Laurel Kroack got up in front of the microphone to all
- 4 parties -- and, again, I believe the meetings were open to
- 5 anyone -- and said, "We are willing to meet with anyone to
- 6 discuss the proposed rules."
- 7 Q. If I said to you, "I'm willing to have you
- 8 come over to my house," would you view that as an
- 9 invitation?
- 10 MR. KIM: Objection. I'm not sure what -- I think
- 11 he's answered your question. I'm not sure where you're
- going with it.

- 14 BY MS. BASSI:
- 15 Q. My question was, did you invite the entire
- regulated community to come in as a group?
- MR. KIM: And I believe he answered the question. He
- 18 stated what the invitation was made.
- 19 MS. BASSI: And the invitation, as I understood the
- answer, was, "We are willing to meet."
- 21 MR. KIM: And I think you can draw any conclusions
- 22 you'd like from that. He's given you exactly what he said
- 23 during that meeting.

- 1 BY MS. BASSI:
- 2 Q. When the stakeholder process began, did the
- 3 Agency at that time announce that the set-aside would be
- 4 30 percent?
- 5 A. To the best of my recollection, during the
- 6 initial stakeholder meeting, we presented what we called
- 7 option papers or position papers, which laid out potential
- 8 options for set-asides and rationale for perhaps why the
- 9 set-asides -- the Agency would consider encouraging them
- 10 or using them, and we asked for feedback from all parties
- on their, I guess, preference or their take on the use of
- 12 the options that were being proposed. I'm uncertain if --
- 13 at what period we actually put forth an exact percent to
- each set-aside. I'd have to go back and review. But
- 15 certainly during one of the stakeholder meetings -- it may
- 16 not have been in the initial one, but in one of the
- follow-up ones, we started providing percentages of the
- 18 set-asides.
- 19 Q. Did the Agency have an idea of what
- 20 percentages it was going to propose before the stakeholder
- 21 process began?
- 22 A. A general idea? I would say somewhat. We
- 23 were still open to hear the concerns of the regulated
- 24 community, the concerns of the environmental groups, the

- 1 concerns of all the stakeholders on whether -- you know,
- 2 "What would an appropriate amount be? Is this even an
- 3 appropriate option for a set-aside?" So, we asked for any
- 4 and all feedback on it, on the set-asides.
- 5 Q. Do you recall whether any of the regulated
- 6 community expressed concern over a 30 percent set-aside?
- 7 A. Yes, I recall concern was expressed over a 30
- 8 percent set-aside. At which of the stakeholders meetings,
- 9 I'm not certain. Certainly that concern has been
- 10 expressed to us, yes.
- 11 Q. Did that concern at all influence the Agency's
- 12 decision making?
- 13 A. Yes, I believe so, to some extent.
- Q. How so, please?
- 15 A. Well, I believe we provided perhaps -- And
- 16 there was a lot of factors involved, but that was one of
- 17 the factors that we took into consideration, but, you
- 18 know, we could have gone as high as 15 percent for the
- 19 energy/efficiency renewable energy as indicated in the
- 20 model CAIR rule. It allows up to 15 percent. We only
- 21 went to 12 percent. For the pollution control upgrades,
- 22 you know, we may have increased the amount available
- there, which the pollution control upgrade category will
- 24 primarily be used by coal-fired power plants. So, we may

- have increased that amount of set-aside, early adopters as
- 2 well. That category will likely be used by the coal-fired
- 3 power plants for fluidized bed boilers. I believe we
- 4 listened to concerns there, that there should be some
- 5 set-asides available to them, and, in fact, we do provide
- 6 some set-asides to fluidized bed boilers.
- 7 Q. If I'm hearing you correctly then, what you're
- 8 saying is, is that the regulated community expressed
- 9 concern over the size of the set-aside, and then you
- 10 increased it; is that correct?
- 11 A. I would say we increased it, reduced it,
- 12 played with it. I said we reduced it somewhat. We didn't
- go to the highest level possible for EE/RE. We're only
- 14 providing 12 percent, whereas the model CAIR says you can
- 15 go as high as 15 percent. So, perhaps we reduced it
- 16 there. Perhaps for the pollution control upgrade category
- 17 for the fluidized bed boiler category, letting them in and
- 18 using clean coal category, we may have let them use that
- 19 and increased the pollution control upgrade. So, perhaps
- both, you know, we raised it and lowered it.
- Q. I don't remember where I read this, probably
- 22 in the Statement of Reasons, but maybe it was somewhere
- else, and you just mentioned it, which is what brings it
- 24 back to mind, and that is you're saying that the model

- 1 CAIR allows up to a 15 percent EE/RE set-aside, and I
- 2 looked through the model CAIR and was unable to find that,
- 3 and, so, if at some point the Agency could provide us with
- 4 a cite to that, I would appreciate it.
- 5 A. Okay. We'll work on that.
- 6 Q. Okay. Are there any co-generation units in
- 7 Illinois that are affected by the CAIR?
- 8 A. I'm uncertain. I think CAIR -- Certain
- 9 percentage of the power has to be available or submitted
- 10 to the grid. Would you like to have the answer?
- 11 HEARING OFFICER KNITTLE: Would you please speak up?
- 12 A. Would you like to have the answer? We have
- 13 someone here on the panel who can provide that answer.

- BY MS. BASSI:
- 16 Q. I'm sorry. On which?
- 17 A. We have someone here who can provide the
- answer.
- 19 Q. On the co-generation?
- A. Right.
- MR. MAHAJAN: Yes. We can --
- 22 HEARING OFFICER KNITTLE: Would you identify yourself
- 23 first?

- 1 BY MS. BASSI:
- Q. What did you say?
- MR. MAHAJAN: There was no coal units.
- 4 Q. There are no coal units?
- 5 MR. MAHAJAN: No.
- 6 Q. In fact, I now see my 15 percent set-aside
- 7 question. It's on Page 6 of your testimony.
- 8 A. (by Mr. Ross) Okay.
- 9 Q. That's where it is. And you're finding that
- 10 cite. Okay. After you find that cite, I may come back to
- 11 another follow-up on that if that's okay. Is the State
- 12 permitting of the acid rain units something new with CAIR?
- 13 A. Permitting of the acid?
- 14 Q. Yeah. Issuing acid rain permits or the --
- 15 A. No. The acid rain permits are required as
- 16 part of the acid rain trading program.
- Q. Who issues those permits?
- 18 A. State.
- 19 Q. Let's see. You say in your testimony that
- 20 USEPA administers most other aspects of the SO2 program,
- 21 besides the permitting, and that's why I asked that other
- 22 question.
- 23 A. Okay.
- Q. What aspects does the State control with

- 1 respect to the CAIR SO2 program?
- 2 A. Permitting. I know we are involved in
- 3 compliance issues, such as inspections. That's all that's
- 4 coming to mind. We have limited involvement.
- 5 Q. Coming back to the set-asides, where does
- 6 USEPA suggest an 11 percent set-aside for clean technology
- 7 projects?
- 8 A. I don't believe they do.
- 9 Q. So, when USEPA developed and analyzed the CAIR
- 10 that was published in the federal register, did it
- 11 anticipate anything close to an 11 percent set-aside for
- 12 clean technology projects?
- 13 A. I can't speak to what USEPA anticipated.
- Q. Do you know or can you recall whether this is
- 15 covered in the preamble to the CAIR?
- 16 A. The use of set-asides certainly.
- Q. Clean technology projects?
- 18 A. Clean technology projects? I'm uncertain. I
- 19 mean, I know they say that states have flexibility to
- 20 provide set-asides. I don't believe they restrict --
- 21 Well, I know they don't restrict what states can provide
- those set-asides for. So, I would say perhaps by not
- 23 addressing it, they allow states the ability to provide
- 24 set-asides as they see fit, and Illinois is utilizing that

1	flexibility.
2	
3	BY MR. BONEBRAKE:
4	Q. The federal CAIR that we've been talking
5	about, Mr. Ross, does it contain set-asides for existing
6	units?
7	A. Federal model CAIR?
8	Q. Federal model CAIR.
9	MR. RIESER: I'm sorry. Set-asides for
10	MR. BONEBRAKE: Existing units.
11	A. Well, what they do is they provide flexibility
12	for states who are in charge of the allocations to provide
13	an allocation methodology that USEPA would then utilize to
14	allocate allowances. So The federal model CAIR simply
15	provides guidelines on what states can do.
16	
17	BY MR. BONEBRAKE:
18	Q. But the federal model itself does not contain
19	set-asides for existing units; does it, Mr. Ross?
20	MR. MAHAJAN: The set-aside is only for the
21	Q. I'm sorry. Was there an answer from Mr
22	A. I don't believe it does, but we'll have to
23	look at that. I'm not sure of the exact wording. I don't

24 want to say that the federal model CAIR says, "No

- 1 set-asides shall be given to existing units." I can't say
- 2 that with certainty. I'd have to go in there and actually
- 3 re-look at it, but I do know, as I've emphasized, that
- 4 they do allow states the flexibility to provide
- 5 set-asides.
- 6 Q. But was there somebody else on the IEPA
- 7 witness panel that was offering an answer? I heard
- 8 somebody speak back there. I wasn't sure who I was
- 9 hearing.
- 10 MR. MAHAJAN: The USEPA given the states a budget to
- distribute. So, the existing units in the model CAIR, if
- 12 you're asking the model, gets 95 percent of the allowances
- 13 to the existing units.
- 14 Q. And the remaining 5 percent is in the new
- source set-aside; is that correct?
- MR. MAHAJAN: Yes, the model CAIR.
- 17
- BY MS. BASSI:
- 19 Q. How does USEPA provide for early adopters in
- 20 the CAIR?
- 21 A. (by Mr. Ross) I believe they did not provide
- 22 a set-aside for early adopters.
- Q. Would they have provided for early adopters
- 24 perhaps with a compliance supplement pool?

- 1 A. Yes, they would have perhaps.
- Q. And isn't the compliance supplement pool a
- 3 considerably or a significantly different approach from
- 4 what Illinois EPA has provided -- or proposes? Sorry.
- 5 A. It is a different approach. However, I
- 6 believe both approaches provide an incentive for early
- 7 installation of controls. So -- And trading programs in
- 8 general provide incentives for early installation of
- 9 controls.
- 10 Q. To kind of recap then, the model rule that
- 11 USEPA adopted or -- according to Mr. Mahajan, provides
- 90 percent of the allowances to existing units --
- MR. BONEBRAKE: 95.

- 15 BY MR. BASSI:
- 16 Q. What did I say -- 95 percent of the allowances
- 17 to existing units and 5 percent to new units, and it
- 18 provides in the annual program a compliance supplement
- 19 pool for early adopters; is that correct?
- 20 A. It's not only -- Well, that is, I would say,
- 21 partly correct. Yes, they allocate 95 percent of state's
- 22 budget to existing units, and 5 percent of that is for new
- units in Phase 1. However, that is reduced to 3 percent
- in Phase 2. And they provide a compliance supplement

- 1 pool, which they have two purposes in general. One of the
- 2 reasons is for early reduction credits, as you mentioned.
- 3 The other is that states were given the flexibility to
- 4 allocate those allowances in the event they found a risk
- 5 to the power supply. So, it's a reliability of the grid
- 6 question, and we found no such reliability issues in
- 7 Illinois, and as far as providing an incentive for early
- 8 reduction credits, we are doing that with our early
- 9 adopters set-aside, and as I mentioned, cap and trade
- 10 programs in general provide incentives for installation of
- 11 early controls.
- 12 Q. So, then is it safe to conclude that Illinois'
- 13 proposal is substantially different from the model rule?
- 14 A. Yes, in terms of the amount of set-asides we
- 15 have proposed and in regards to the fact that we are
- proposing to retire the compliance supplement pool, yes,
- we are different from the model.
- 18 Q. And there are other differences, as well, that
- we'll get into later?
- 20 A. Yes.
- Q. Okay. Does USEPA development and analysis of
- 22 the CAIR, including its economic analysis, anticipate --
- and by "anticipate," I don't mean what was USEPA's
- 24 thinking -- I'm saying, does it include anything that is

- 1 similar to the Illinois rule, besides the fact that
- there's a cap and trade program?
- 3 A. You mean what they modeled --
- 4 Q. Yeah.
- 5 A. -- in coming up with the cost to industry?
- 6 Q. Yes.
- 7 A. The differences are as you've noted.
- Q. Okay.
- 9 A. So --
- 10 Q. Thank you.
- 11 HEARING OFFICER KNITTLE: Mr. Bonebrake is waving his
- hand.

- 14 BY MR. BONEBRAKE:
- 15 Q. Is it true then, Mr. Ross, that USEPA's
- 16 economic analysis in connection with the CAIR would have
- addressed a 5 percent set-aside as opposed to a 30 percent
- 18 set-aside?
- 19 A. Is that what they modeled?
- Q. That's my question.
- 21 A. I believe that's what they modeled.
- 22 Q. Okay.
- 23 A. I mean, perhaps another point, Illinois --
- 24 This is as good a time as any to mention it. Illinois has

- 1 also stated or proposed that we will give away the
- 2 allowances. We could have chosen to sell them or
- 3 distribute them through an auction. So, in that regards,
- 4 that's another flexibility that the USEPA offered to
- 5 states. So, we have chosen not to do that more costly
- 6 mechanism.

- 8 BY MS. BASSI:
- 9 Q. With respect to the possibility of auctioning
- 10 allowances, does Illinois EPA even have statutory
- 11 authority to do so?
- 12 A. I'm uncertain.
- 13 Q. There could be other reasons why you're not
- 14 auctioning them. Let me suggest that. Has Illinois
- 15 analyzed particularly the economic reasonableness and the
- 16 highly cost effectiveness of these control measures that
- 17 will be required in Illinois as a result of this proposal?
- 18 A. Yes, I believe we did with the ICF modeling.
- 19 Q. Okay. When I use the term "highly cost
- 20 effective," is this not a term that USEPA uses in the
- 21 CAIR?
- 22 A. Yes, it is.
- Q. And would you please explain what it means?
- 24 A. Well, it means that the cost to industry of

- implementing this rule, reaching the caps required under
- 2 the cap and trade program meet the criteria for highly
- 3 cost effective. I guess one way you could phrase that is
- 4 they will not be significantly burdensome to the regulated
- 5 community, to the affected parties of this rule. So,
- 6 highly cost effective controls are controls that will not
- 7 impose a significant or a financial burden to the
- 8 regulated parties.
- 9 MR. KIM: Just as clarification, when you asked that
- 10 question, were you asking the witness what his
- 11 understanding of that phrase is, or what his understanding
- of USEPA's definition of that phrase is?
- MS. BASSI: The second.
- MR. KIM: So, you were asking what did USEPA mean
- when it used the phrase "highly cost effective"?
- 16 MS. BASSI: Yes. Which I think is set forth in the
- 17 preamble. So, assuming he's read the preamble, he's --
- 18 MR. KIM: I just wanted it clear.

- 20 BY MS. BASSI:
- Q. Okay. So, when USEPA determined the emission
- 22 cap, it was based on what are highly cost effective
- 23 control levels in terms of the reductions that would be --
- 24 that they wanted to meet, plus the controls that would be

- imposed; is that correct?
- 2 A. That sounds correct.
- 3 Q. Okay. And my question then is, did Illinois
- 4 perform a similar highly cost effective-type analysis
- 5 before it determined that a 30 percent set-aside was
- 6 appropriate?
- 7 A. To some extent, yes. What we modeled with the
- 8 ICF was the incremental impact that our set-aside policy
- 9 and allocation policy would have to electricity rates,
- 10 cost to the power sector, and I believe the results of the
- 11 modeling show that there will be minimal impact. So,
- 12 the --
- 13 Q. If the --
- 14 A. I'm sorry.
- 15 Q. If the 30 percent set-aside, which arguably
- 16 could be viewed as a 30 percent reduction in the cap for
- 17 Illinois, was highly cost effective, wouldn't USEPA have
- reduced the regional cap or Illinois' cap by 30 percent?
- 19 A. I can't speculate on what USEPA would have
- done, but I will say that I don't believe that a 30
- 21 percent set-aside is the same as removing those
- 22 allowances.
- 23 Q. Is that because 30 percent is not being
- 24 removed in the rest of the region?

- A. Well, 30 percent of Illinois' budget is

 set-aside and remains available for allocation. So, it is
- 2 set-aside and remains available for allocation. So, it is
- 3 not the same as removing 30 percent of the allowances.
- 4 Q. If this 30 percent set-aside is no longer
- 5 available to the regulated community in Illinois through
- 6 direct allocation, which is what happens when you have a
- 7 set-aside, does that -- you have said several times that
- 8 it's not removed because they're not retired -- does that
- 9 not then increase the cost of compliance for Illinois
- 10 sources who may have to go out and buy that 25 percent
- 11 that's gone from their allocation?
- 12 A. If they are unable to obtain enough allowances
- from the set-asides, then, yes, that would increase the
- 14 cost to those companies. They would have to go out and
- 15 purchase, otherwise obtain enough allowances to cover
- their emissions. The true --
- 17 Q. Just to establish this, because even though I
- 18 can -- probably we all understand it, the Illinois
- 19 coal-fired power generators are not -- is it correct that
- 20 they are no longer considered utilities, in that utilities
- are regulated by the Illinois Commerce Commission? Are
- the rates that are paid to the Illinois power generators
- controlled by any governmental entity?
- 24 A. I believe they're regulated, controlled by the

Illinois Commerce Commission. That's my understanding. 2. Q. Okay. We'll come back to that. 3 Α. But I am no expert in that area. 4 Q. Yeah. I understand. 5 HEARING OFFICER KNITTLE: Ms. Bassi, let's go off the 6 record for just a second. 7 (A brief recess off the record.) 8 9 10 HEARING OFFICER KNITTLE: Let's go back on the record. We are back on the record after a short break, 11 12 and, Ms. Doctors, you have a question. 13 MS. DOCTORS: We had found the citations to the documents that Ms. Bassi asked for. So, I'd like to go 14 back on the record. It's Exhibit E to the Statement of 15 Reasons, Guidance on Establishing Energy Efficiency and 16 17 Renewable Energy Set-Aside in the NOx Budget Training, 18 Page -- It looks like it's right up front. It's Page X. 19 BY MS. BASSI: 20 21 Just following up on that a bit. So, this was

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the NOx SIP Call, but developed for NOx budget trading

(by Mr. Ross) I believe it was developed for

not then developed for the CAIR; is that correct?

- 1 programs. And on Page X, it says, "EPA's recommendation
- 2 for size of a set-aside is 5 to 15 percent," and it's
- 3 referring to energy efficiency and renewable energy.
- 4 Q. Isn't the title of this "Guidance On
- 5 Establishing EE/RE Set-Aside in the NOx Budget Trading
- 6 Program, and it's dated March, 1999?
- 7 A. Yes, it is.
- 8 Q. And is the NOx budget trading program what we
- 9 call the NOx SIP Call?
- 10 A. Yes.
- 11 Q. Is that codified in Illinois in Part 217,
- 12 subpart W?
- 13 A. I believe so, yes.
- Q. For EGU's, that is?
- 15 A. Yes.
- 16 Q. Is the CAIR exactly like the NOx budget
- 17 trading program?
- 18 A. No.
- 19 MR. KIM: When you say "CAIR," you mean federal CAIR?
- 20
- 21 BY MS. BASSI:
- 22 Q. I mean the federal CAIR NOx trading program,
- is it exactly like the NOx budget trading program? And I
- 24 recognize the annual is annual.

- 1 A. Right. No, it is not exactly.
- Q. Okay. So, this is guidance then that was
- 3 developed for the NOx SIP Call and not for the CAIR, and
- 4 has there been any update to this relative to the CAIR?
- 5 A. No, not that I'm aware of, no.
- 6 Q. And I recognize there could be and nobody
- 7 would know.
- 8 A. Quite possible.
- 9 Q. Okay. So, I just wanted to clarify that the
- 10 Agency's basis for this 5 to 15 percent EE/RE set-aside
- 11 was something that was developed for a previous trading
- 12 program and not for the current trading program, and is it
- 13 not the case that Illinois did not include an EE/RE
- set-aside in the NOx budget trading program?
- 15 A. Yes, all those statements are true.
- Q. Mr. Ross, I realize this may predate your
- 17 position -- in fact, I know it predates your position, but
- 18 not Mr. Kaleel. Do you recall, Mr. Kaleel -- I'll ask you
- 19 because you're the one sitting there -- whether Illinois
- 20 considered an EE/RE set-aside in the NOx SIP Call?
- 21 MR. KALEEL: I don't believe we considered it at that
- 22 time.
- MS. BASSI: Okay.

- 1 BY MR. BONEBRAKE:
- Q. Mr. Ross, I had earlier asked you some
- 3 questions about the ICF report and to whom at IEPA we
- 4 should direct our related questions, and I think you
- 5 basically told me the panel that's currently present, and
- 6 one of my questions then would be for you, Mr. Ross,
- first, are you an economist by training?
- 8 A. (by Mr. Ross) No, I am not.
- 9 Q. Do you have any economic degree?
- 10 A. No, I do not.
- 11 Q. Do you have any training or degree in economic
- 12 modeling?
- 13 A. No, I do not.
- Q. Mr. Kaleel, are you an economist by training?
- MR. KALEEL: No, I'm not.
- 16 Q. Do you have any degree in economics?
- MR. KALEEL: I do not.
- 18 Q. Do you have any degree in economic modeling?
- 19 MR. KALEEL: No, I do not.
- 20 Q. Do you have any formal training in economic
- 21 modeling?
- MR. KALEEL: No.
- Q. And same questions for the third member of our
- 24 panel.

- 1 MS. KIM: Mr. Cooper.
- 2
- 3 BY MR. BONEBRAKE:
- 4 Q. Mr. Cooper. Thank you.
- 5 MR. COOPER: No.
- 6 Q. You have no economic degree, no training in
- 7 economic modeling?
- 8 MR. COOPER: Not specifically, no.
- 9 Q. Mr. Ross, we were earlier talking about the
- 10 differences in set-asides between the federal model
- 11 program and what IEPA, the Agency, has proposed here, and
- 12 I had a follow-up question for you, and the follow-up
- 13 questions relate to a comparison of what Illinois has
- 14 proposed and what other states in the CAIR region have
- 15 proposed or adopted at this point in time. And just to
- 16 kind of bring a fire point to the question, I think the
- 17 TSD at Page 114 -- And if you want to go there, that would
- be fine, if you've got a copy handy. And this is the
- 19 Section 8.1.5.6 entitled "Economic Reasonableness of
- 20 CASA," and the first sentence in that section reads in
- 21 part, "While the Illinois CASA is larger than the
- 22 set-asides specified by other states in the NO2 SIP Call
- trading program, or in other states CAIR SIP's (proposed
- or adopted), and goes on from there. So, my first

- 1 question for you, Mr. Ross, is, has the Agency conducted
- an investigation of what other states have adopted or
- 3 proposed with respect to set-asides and rules implementing
- 4 federal CAIR?
- 5 A. (by Mr. Ross) We previously had conducted
- 6 such an investigation.
- 7 Q. When you say "previously," can you describe
- 8 for us what you mean?
- 9 A. Prior to the writing of the Technical Support
- 10 Document. I believe a lot of the proposals for CAIR are
- 11 still ongoing. More states are letting it be known how
- 12 they are going to proceed in regards to CAIR, whether they
- 13 will be having significant set-asides or any set-asides
- 14 deviating from the model federal CAIR in regards to
- 15 utilizing the flexibility offered by USEPA.
- 16 Q. Is it still true that at this time the Agency
- is not aware of any other states that has proposed
- 18 set-asides as significant in size as what Illinois has
- 19 proposed in the rule before the Board?
- 20 A. Yes, that is true. I am not aware of any
- 21 state that has proposed such a large set-aside.
- 22 Q. And has any other state adopted a rule with
- set-asides as large as what the Agency has proposed?
- A. Not to my knowledge, no.

- Q. And specifically, Mr. Ross, do you know what any other states in the CAIR region have proposed or
- 3 adopted with respect to set-asides at this point?
- 4 A. Yes, we have that down somewhere. Like I
- 5 said, we did an investigation. We had identified several
- 6 states that were proposing some set-asides in different
- 7 amounts. Some states had actually adopted some set-asides
- 8 in their NOx SIP Call regulations which Illinois did not.
- 9 But as far as what other states are doing in regards to
- 10 CAIR, we had looked at that. We had reviewed, discussed
- and included that in our thinking and in our arrival at
- 12 our set-asides.
- 13 Q. Was this analysis an investigation by the
- 14 Agency then reflected in some writing?
- 15 A. I believe there is some document out there,
- 16 whether it be draft or not. I know that we submitted as
- 17 part of the stakeholders meeting a position paper. So to
- 18 say, you'd call them position papers. I'm not sure what
- 19 you want to refer to them as. But they laid out all the
- 20 set-asides, and then we had some follow-up presentations
- on what Illinois was proposing. I'm trying to recollect
- 22 if those presentations also included perhaps what other
- 23 states were considering. I'm uncertain. I'd have to go
- 24 back and review those. But a lot of that information is

- 1 on our web site.
- 2 MR. BONEBRAKE: I guess I'd like to place a request
- 3 then to the Agency if there is a writing which summarizes
- 4 or otherwise identifies what other states have adopted or
- 5 proposed with respect to set-asides in CAIR implementation
- 6 programs, that would be a document we certainly would like
- 7 to see.
- 8 MR. KIM: We'll try and track that down.
- 9 MR. BONEBRAKE: Is anybody then on the panel in a
- 10 position to testify today about what other states
- 11 specifically are doing -- any or all of them?
- MR. KIM: Possibly after we look at the document, we
- 13 could.
- MR. BONEBRAKE: So, why don't we postpone further
- 15 questions on that until we have the opportunity to find
- that document or documents?
- 17 A. (by Mr. Ross) Okay.
- 18 HEARING OFFICER KNITTLE: Does that conclude the
- 19 questions?
- 20 MR. BONEBRAKE: No. We have some more questions.
- 21
- 22 BY MR. BONEBRAKE:
- Q. Mr. Ross -- I'm sorry.
- 24 A. (by Mr. Ross) I was just clarifying a point

- that many states that are involved in the CAIR trading
- 2 program have not made known yet what they intend to do in
- 3 regards to the set-asides, that Illinois is perhaps one of
- 4 the few out there that is moving forward with a CAIR
- 5 proposal.
- 6 Q. I would suggest to you, Mr. Ross, that I think
- 7 there are quite a few states that have proposed or adopted
- 8 CAIR rules, but perhaps we'll re-visit that line of
- 9 questioning when we find that document that we were
- 10 earlier talking about. Now, one of the allocation
- 11 methodologies that can be used relies on heat and another
- on gross electrical output; is that correct, Mr. Ross?
- 13 A. That's correct.
- 14 Q. And which of those two does the USEPA model
- 15 CAIR use?
- 16 A. USEPA model rule uses heat input.
- 17 Q. And which does the IEPA proposed rule use?
- 18 A. We are proposing to use output based
- 19 allocations.
- 20 Q. When you say "output based allocations," can
- 21 you describe for us what you mean?
- 22 A. It's based on gross electrical output from a
- 23 facility, that is the amount of power produced measured, I
- 24 believe, in megawatt hours. Is that right? Gigawatt

- 1 hours. I'm sorry. And we believe that output based
- 2 allocations reward efficiency. They encourage using less
- 3 fuel to produce the same amount of power, and, of course,
- 4 using less fuel, in particularly when it's coal that is
- 5 the fuel, the less coal burned, the fewer the emissions.
- 6 Q. Are fluidized bed boilers recognized by the
- 7 Agency to be good environmental performers?
- 8 A. To some degree, yes. They are recognized as
- 9 being less polluting than pulverized coal boilers, that is
- 10 their emissions, in particular of NOx and SO2, are lower
- 11 than the emissions of pulverized coal boiler --
- 12 uncontrolled emissions.
- 13 Q. And, in fact, in recognition of that, there is
- 14 a category of the CASA that is available to fluidized bed
- boilers; is that correct, Mr. Ross?
- 16 A. That is correct.
- 17 Q. Is it also true that fluidized bed boilers are
- 18 less efficient as compared to pulverized cyclone units?
- 19 A. My understanding, they're in the same general
- 20 efficiency area.
- Q. So, your testimony, Mr. Ross, is they have the
- 22 same levels of efficiency?
- 23 A. In general they have near the same levels of
- 24 efficiency. I don't believe there's a big difference in

- 1 the efficiencies of fluidized bed boilers and pulverized
- 2 coal boilers.
- 3 Q. Is there anyone else on the panel that has any
- 4 different view?
- 5 MS. DOCTORS: No.

- BY MR. BONEBRAKE:
- 8 Q. Mr. Ross, I think you've indicated that one of
- 9 the goals of the 25 percent CASA from the Agency's
- 10 perspective is to encourage and promote energy efficiency
- and renewable energy, conservation and clean coal
- 12 technology. If you haven't done that so today, I think
- 13 there's testimony to that effect in the written testimony.
- 14 And my follow-up question for you, Mr. Ross, is, what
- 15 studies or analyses has IEPA done to determine that these
- 16 goals will, in fact, be attained by the CASA that it has
- 17 proposed for adoption?
- 18 A. Well, we have performed an assessment of what
- 19 could potentially occur as a result of our set-aside
- 20 policy, and we believe that our set-aside policy will, in
- 21 fact, encourage what it's meant to encourage, the items
- 22 you stated, energy efficiency, renewable energy, clean
- 23 technology and early adopters.
- Q. Can you describe for us this assessment?

1	Α.	We	can	l belleve		we have		it some	somewher	
2	could prob	ably	provide	it,	also,	but	in	general	it	shows

- 3 that to the extent that these -- this policy encourages
- 4 the use of these technologies of energy efficiency,
- 5 renewable energy, clean technology, early adopters, that
- 6 NOx emissions will in turn also be reduced, and to the
- 7 greater extent that NOx emissions are reduced, the greater
- 8 the public health and environmental benefits, and these
- 9 reductions could be in the areas of tens of thousands of
- 10 tons of pollutants each year.
- 11 Q. Your answer to my question suggested that
- 12 there's some writing that reflects or contains this
- 13 assessment. Is my understanding of your testimony
- 14 correct?
- 15 A. I believe we have a preliminary analysis out
- 16 there, a draft analysis that we could perhaps provide.
- Q. And who was the author of this preliminary
- 18 draft analysis?
- 19 A. Agency staff. I mean, in general we have had
- 20 meetings -- many meetings on the effect of our policy, how
- 21 it will impact NOx emissions, SO2 emissions, what we
- 22 expect will occur. We formed a CAIR advisory group, which
- 23 also, from initial development of the rule all the way up
- 24 to weeks ago, had met many times discussing this issue.

- 1 So, the document kind of evolved. There were perhaps some
- 2 primary authors, maybe Roston Cooper, who is on the panel.
- 3 He was perhaps the person who took the lead in that
- 4 document preparation.
- 5 Q. So, is it correct then that the Agency is
- 6 predicating its CASA allowances upon a preliminary draft
- 7 assessment that's not part of the record in this
- 8 rulemaking proceeding?
- 9 A. I wouldn't say that's correct. We are simply
- speaking to encourage the use of energy efficiency,
- 11 renewable energy, clean technology, early adopters in
- 12 order to see additional NOx reductions in Illinois and
- also to be consistent with the Governor's energy policies.
- In addition, we looked at some guidance documents provided
- 15 by staff at LADCO. We looked at documents provided by the
- 16 USEPA. One of those was referenced earlier. Internal
- 17 staff discussions. So, all of these -- together through
- 18 all these we arrived at our policy.
- 19 Q. And I need to make sure that I understood the
- answer that you just provided. I think you referred to
- 21 staff of LADCO guidance documents and USEPA guidance
- documents. With respect to USEPA guidance documents, you
- looked at EE/RE guidance document dated in 1999 that Ms.
- 24 Bassi asked you questions about. Are you referring to any

- 1 quidance other than that by Illinois EPA?
- 2 A. I believe there are several other quidance
- documents out there. Then there's the CAIR rule itself.
- 4 There's -- And perhaps someone else -- I believe we list
- 5 several of these documents in the references used for the
- 6 Technical Support Document. Do we have an
- 7 all-encompassing list somewhere? We may very well have.
- 8 I'd have to check.
- 9 Q. Just so it's clear, there's more than a set of
- 10 documents. From your perspective today, do they all
- 11 support the notion that the CASA will, in fact, achieve
- 12 the goals that are identified in your written testimony?
- 13 A. I believe they do. I don't believe there's
- any contradiction in any of those documents.
- 15 MR. BONEBRAKE: And I guess I would place a request
- 16 to the Agency to get a copy of the written assessment that
- 17 Mr. Ross has been talking about.
- 18 MR. KIM: We can -- And I assume you're referring to
- 19 the internal document that he made reference to?
- 20 MR. BONEBRAKE: That's correct. I think you're
- 21 calling it the assessment, and I think he identified
- Mr. Cooper as one of the primary authors.
- MR. KIM: We should be able to make a copy of that.
- 24 Although I'd like to ask him just one question, and we

- will provide that.
- 2
- 3 BY MR. KIM:
- 4 Q. Mr. Ross, was that document that you're
- 5 referring to relied upon in preparing the rule that was
- filed with the Board?
- 7 A. No, I don't believe so.
- 8 MR. KIM: And I think we can get more testimony, once
- 9 you get the document handy, exactly what the purpose and
- 10 impact of that document is.
- 11 MR. BONEBRAKE: Then I'm confused. My understanding
- 12 had been that the assessment that's reflected in this
- writing is, in fact, what IEPA relied upon.
- MR. KIM: And I think I can clarify that. I think
- 15 that your question started -- It took into account several
- different concepts, both -- You began on that document,
- and then you began asking about some other stuff. So, I
- 18 think maybe we just need to make clear, you know, what
- 19 documents were relied upon and were not. The documents
- that were relied upon, you know, if he's referring to the
- 21 documents that are included on the lists -- the documents
- 22 that were relied upon the list, if there's something
- 23 beyond that list, I guess you can ask that. I assume that
- there's not. That's why I asked the question. The

- internal document is -- I believe he's testified was not relied upon in creating the rule.
- 3 MR. BONEBRAKE: Well --
- 4 (by Mr. Ross) Perhaps for some clarification, Α. 5 through the rule development process, as I've stated, we met numerous times. We formed a CAIR advisory group. We 6 had larger group meetings with that group as a subset. We discussed all different types of potential set-asides, 9 what impact they would have, "What would be the result of 10 pursuing a large set-aside policy, of pursuing a renewable 11 energy, energy efficiency, set-aside of a certain percentage, the effect of a clean technology set-aside 12 pollution control upgrades, and early adopters?", and 13 14 throughout the whole process, the thinking has always been 15 to the extent that these set-asides result in additional 16 NOx reductions, there will be additional public health and 17 environmental benefits and improvement to air quality. So, the document was kind of in development, and it was 18 19 perhaps not anything formally in writing in a presentable 20 manner until perhaps several weeks ago, a month or so ago. 21 So, the concepts have existed for a very long time. As

22

23

far as something in writing that could be shared, that's a

rather newer development.

- 1 BY MS. BASSI:
- 2 Q. Just to follow-up on one of the things that
- 3 you just said, you said that part of the concept or the
- 4 thought in the Agency's mind supporting a CASA or at least
- 5 EE/RE and perhaps some of these other set-asides that
- 6 you've included in the rule is that they would result in
- 7 NOx reduction that would result in improvement, I think
- 8 you said, of health benefits or something. Maybe you said
- 9 more.
- 10 A. Public health and environmental benefits in
- 11 the way of improved air quality.
- 12 Q. But you said earlier, as I recall, that
- 13 because this is just a set-aside, that these allowances
- 14 are still out there, meaning they can be traded, and they
- 15 then can be surrendered by sources who have emitted NOx
- for compliance purposes; is that correct?
- 17 A. I believe you've characterized that correctly.
- 18 The allowances in the set-aside are available for
- 19 allocation back to the affected sources.
- 20 Q. Who can then trade them; is that correct?
- 21 A. Who can trade them.
- Q. If they are traded and if they are not
- 23 retired, in other words, but they are traded, and they are
- 24 eventually surrendered to represent a ton of NOx emitted

- 1 by some party, does this not -- I hesitate to use the
- word, but does this not offset the environmental and
- 3 health benefits?
- 4 A. No, I don't believe so, and we'll get into
- 5 this somewhat in more detail, and this will be explained
- 6 as -- I believe we have a set-aside presentation. But in
- 7 general the energy efficiency/renewable energy category,
- 8 solar energy -- Let's say a new unit comes on-line, and
- 9 that energy that that produces is believed to in turn
- offset the production of energy from a dirtier unit so
- 11 that the net effect is a cleaner environment. Now, what
- 12 that solar energy company does with the allowances they're
- 13 allocated is critical. We believe, you know, that they
- 14 could sell it back to a source here in Illinois. They
- 15 could sell it to a source outside of the Illinois. They
- 16 could retire it. They could bank it. But there is an
- offset of a dirtier polluting source generating
- 18 electricity.
- 19 Q. Does the CAIR --
- 20 MR. KIM: I think Mr. Cooper wanted to add something
- 21 to that question.
- MR. COOPER: Building off what Mr. Ross said, in
- 23 effect there is a two for one going on. There is the
- first round of benefit that is given to the renewable

- 1 source, such as a wind farm. So, it generates, say, a
- 2 megawatt. And then in turn that wind farm then, we
- 3 believe, most likely would sell to the utilities, and then
- 4 they would use it for their own purposes. So, the offset
- 5 in reduction is the megawatt of clean power that otherwise
- 6 perhaps not would have been generated.

- 8 BY MS. BASSI:
- 9 Q. Does the CAIR assume there is growth and
- 10 demand?
- 11 MR. COOPER: I am uncertain.
- 12 A. (by Mr. Ross) Does the CAIR modeling assume
- 13 there is growth --
- Q. Does the CAIR, meaning the CAIR rule, when
- 15 USEPA developed the CAIR rule, was there an assumption
- that there would be a growth and demand for electricity?
- 17 A. I'm uncertain, but I know that IPM in their
- 18 modeling takes into account growth.
- 19 MS. BASSI: Okay. Thank you. I have some questions
- 20 next about -- that might be covered by the errata, and I
- 21 haven't had enough time to look at this, but basically is
- this errata sheet, I want to say, proposed amendments to
- the proposed rule?
- 24 MS. DOCTORS: Some of them are. These are just like

- 1 typographical errors versus there are some things that
- 2 need to be fixed that are more controversial issues. We
- 3 provided that, "Oh, we forgot a parentheses on one side of
- 4 an equation type of typo correction in that, but there are
- 5 some language changes coming later in the week that
- 6 correct some of the other errors in the rule.
- 7 MS. BASSI: Later this week?
- 8 MS. DOCTORS: Yes.
- 9 MS. BASSI: And I'm sorry. Are these language
- 10 changes, you say they don't correct; they change?
- MS. DOCTORS: Correct.
- MS. BASSI: Okay.
- 13 MS. DOCTORS: Well, there is a correction in --
- 14 There's both corrections, but just some controversial
- 15 people might have questions about them versus I don't
- 16 think people question the fact that you need to add a
- parentheses or there's a word missing. Comprehensive.
- 18
- 19 BY MS. BASSI:
- 20 Q. Anyway, how will the CAIR improve
- 21 recreational -- And here when I say "the CAIR," I mean
- 22 this rule. How will this rule improve recreational and
- 23 commercial fishing? I'm just curious?
- 24 A. (by Mr. Ross) I believe one of the problems

- 1 that I went over in the presentation -- I believe we
- 2 addressed it in Technical Support Document -- is the
- 3 acidification of lakes and streams, that is NOx and SO2
- 4 can transform or contribute to acid rain. So, acid rain
- 5 in turn can acidify lakes and streams and make them less
- 6 habitable to fish and aquatic life in general, which in
- 7 turn would affect the fishing industry.
- 8 Q. Going back a little bit to the economic
- 9 analysis, you say that your economic analysis evaluated
- 10 the increments of the Illinois rule over the CAIR. I
- 11 believe you said that in --
- 12 A. The incremental impact, that's correct.
- 13 Q. Okay. What is the total cost including both
- 14 the cost of the CAIR plus the incremental cost of this
- rule to Illinois EGU's?
- 16 A. The total cost? I'd have to go back and
- 17 review those numbers. I believe it's more expensive in
- 18 the first phase and then becomes less expensive in the
- 19 following phases primarily due to lower generation.
- Q. If there's lower generation, does that also
- 21 mean a loss of revenue?
- 22 A. I believe it does.
- Q. Is that not a cost?
- A. That is a cost.

1 O. Okay. So, I asked what the total costs to the Illinois EGU's --2. 3 Α. Yeah. I'd say I'd have to review it, but I 4 believe it's in the 30 million range. 5 Q. Per year? 6 I believe it's per year. Α. 8 BY MR. BONEBRAKE: 9 Just so the record is clear, Mr. Ross, is that 10 the total cost of the federal CAIR model with the deviations reflecting the CASA as proposed by IEPA? 11 That's the incremental additional costs that 12 Α. are incurred as a result of our policy. 13 14 BY MS. BASSI: 15 16 And what I was asking for was the cost that Q. 17 includes the basic rule, as well. 18 And that's in the modeling results. I don't Α. know that off the top of my head, but it is in the tables 19 that were provided as part of the Technical Support 20 21 Document. 22 Do you know whether these costs that are

reflected in the TSD that includes apparently the whole

thing that I was just asking about include commonwealth

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- 1 Edison proposed rate hikes?
- 2 A. I don't believe they do. I'm uncertain,
- 3 though. I mean, I don't believe they do.

- 5 BY MR. BONEBRAKE:
- 6 Q. Mr. Ross, for clarification, can you refer us
- 7 to the TSD tables that you had in mind so we all have an
- 8 understanding of your testimony?
- 9 A. I believe they're in Section 7. Yeah, they're
- 10 in Section 7. They begin on Page 68 beginning with Table
- 11 7-1; Page 69 has Table 7-2; 7-3, 7-4 on Page 70; Table 7-5
- is on Page 71, Table 7-6 and 7-7 are on Page 73; 7-8 and
- 13 7-9 on Page 74; Table 7-10 on Page 75; and Table 7-11 on
- 14 Page 76.
- 15 Q. Section 7, that contains all of the tables
- 16 that you just referenced, Mr. Ross, deals specifically
- 17 with the ICF incremental analysis with respect to the ways
- in which the Illinois rule deviates from the federal
- 19 forum; is that correct?
- 20 A. I believe so, yes.
- Q. So, all the tables that you just mentioned
- 22 address the incremental cost and other effects of the
- 23 Illinois proposal as opposed to total costs, including
- those imposed by the federal model; is that correct,

- 1 Mr. Ross?
- 2 A. Say that again, please.
- 3 Q. All the tables that you just mentioned --
- A. Yes.
- Q. -- are addressing the effects including the
 cost effects of the Illinois rule as it deviates from the
 federal forum and not the total cost of the Illinois
 proposal including the impact of the federal model?
- 9 No, I don't believe that's accurate. The 10 tables are divided into different columns. For instance, 11 if you -- Well, we can look at the first table, Table 7-1 12 on Page 68. I believe column one is the policy case with Illinois NOx rule. I believe those are total costs. Then 13 14 the base case is Illinois with CAIR CAMR. That is just 15 with the model federal CAIR. And then the third column is 16 the difference between the two. So, the third column is the incremental impact. So, I believe you can determine 17 the total cost from these tables. So, they provide total 18 19 costs, and then the difference between column one and 20 column two were more specifically the difference. Well, 21 column one and column two is the incremental impact of Illinois' policy. 22
- Q. And all the tables that you just mentioned in the TSD, are those taken from the ICF report?

- 1 A. They are.
- 2 MR. BONEBRAKE: And I have some specific questions
- 3 for Mr. Ross pertaining to the ICF report, and I believe
- 4 we have an indication that a copy of that was an
- 5 attachment to the Statement of Reasons, I think you
- 6 mentioned, Ms. Doctors?
- 7 MS. DOCTORS: The ICF report was attached to the TSD
- 8 B33.
- 9 MR. BONEBRAKE: And I have some extra copies if
- 10 people want to follow along on specific questions.

- 12 BY MR. BONEBRAKE:
- 13 Q. Mr. Ross, have you had a chance to take a look
- 14 at the document that I just handed to you?
- 15 A. I'm familiar with the document.
- 16 Q. And this is the ICF report dated March 25,
- 17 2006 that we've been referring to this morning?
- 18 A. It is.
- 19 Q. And this was the report upon which Section 7
- of the TSD was based; is that correct?
- 21 A. That is correct.
- 22 Q. At the bottom of Page 1 of 11, there are three
- 23 items there listed in the section "Reduction in Illinois
- NOx Budget Allowances"?

- 1 A. That is correct.
- 2 Q. And were each of these assumptions that were
- 3 made by ICF in performance of the modeling run for the
- 4 Agency?
- 5 A. Yes.
- 6 Q. And can you explain to us what the first item
- 7 means, that is the CAIR NOx compliance supplementary pool
- 8 item?
- 9 A. Yeah. That's what we were discussing earlier,
- 10 that USEPA provides an allowance pool -- a one-time
- 11 allowance pool that can be allocated to sources to
- 12 encourage early reduction or for the purpose, if it's been
- identified that there is a risk to the power grid, a
- 14 reliability concern, then these allocations can be
- 15 distributed accordingly.
- 16 Q. Did I understand your testimony -- and correct
- me -- from earlier this morning that that compliance
- 18 supplementary pool was not going to be allocated by the
- 19 Agency but retired?
- 20 A. That's correct.
- Q. So, the reference here to "Starting in 2009,
- 22 the Illinois budget was reduced by 30 percent," in item
- one, I found that phrase confusing. Do you know what that
- 24 was intending by that phrase in connection with the

- 1 reference to the compliance supplementary pool?
- 2 A. Well, they retired our entire proposed
- 3 set-aside, which is 30 percent. They did not retire the
- 4 compliance supplement pool as we proposed. So, in that
- 5 regard, they did not specifically model what we are
- 6 intending to do with the compliance supplement pool.
- 7 Q. And the retirement of the compliance
- 8 supplement pool would have the effect of taking a certain
- 9 number of allowances out of the market; is that correct,
- 10 Mr. Ross?
- 11 A. That's correct. At the initial phase of the
- 12 program. Again, it's a one-time pool. So, it's 11,299
- 13 allowances that can be distributed during the first
- 14 perhaps two years of the trading program, whereas the
- 15 set-asides are an ongoing pool of allowances which can be
- 16 re-allocated. The answer to your question is, they did
- 17 not retire the compliance supplement pool in the model,
- 18 and that would result in additional costs to industry.
- 19 The modeling is not more conservative in that regard.
- Q. So, in fact, the modeling results understated
- 21 the cost to industry?
- 22 A. To the extent that the compliance retirement
- of the compliance supplement pool would increase those
- 24 costs, the answer is, yes, the modeling understated the

- 1 cost to industry.
- 2 Q. ICF also assumed that 30 percent of the annual
- and seasonal NOx allowances would be retired; is that
- 4 correct?
- 5 A. That's correct. And as I have stated many
- 6 times, that is not the case. That these allowances remain
- 7 available for allocation.
- 8 Q. And if, in fact, the allowances remain
- 9 eligible for allocation as opposed to -- Strike that.
- 10 I'll come back to that. Did ICF address, Mr. Ross, the
- 11 impact, if any, of the CASA on the use of Illinois coal?
- 12 A. Yes, I believe they did.
- 13 Q. And did they find in their modeling results
- 14 negligible or no impact? There is a Table 1-10 that might
- 15 help you answer.
- 16 A. Yeah, I think the -- what was found is the
- 17 proposed rule has minimal impact on coal use and type of
- 18 coal utilized.
- 19 Q. Is it also true that ICF found that the
- 20 30 percent retirement assumption led to the installation
- 21 of only 100 megawatts of additional NOx control in
- 22 Illinois?
- 23 A. I would have to go back and review the
- 24 results, but --

- 1 Q. I quess --
- 2 A. In general I believe it did not find a large
- 3 amount of additional NOx controls being used.
- 4 Q. I think Table 1-9, Mr. Ross, addresses that
- 5 issue.
- 6 A. Yes, as can be seen from Table 1-9.
- 7 Q. And did ICF determine that instead of
- 8 installing new controls, EGU's in the state would by and
- 9 large buy allowances as a result of the 30 percent
- 10 set-aside?
- 11 A. As a result of retirement. You've got to keep
- 12 in mind as we go through these tables that ICF modeled
- 13 set-asides being retired. So, the modeling results do
- show what you're saying with the set-asides being retired,
- 15 but, again, the set-asides will not be retired, and as
- 16 Mr. Cooper stated and I stated, we believe that set-asides
- do provide a benefit in the way of additional NOx
- 18 reductions, but in regards to, I believe, what you're
- 19 stating, control retrofits for NOx controls, there's some
- 20 additional controls. 102 megawatts in 2009, and then that
- 21 goes for scrubbers, too, and then no additional retrofits
- beyond 2009, if that's where I believe you're going, the
- 23 question asked.
- Q. Well, in the scenario that Mr. Cooper

- 1 described where there is an allowance that is made
- 2 available, let's say, to a wind farm and then sells that
- 3 allowance to an electric generating unit, there is a cost
- 4 from the electric generating unit's perspective in the
- 5 program inasmuch as it has to buy that allowance when but
- 6 for the CASA it would not; is that correct, Mr. Ross?
- 7 A. There is a scenario where that may be the
- 8 case. That's not necessarily the case. The utility, the
- 9 coal-fired power plant per se could reduce its emissions
- 10 substantially so that they do not need additional
- 11 allowances from CASA or anywhere else. So, they would not
- 12 necessarily have to purchase an allowance from the wind
- farm or solar energy producing plant.
- 14 Q. The ICF model projects useable economic
- 15 activity; is that correct, Mr. Ross?
- 16 A. I believe that's correct.
- 17 Q. In fact, ICF is projecting a feasible economic
- 18 activity trading as opposed to installing controls and
- 19 less reducing the emissions in Illinois by and large; is
- 20 that not correct?
- 21 A. That's correct.
- Q. Now, is it also true, Mr. Ross, that ICF
- 23 predicted essentially no change in NOx emission levels in
- 24 Illinois as compared to the federal CAIR model as a result

- of the 30 percent set-aside?
- 2 A. They predicted forecast some additional NOx
- 3 reductions, but minimal, correct.
- 4 Q. In fact, if we turn to Page 2 of 11, Section
- 5 headed "Results" --
- 6 A. Yes.
- 7 Q. -- the third paragraph in that section.
- 8 A. Yes.
- 9 Q. Does ICF predict in 2009 additional NOx
- 10 emission reductions of less than 1,000 tons or 1.8 percent
- as compared to the federal CAIR model?
- 12 A. Yes. That's correct.
- 13 Q. And as of 2015 and 2018, ICF was predicting no
- 14 change in NOx emissions as a result of the additional
- 15 set-asides proposed by Illinois?
- 16 A. No change in Illinois as a result of
- 17 retirement of the set-asides. I think the next few
- 18 sentences emphasize there is a change in the regional
- 19 emissions of NOx and SO2, substantial reduction equivalent
- 20 to 30 percent retirement. This change was forecasted to
- occur mostly in Florida and Kentucky, not Illinois.
- Q. Has the Agency conducted any analysis of
- 23 whether reductions in Florida would have an impact on the
- 24 State of Illinois?

1 Α. I don't believe the Agency has. The USEPA has conducted some modeling. And, yeah, I don't believe 2. 3 Florida was identified as one of the significant 4 contributors to pollution in Illinois. 5 Ο. Was not identified? 6 Was not, correct. But Kentucky was. Α. MR. KIM: While Mr. Bonebrake may form his next question, I just had one question I wanted to ask Mr. Ross 8 9 just to sort of maybe frame all this. 10 BY MR. KIM: 11 12 Q. Mr. Ross, was the primary purpose behind the proposal of the CASA in its form to result in reduced 13 14 emissions, or was there a different purpose that was 15 driving the Agency's proposal? 16 It was -- The primary purpose was to encourage 17 energy efficiency, renewable energy, clean technology and 18 early adopters, and as I stated, to the extent that those result in additional NOx reductions, we would expect 19 corresponding improvements to public health and air 20 21 quality. 22 BY MS. BASSI: 23

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Q.

Is it -- At the outreach meetings, did the

- 1 Agency not present that the CASA allowances that were not
- 2 used to be retired?
- 3 A. I believe we retain that as an option.
- 4 Q. Is that option to retire the CASA allowances
- 5 that are not used reflected in the proposed rule?
- A. Yes, it is.
- 7 Q. And in the various documents that the Agency
- 8 has presented both in your testimony and -- I don't know
- 9 if it's fair to ask you about everybody else's, but in the
- 10 Statement of Reasons perhaps in the TSD, is there not the
- 11 concept included in there that retirement of unused CASA
- 12 allowances will aid towards attainment of the ozone and
- 13 PM2.5 standards?
- 14 A. Well, USEPA does offer guidance on how to
- 15 obtain SIP for retirements, but more generally to the
- 16 extent that retirements result in additional NOx
- 17 reduction, then the closer we are to meeting our air
- 18 quality goals.
- 19 Q. Does the Agency plan to take SIP credit for
- 20 EE/RE as set forth in guidance that you attached to, I
- 21 believe, the Statement of Reasons at your Exhibit F?
- 22 A. We are reviewing that, and we take SIP credit
- where appropriate. So, there is guidance out there. We
- 24 are actively reviewing it and have been reviewing it, and

- 1 we are examining how much SIP credit we can get for our
- 2 policy.
- Q. Okay.
- A. But certainly USEPA has stated that there is some SIP credit available when you retire allowances.
- Q. I was talking not about the retirement, but
 about the --
- 8 A. Or to the extent that you can demonstrate that 9 additional reductions will occur as a result of a policy.

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- 11 BY MR. BONEBRAKE:
- Q. Has the Agency, that is the State Agency, had
 any discussions with USEPA regarding SIP credit as a
 result of the CASA?
- 15 A. I don't believe so, but we have participated
 16 in seminars sponsored by USEPA on how to calculate and go
 17 about getting SIP credit for reductions from retirement
 18 allowances or a policy such as ours.
 - Q. Mr. Kim asked you a question about whether the objective or at least one of the objectives was to reduce NOx emissions, and he asked you specifically about some of the set-aside programs, I think, like the EE/RE in his question, and my understanding had been that the intent or the goal of the EE/RE and other set-asides was, in fact,

- to reduce emissions. Is that understanding not correct?
- 2 A. I think Mr. Kim's question was, "What was the
- 3 primary purpose of our set-aside policy?", and the primary
- 4 purpose is to encourage these activities. A result of
- 5 this encouragement is certainly likely to be additional
- 6 NOx reductions, and to the extent that there are
- 7 additional NOx reductions that we can quantify and take
- 8 credit for, then all the better. They will help us in our
- 9 attainment demonstration, and they will result in
- 10 improvements to public health and air quality and all
- 11 that.
- 12 Q. The Agency wants to encourage the set-aside
- 13 activities because the result of those activities may be
- 14 to decrease emissions; is that right, Mr. Ross?
- 15 A. That is one of the reasons stated. Other
- reasons consistent with the Governor's energy policy. I
- 17 believe I added a few others.
- 18 Q. So, to the extent that ICF analysis is telling
- 19 the Agency that, in fact, it should expect no or minimal
- NOx emissions, then the goals of its CASA set-aside
- 21 program do not appear to be attainable through the CASA;
- is that correct, Mr. Ross?
- 23 A. Well, the primary purpose of the ICF modeling
- 24 was to analyze an economic impact. The ICF modeling does

- 1 not accurately reflect the NOx emission reductions we
- 2 expect to see as a result of our policy. Hence, we
- 3 performed and have discussed, as we've talked about
- 4 already, an assessment of the reductions in NOx that we
- 5 would expect to see as a result of our policy. So, I
- 6 think it's safe to say that we believe the actual results
- 7 of our policy will be different than what ICF results
- 8 show, because ICF results, stated several times, were
- 9 based upon a retirement of the entire set-aside, whereas
- 10 these allowances are available for re-distribution, and
- 11 through that re-distribution or re-allocation, they
- 12 encourage policies, which in turn result -- likely result
- in additional NOx reductions.
- Q. Other than the quantification that's in the
- 15 ICF report, has the Agency quantified what NOx reductions
- it expects to see?
- 17 A. Well, that's something that the assessment
- does to some degree. It attempts to put a number on it --
- 19 a potential number. I mean, you can just take one
- 20 category of the set-asides and focus on it. One category
- 21 is the pollution control upgrades. So, we believe, for
- 22 existing units at least, to the extent that they install
- 23 pollution control upgrades for which -- or additional
- 24 pollution controls for which the pollution upgrade

- 1 set-aside is an incentive, there could be dramatic
- 2 reductions in NOx, and, in fact, we expect to see dramatic
- 3 reductions in NOx in Illinois over the coming years as a
- 4 result of the installation of additional pollution
- 5 controls.

- 7 BY MS. BASSI:
- 8 Q. How will NOx emission reductions in the
- 9 Chicago area benefit attainment of the ozone standard in
- 10 Chicago?
- 11 A. Well, to the extent that they contribute. If
- 12 it's a significant contribution, there will be significant
- 13 benefit to the NOx reductions. Modeling usually evaluates
- that question and provides an answer, and we are in the
- 15 process -- have conducted modeling and are in the process
- of, I believe, updating the modeling to reflect certain
- developments.
- 18 Q. Is the NOx dis-benefit still an issue?
- 19 A. Well, the NOx -- The waiver for NOx, I
- 20 believe, expired. I'm not sure --
- 21 Q. That's not my question. My question goes to
- 22 the NOx -- the model NOx dis-benefit, the increase in
- ozone that occurs when you reduce NOx.
- 24 A. And that's accounted for in the modeling. I

- believe they factor in to some extent the NOx dis-benefit,
- 2 and it is related to the NOx waiver because I believe the
- 3 NOx waiver was put in place as a result of the NOx
- 4 dis-benefit.
- 5 MR KALEEL: Maybe a longer answer on the NOx
- dis-benefit, we still see NOx dis-benefit in the air
- 7 quality modeling that we're doing. It's not the same
- 8 signal. It may be -- Let me back up a second. The idea
- 9 of NOx dis-benefit really stems from the fact that NOx is
- 10 really composed of a couple of forms of nitrogen oxide.
- 11 One form of it, NO, is actually a very efficient scavenger
- 12 of ozone. So, it's typically the case that close to a
- fresh emission of NO, ozone concentrations go down. So,
- if you remove those emissions, the ozone levels, in fact,
- 15 appear to go up. They reflect more the regional level of
- 16 ozone. So, that increase in ozone concentration has been
- 17 termed NOx dis-benefit.
- 18 It's important to note that that signal is different
- 19 every day depending on the relevant emits of DOC's and NOx
- 20 in the air shed. You don't see the same signal on every
- 21 single day. So, it is the case that NOx dis-benefit is
- 22 significant locally within the City of Chicago on some
- days and on other days it isn't. The modeling that we're
- 24 doing accounts for all these different types of days, and

- when we have our attainment demonstration put together,
- 2 then it will reflect a wide variety of meteorology, a wide
- 3 variety of aerosols in the city, different mixes of NOx
- 4 and DOC, and the NOx dis-benefit would have to be
- 5 accounted for. We couldn't develop an attainment plan
- 6 that has so much NOx dis-benefit that it would prevent us
- 7 from attaining the standard.
- 8 Q. On the days that you are seeing a higher
- 9 dis-benefit of NOx in this modeling that's been conducted
- 10 so far, are those days days when you're also seeing higher
- 11 levels of ozone? In other words, that -- I want to say
- the exceedance days as opposed to non-exceedance days?
- 13 MR. KALEEL: In general, no. I think there are some
- cases where the NOx dis-benefit is occurring at times
- 15 where there's also high levels of ozone. The City of
- 16 Chicago typically doesn't have real high ozones to begin
- 17 with. The ozone happens downwind of Chicago in the
- 18 northern suburbs and Lake County and in Wisconsin and
- 19 Michigan, but we see a lot of NOx dis-benefit at night.
- 20 The fact that ozone levels at the surface are low at night
- is because of the NOx scavenging that goes on. It's one
- 22 form of that effect.

24 BY MR. BONEBRAKE:

- 1 Q. Mr. Ross --
- 2 A. Yes.
- 3 O. -- ICF also forecasted the incremental cost
- 4 impact on Illinois generators of the 30 percent set-aside;
- 5 is that correct?
- A. That's correct.
- 7 Q. And if you can turn with me to Page 4 of the
- 8 ICF report, the bottom paragraph on that page that runs
- 9 over on Page 5. In the last full sentence in that
- 10 paragraph on Page 4 reads, incremental allowance cost to
- 11 the Illinois sources are approximately 26, 27 and 31
- 12 billion in 2009, 2015 and 2018 respectively. Do you see
- that, Mr. Ross?
- 14 A. Yes, I do.
- 15 Q. Do you have an understanding of whether that
- 16 statement is ICF's projection of cost to Illinois
- generators as a result of the Agency's proposed set-asides
- 18 above and beyond what's proposed in the federal CAIR
- 19 model?
- 20 A. Those are the costs that the IPM model showed
- as a result of a retirement of the 30 percent set-aside.
- 22 So, those are incremental additional costs to the power
- 23 sector.
- Q. When we say "incremental additional costs," do

CAIR? 2. 3 Correct. And I do want to re-visit an issue. 4 I believe we talked previously about the compliance 5 supplement pool and the additional costs that could be 6 incurred there. I believe the preamble to the federal 7 model rule states that, "The marginal cost of a ton of annual NOx controlled under CAIR is the same with and 8 9 without the compliance supplement pool." 10 BY MS. BASSI: 11 12 Q. Would you repeat that, please? "The marginal cost of a ton of annual NOx 13 Α. 14 controlled under CAIR is the same with and without the 15 compliance supplement pool," and we can provide the 16 reference. 17 18 BY MR. BONEBRAKE: The cost numbers that we just were talking 19 Ο. about, Mr. Ross, on Page 4 --20 21 Α. Right. 22 -- do you know how ICF calculated those costs? Ο. Not specifically. I believe we discussed 23 Α. these with them in post modeling conference calls to some 24

you mean above and beyond what's required by the federal

- degree. What all exactly they take into account there --
- 2 The IPM modeling is very complex. So, I'm not an expert
- 3 in that area. But we did discuss this with ICF to some
- 4 degree. So, we discussed it with the experts and asked
- 5 that they provide us a final report in layman's terms so
- 6 that hopefully everyone could understand the results.
- 7 Q. Do you recall if ICF cost numbers are based
- 8 upon assumed additional buying of allowances that Illinois
- 9 generators would have to do?
- 10 A. I believe that is where the majority of the
- 11 costs -- additional costs are incurred.
- 12 Q. And do you know what costs ICF assigned to the
- value of a NOx allowance seasonal and annual?
- 14 A. I did at one time. Whether it's between 2,000
- and \$3,000 per ton, I would assume -- I don't know that
- off the top of my head, no.

- BY MS. BASSI:
- 19 Q. Did you say, though, you think it's between 2
- and \$3,000 a ton?
- 21 A. I believe that is the generally accepted
- 22 amount that NOx allowances would fluctuate between.

23

24 BY MR. BONEBRAKE:

- Q. And I applied that \$2,500 number to the annual
- 2 NOx 30 percent numbers based upon that to retirement, and
- 3 I came up with a different numbers. That's the reason why
- 4 I was asking about what we know in terms of how ICF
- 5 calculated these. Is there an intermediate output or
- 6 other written or electronic document that's in the
- 7 possession of the Agency that would describe the cost
- 8 calculation for us?
- 9 A. I don't believe -- This is all they provided
- 10 us in the way of results of the modeling.
- 11 Q. Is this information available from ICF at the
- 12 Agency's request?
- 13 A. It would be additional cost to the Agency,
- 14 which is something, my understanding is, we are limited in
- 15 our funds available. So, I wouldn't be able to say here
- 16 that any request for additional information could be
- 17 honored. I would have to examine what amount of funds we
- 18 would have available and take it from there. So --
- 19 Q. It's your understanding, Mr. Ross, that no
- 20 additional documents will be provided by ICF without
- 21 additional payment; am I understanding your testimony
- 22 correct?
- 23 A. That is accurate.
- Q. So, we are in a somewhat difficult position

- looking at a black box of cost calculations that we don't
- 2 understand what went into them, and, so, we have a hard
- 3 time understanding what they really mean. Mr. Ross, do
- 4 you have any proposed solution for us?
- 5 A. Well, we would contact ICF and clear them to
- 6 provide information to you should you wish to incur the
- 7 cost, but we may be able to ask ICF for additional
- 8 information based on the premise that they don't charge us
- 9 any additional money or some significant amount. Again,
- 10 you would have to submit a request to us. We would have
- 11 to evaluate it, perhaps discuss it with ICF the cost
- 12 involved, evaluate the need for it. I would assume we may
- 13 be able to do some research. They probably used the same
- value of NOx allowances that we used for the federal CAIR
- 15 modeling, and we may be able to extrapolate from that
- modeling the cost that they used here.
- Q. Does the Agency agree that \$2,500 is a
- 18 reasonable estimate for the anticipated cost for NOx
- 19 annual and seasonal allowances under CAIR?
- 20 A. I believe we agree with that premise, yes.
- 21 Q. So, one way to calculate the value of
- 22 30 percent set-aside would be to apply 30 percent to the
- 23 total NOx allowances in Illinois for a given year and then
- 24 multiply it by that number, Mr. Ross?

- 1 A. Yes.
- 2 MR. KIM: If I could ask a few questions. And I
- 3 believe you indicated that we will try and find the
- 4 exhibit that referenced the ICF inputs that were used for
- 5 this run. So, we'll make that available.

- BY MR. KIM:
- 8 Q. So, my question to Mr. Ross is, aside from the
- 9 input information that we'll make available and we'll
- 10 identify and aside from the output results that you cited
- 11 to, is there anything more that you have seen, and USEPA's
- 12 presentation of their IPM results, that is in addition to
- 13 what Illinois EPA has presented to the Board in our
- 14 rulemaking? In other words, put a different way, the type
- 15 of calculation breakdowns that Mr. Bonebrake is asking
- 16 you, is that found anywhere, to the best of your
- 17 knowledge, in the federal CAIR rules or any documents
- 18 related to the federal CAIR rule?
- 19 A. I simply don't know. I've looked at the
- 20 modeling performed for USEPA by ICF, but I can't -- It's a
- 21 huge amount of documentation, paperwork. I simply can't
- 22 recall all --
- MR. KIM: If I may, there's another member of our
- 24 panel, Mr. Mahajan, that is more familiar with that

- 1 information. If I could present that same question to
- 2 him.

- 4 BY MR. KIM:
- 5 Q. Is there anything in the federal CAIR rule
- 6 presentation that contains the kind of calculation
- 7 breakdowns Mr. Bonebrake was asking of Mr. Ross, In other
- 8 words, how calculations were performed, how calculations
- 9 were worked out and so forth?
- 10 MR. MAHAJAN: No. There is no related discussion
- 11 like how much --
- 12 HEARING OFFICER KNITTLE: Could you speak up, sir?
- 13 I'm having trouble hearing, too.
- 14 MR. MAHAJAN: I said there is no related discussions
- about these allowances, cost of allowances, and all this
- 16 they use the IPM modeling to arrive at those cost numbers.

- 18 BY MR. KIM:
- 19 Q. So, based upon your review of the IPM
- 20 information presented by USEPA, is there anything more
- 21 substantial or more comprehensive that USEPA provided than
- in the federal CAIR rule as compared to what Illinois EPA
- 23 provided in our rule proposal?
- MR. MAHAJAN: It might have provided in the

1 background documents in the IPM. If you go to the IPM inputs and outputs, it might have provided that 2. 3 information, but I don't know that. 4 MR. KIM: Thank you. 5 BY MR. BONEBRAKE: 6 Mr. Ross, on Page 4, Table 1-2, there's some information pertaining to generation; is that correct? 8 9 (by Mr. Ross) That's correct. Α. 10 Ο. Can you describe for us what's in the Delta column on the far right on that table? 11 Yes. It shows that for coal usage for 2009, 12 Α. there will be 62 gigawatts per hour additional electricity 13 14 generated from coal. Then in 2015, the power generated from coal actually is reduced by 3 gigawatt hours. And 15 16 then further out, IPM projects that in 2018, that coal 17 power generation is further reduced by a total of 29 18 gigawatts per hour, and then they also list other forms of 19 generation. 20 BY MS. BASSI: 21

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Yes, I believe so.

Is that what it means?

Are these gigawatts produced in Illinois?

22

23

24

Q.

Α.

Q.

- 1 A. The first row of values is for the State of
- 2 Illinois, and the second row is nationally.
- 3 MS. BASSI: Sorry. It was buried in the gray.

- 5 BY MR. BONEBRAKE:
- 6 Q. Do you know, Mr. Ross, if the forecast
- 7 increased in coal generation in 2009 is a result of an
- 8 increase in forecasted demand for generation in this
- 9 state?
- 10 A. Well, on the previous page, Page 3 of 11, it
- 11 states in the first paragraph, second sentence, "Total
- 12 generation in Illinois in 2009 is slightly higher than in
- 13 the base case CAIR CAMR case as generation from less
- 14 expensive, uncontrolled coal-fired power plants
- 15 increases." So, that would indicate to me that existing
- 16 plants become more cost effective or their power is less
- 17 expensive to produce than other units, and, therefore,
- 18 there is an increase in power generated from coal-fired
- 19 power plants.
- Q. But do you know if ICF was forecasting a
- 21 general increase in demand across the state during the
- year 2009 as compared to today?
- A. I'm uncertain.
- Q. The increase for 2015 and 2018 show net

- 1 reductions in generation; is that right, Mr. Ross?
- 2 A. That's correct.
- 3 Q. And those are reductions in generation as a
- 4 result of the proposed set-asides by the Agency; is that
- 5 correct?
- A. As modeled by IPM, that's correct.
- 7 Q. And the loss of generation that's projected by
- 8 ICF has an associated cost for generators; does it not?
- 9 A. Yes, it does.
- 10 Q. And do you know whether those associated costs
- 11 were included or not included in the cost numbers that we
- talked about at the bottom of Page 4?
- 13 A. Well, I would assume -- I'm uncertain, but I
- 14 would assume they would be -- if ICF is doing their job,
- 15 they would include all costs, and they are -- IPM is
- 16 supposedly the gold standard of modeling. So, them being
- economic experts, so to say, they would include all costs,
- 18 including the costs of lost generation from coal plants
- and costs incurred to the power sector.
- 20 Q. The reason I asked, the sentence that we
- focused earlier contains the dollar amounts. The lead-in
- 22 phrase, "an incremental allowance cost," that suggested to
- 23 me that ICF was focused on the cost of additional
- 24 allowances that would require as opposed to the cost of

- lost generation, and, so, with that language in mind, do
- you recall, Mr. Ross, whether your discussions with ICF
- 3 regarding lost generation was included in the cost numbers
- 4 at the bottom of Page 4?
- 5 A. Well, a reading of that sentence would
- 6 indicate that those costs on the bottom of Page 4 are only
- 7 for allowance costs.
- 8 Q. Therefore, your understanding, Mr. Ross, is
- 9 that the dollars at the bottom of Page 4 in the sentence
- 10 that we read understates costs to Illinois generators as a
- 11 result of the CASA as projected by ICF?
- 12 A. If what you are implying is correct, that ICF
- 13 did not include the cost of lost generation in the 26, 27
- and 31 million, then, yes, those are an understatement of
- 15 the total cost to the power sector as a result of our
- 16 policy in regards to how IPM modeled it. Again, a broken
- 17 record, but they modeled the retirement of 30 percent,
- where, in fact, they are not retired.
- 19 Q. But it is true, is it not, Mr. Ross, that ICF
- 20 essentially was projecting negligible NOx emission
- 21 decreases in Illinois at a cost of at least tens of
- 22 millions of dollars each year as a result of the --
- 23 A. That is true. I mean, we're talking about
- 24 power generation. One thing -- I mean, we're talking

- 1 about a loss of 29,000 -- 29 -- I'm sorry -- gigawatt
- 2 hours, where I believe -- Just to put it in perspective,
- 3 the total amount in Illinois is 109,000 gigawatt hours.
- 4 So, 29 gigawatt hours in comparison to the total picture
- of 109,000 gigawatt hours, it's a very small loss in power
- 6 generation from coal.
- 7 Q. Do you know the value today of a gigawatt hour
- 8 of generation?
- 9 A. No, I don't.
- 10 Q. Does anybody on the panel?
- 11 MR. MAHAJAN: Table 7-4 has that 1999 by megawatt
- hours.
- 13 MR. BONEBRAKE: I'm sorry. What was the reference?
- MR. MAHAJAN: In the TSD, Page 70, Table 7-4.
- 15 MR. BONEBRAKE: I'm sorry. You're saying that 7-4
- has the dollar value for gigawatt?
- MR. MAHAJAN: Megawatt hours. So, you can --
- 18 MR. KIM: Well, there is math involved.
- 19 MR. BONEBRAKE: Being an attorney, I always have to
- 20 have somebody else decipher that for me. Thank you for
- 21 that information.
- 22
- BY MR. BONEBRAKE:
- Q. Now, Mr. Ross, did ICF also address the

- 1 question of whether rates for electricity in Illinois
- 2 would be expected to increase as a result of the CASA and
- 3 USAH (phonetic) proposed by the Agency?
- A. Yes, they did.
- 5 Q. And are the results of that analysis presented
- 6 at Page 7 of the ICF report, including Table 1-6?
- 7 A. Yes, they are.
- 8 Q. And there's a sentence in the first full
- 9 paragraph below Table 1-6, and it's the second sentence
- 10 which reads, "In 2009, residential, industrial and
- 11 commercial expenditures increased by approximately
- 12 \$1 million." Do you see that, Mr. Ross?
- 13 A. Yes.
- Q. Do you know, is that a projection by ICF of
- 15 additional expenditures by Illinois citizens, both
- businesses and individuals, for electricity as a result of
- the Illinois proposal as compared to the federal model?
- 18 A. Yes, I believe that's what it's stating.
- 19 Q. One of the things that I was wrestling with
- 20 when I was looking at the ICF report, earlier as we talked
- 21 about, they were projecting additional allowance costs of
- tens of millions of dollars, and you just talked about the
- fact that that may well not have included additional costs
- 24 associated with lost generation, and those numbers far

- 1 exceed the 1 million dollars that's referenced in the
- 2 sentence we just talked about on Page 7. Did you know how
- 3 it is, Mr. Ross, that ICF was predicting an increase in
- 4 expenditures of only approximately 1 million dollars for
- 5 electricity while at the same time projecting tens of
- 6 millions of dollars in additional cost for generators?
- 7 A. Well, the additional costs for generators, I
- believe, were focused on the need to purchase additional
- 9 allowances as a result of ICF modeling that 30 percent of
- 10 the budget was retired. So, that would indicate a large
- 11 number there. How that carries over and relates to
- impacts to industrial, commercial and residential
- electricity prices, I'm uncertain.
- 14 Q. Well, do you know if ICF was making the
- assumption that, for instance, in 2009, when they were
- 16 projecting an increase in expenditures for electricity by
- 17 Illinois citizens of a million dollars and they were
- 18 projecting 26 million dollars in additional allowance
- 19 costs, do you know what ICF was assuming with respect to
- 20 how the generators would recover, if they would recover,
- 21 the additional 25 million dollars in costs?
- 22 A. You mean did ICF somehow take into account
- that the power sector may pass on those costs through
- 24 increased electricity rates? I'm uncertain if ICF has the

- ability to do that. I simply don't know.
- 2 Q. Well, if a generator incurs 26 million dollars
- 3 of additional costs in 2009 and was an Illinois generator,
- 4 the same Illinois generators increase or we cover only a
- 5 million dollars of that increase from Illinois citizens,
- 6 does that imply, Mr. Ross, that the Illinois generators
- 7 have to absorb a 25 million dollar loss as a result of the
- 8 Illinois proposal?
- 9 MS. DOCTORS: Objection. We've kind of been going
- 10 through -- The USEPA didn't provide all the breakdowns
- 11 when they did the modeling for CAIR, and we're not going
- 12 to try and provide all the breakdowns on this IPM modeling
- 13 either.
- 14 HEARING OFFICER KNITTLE: Response?
- 15 MR. BONEBRAKE: Well, Illinois has its own statutory
- 16 requirements for rulemaking, including economic
- 17 reasonableness. The ICF has done an analysis of
- 18 economics, including the costs associated with the
- 19 rulemaking. I think all the information in the analysis
- is very relevant to the Board's consideration of the
- 21 Illinois proposal.
- 22 MR. KIM: And I think we've been clear that our basis
- 23 for our argument on economic reasonableness is that we
- 24 relied upon the very same modeling that USEPA did, to the

- 1 very same extent that they did and with no more or no less
- 2 detail than they did. So, you're asking us to provide a
- 3 lot more information than the federal rule otherwise
- 4 provides. So, we're in a difficult position to do that
- 5 because it's simply not available to the information we
- 6 have to the same extent that if you look at the federal
- 7 CAIR rule, you can apply the level of detail that you're
- 8 looking for.
- 9 MR. BONEBRAKE: And I think it's clear today from the
- 10 testimony that the federal analysis, the USEPA analysis
- 11 applies to the federal CAIR model. Here we're talking
- 12 about something different. We're talking about an
- incremental analysis that's associated on the deviations
- that Illinois has proposed from the federal program. So,
- what it is that USEPA has done or not done is really not
- 16 under consideration when we're talking about the ICF
- 17 report. The ICF is focused in on the issue of what is the
- 18 impact associated with what Illinois has proposed inasmuch
- 19 as it is very different from the federal model.
- 20 MR. KIM: And, again, we relied upon the very same
- 21 model they did. We applied the results with our different
- inputs compared to what the USEPA did. And it's, I
- 23 believe, unfair and it is going to take a lot of time
- trying to find out answers that were simply not provided

- and, frankly, shouldn't have to be provided to the depth
- 2 and level of detail that we're being asked for.
- 3 HEARING OFFICER KNITTLE: Hold on. I'm going to
- 4 overrule the objection. I do think it's relevant to
- 5 economic reasonableness. However, if Mr. Kim, as you
- 6 said, you don't have the information or it's information
- 7 that's not available, you clearly can't answer that
- 8 question as so stated. You can proceed with your
- 9 questions.
- 10 MR. BONEBRAKE: And I forgot what question was
- 11 pending or raised.
- MR. KIM: I think you were done.

13

- 14 BY MS. BASSI:
- 15 Q. I remember. I remember. The last question
- 16 was, if the cost to Illinois consumers is a million
- dollars increased because of the CASA and the cost to
- 18 generators is 26 million dollars, what happens to the
- 19 difference; who absorbs the difference?
- 20 A. Well -- And how that is presented, the power
- sector would be responsible for absorbing the difference.
- 22 Now, what options are available to them to recover those
- 23 costs I'm no expert, but I do know, if the CASA allowances
- 24 were not retired but were, however, available for

- 1 allocation as they are under our proposed CAIR, then those
- very same power companies could apply for and receive
- 3 allocations from our CASA, which in turn could be sold to
- 4 recover some of the costs incurred.

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- 6 BY MR. BONEBRAKE:
- 7 Q. You're talking, Mr. Ross, for instance, about
- 8 a scenario where an electric generator would install an
- 9 air pollution control and, therefore, seek an allowance
- 10 from the appropriate CASA category?
- 11 A. That's certainly one mechanism that could be
- 12 utilized.
- 13 Q. And in that scenario then, that company would
- 14 be incurring the additional costs of that air pollution
- 15 control; is that correct?
- 16 A. They would be incurring that additional cost
- 17 from the installation of that control, correct.
- 18 Q. And that control installation would be a cost
- incurred as a result of the CASA that would not be
- incurred under the proposed federal model; is that not
- 21 correct, Mr. Ross?
- 22 A. You said that cost of the additional control
- is incurred as a result of the CASA?

24

1	DV	MC	BASSI:
_	Вĭ	MD.	BASSI.

- Q. In order to apply for allowances under a CASA category, like the pollution control upgrade category, the source would have to install a pollution control device at
- A. Correct.

some cost; correct?

- Q. Okay. And, so, that would be a cost incurred that would not have been incurred if the source did not attempt to apply for allowances from a CASA category?
 - A. No. The source may have the intent or plans to install that pollution control device regardless of whether a CASA exists or not. So, if they have those plans anyway, then they are given additional incentive or benefit from the CASA in the receipt of allowances, which can then be sold to offset the cost of installation of that control.

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18 BY MR. BONEBRAKE:

- 19 Q. Do Illinois generators compete with generators 20 from other states for the sale of electricity?
- 21 A. They do.
- Q. And would you expect that Illinois generators incur 25 additional millions of dollars in 2009 as compared to generators in other states, assuming that the

- other states follow the federal model as opposed to the
- 2 state model that's not yet been entered into the record at
- 3 this point, would you then anticipate that the Illinois
- 4 generators would be at a competitive disadvantage
- 5 vis-a-vis --
- 6 A. I couldn't reach that conclusion. I know
- 7 right now Illinois is a net exporter of power, which leads
- 8 me to believe that power production in Illinois is cost
- 9 effective, and that other states are purchasing it instead
- 10 of purchasing power generated in their own state or from a
- 11 neighboring state. So, I can't say that an additional
- 12 25 million dollars as a result of what IPM modeled, which,
- again, is different than our policy, but I can't say that
- that would make Illinois power producers less competitive.
- 15 It stands to reason that to a certain degree certainly
- 16 their power would be more expensive than it was prior to
- incurring these costs. But does that make then
- significantly less competitive? I can't say.
- 19 MS. DOCTORS: Can I Re-Direct?

20

- 21 BY MS. DOCTORS:
- 22 Q. Mr. Ross, I'd like you to take a look at the
- 23 last paragraph on Page 3 where it talks about the effect
- of the base case and the policy case in exporting of

Т	energy.
2	MS. BASSI: This is the ICF analysis?
3	MS. DOCTORS: Yes.
4	MR. BONEBRAKE: And you referenced the last full
5	paragraph on Page 3?
6	MS. DOCTORS: Yes.
7	A. Yeah. And this simply, as I stated, we are a
8	net exporter of energy, and we continue to be, I believe,
9	is the conclusion reached by ICF.
10	HEARING OFFICER KNITTLE: Let's hold off here for a
11	second. Let's go off the record.
12	
13	(A brief discussion off the record.)
14	(Proceedings were concluded for October 10, 2006.)
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1	STATE OF ILLINOIS)
2	COUNTY OF ST. CLAIR)
3	
4	I, HOLLY A. McCULLOUGH, a Notary Public within and
5	for the County of St. Clair, State of Illinois, do HEREBY
6	CERTIFY that the foregoing record of the proceedings was
7	made before me on October 10, 2006, at the Illinois
8	Environmental Protection Agency, Training Room, 1021 North
9	Grand Avenue East, North Entrance, Springfield, Illinois.
10	IN WITNESS WHEREOF, I have hereunto set my hand and
11	affixed my Notarial Seal the 11th day of October, 2006.
12	
13	HOLLY A. McCULLOUGH
14	Notary Public CSR #084-004265
15	RPR #821968 CCR #1011
16	CCR #IUII
17	
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