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2	ILLINOIS POLLUTION CONTROL BOARD
3	October 12, 2006
4	IN THE MATTER OF: ) )
5	PROPOSED NEW CAIR SO2, CAIR ) R06-26 NOx ANNUAL AND CAIR NOx ) (Rulemaking - Air) OZONE SEASON TRADING )
6	PROGRAMS, 35 ILL. ADM. CODE )
7	225, CONTROL OF EMISSIONS ) FROM LARGE COMBUSTION ) SOURCES, SUBPARTS A, C, D )
8	and E )
9	
10	RECORD OF PROCEEDINGS
11	BEFORE JOHN KNITTLE HEARING OFFICER
12	
13	
14	This record of proceedings was before the Illinois Pollution Control Board taken on October 12,
15	2006, at 9:00 a.m., at the offices of the Environmental Protection Agency, Springfield, Illinois, before Holly A.
16	McCullough, an Illinois Certified Shorthand Reporter, a Missouri Certified Court Reporter, a Registered
17	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	Andrea S. Moore, Board Member Mr. Amand Rao, Board Staff
5	COUNSEL FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY:
6	Ms. Rachel Doctors Mr. John Kim
7	CONNELL FROM CHIEFE HARRING
8	COUNSEL FROM SHIFF-HARDIN: Ms. Kathleen Bassi Mr. Stephen Bonebrake
9	COUNSEL FROM McGUIRE-WOODS:
10	Mr. David Rieser
11	COUNSEL FROM BAKER & McKENZIE FOR ZION ENERGY: Mr. Steven J. Murawski
12	
13	COUNSEL FROM ENVIRONMENTAL LAW & POLICY CENTER: Ms. Faith E. Bugel
14	
15	INTERROGATION INDEX:
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1 HEARING OFFICER KNITTLE: Let's go on the record. Good morning. Today is Thursday, October 12th. We're on 2 3 the third day of hearings in this rulemaking R06-26 4 regarding the CAIR rule. We are still continuing with the 5 Agency's presentation of witnesses. I don't think I see 6 anybody who isn't familiar with the Board's rulemaking 7 process, but if anybody has a question, feel free. 8 Anybody can ask it. I want you only to raise your hand 9 and identify yourself both so the Board and the Court 10 Reporter gets your name down appropriately. So, other than that, I think we're going to proceed with the 11 12 hearing. I think we are on the Agency's last witness; is that correct, Ms. Doctors? 13 14 MS. DOCTORS: Yes. 15 HEARING OFFICER KNITTLE: And that is --MS. DOCTORS: Mr. Cooper. 16 HEARING OFFICER KNITTLE: You understand that you 17 were sworn in initially and that still stands; correct? 18 19 MR. COOPER: Correct. HEARING OFFICER KNITTLE: Okay. Ms. Doctors, do you 20 21 have anything you want to say before we get started with 22 his testimony? MS. DOCTORS: I guess I'll just lay some foundation 23 24 for Agency Exhibit 5.

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1 HEARING OFFICER KNITTLE: That will be great. I just 2 want to make sure there's no preliminary matters over on 3 the other side of the room. 4 (No response.) 5 HEARING OFFICER KNITTLE: Please go ahead. 6 MS. DOCTORS: And I also have a calculation sheet that Mr. Cooper prepared last night on SIPCO analysis that 7 was asked for. So, I can enter that first, or I can lay 8 9 the foundation, if you have a preference. 10 HEARING OFFICER KNITTLE: Your preference. MS. DOCTORS: Okay. Are we at 20? 11 HEARING OFFICER KNITTLE: 20. 12 13 MS. DOCTORS: Let's mark the Exhibit as Agency Exhibit 20. 14 15 EXAMINATION OF 16 17 Mr. Roston Cooper: 18 BY MS. DOCTORS: Could you explain what --19 Q. 20 Α. This is the example, as per Ms. Bassi's 21 request, how SIPCO would have fared using 2005 data, which 22 was taken from CAMD. In this particular exercise, two pieces of data were needed, the megawatt hours generated, 23 24 as well as the emission rate in pound per megawatt. CAMD

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1 told me that they generated 885,172 megawatt hours, and CAMD told me that their emission rate was .087, which was 2 3 approximately .87. We plugged those particular variables 4 in, solved the equation, and we end up with 57.5. 5 BY MS. BASSI: 6 7 Q. And this is out of 4,000 in that category? 8 9 BY MS. DOCTORS: 10 How many allowances are in that category? Ο. That particular category holds 4,573 annual, 11 Α. 1,842 seasonal. 12 13 BY MS. BASSI: 14 So, what this shows is that SIPC, assuming all 15 Q. this is correct and everything, would have gotten only 58 16 17 allowances from that category? 18 That is correct. Α. 19 Q. Okay. HEARING OFFICER KNITTLE: Yes, Ms. Bugel? 20 21 22 BY MS. BUGEL: I just want to go back to the discussion we 23 Q. were having yesterday where there was testimony that to be 24

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eligible for the CASA, there's a certain NOx emission
 rate.

A. Yes. It's inherent in the equation. If you look in the slide or the handout, the middle term 1.0 minus ER, if said unit is not less than 1.0, the resultant is actually negative. So, build into the equation is a cleanness of at least 1.0 pound per megawatt hours.

8 Q. Right. But yesterday we were saying that that 9 translated to approximately .07 pounds per million BTU, 10 which does not seem to be the case here.

11 A. I think what you're referring to is the slide 12 example, and as I prefaced during my presentation, that 13 was a totally hypothetical, mythical example. It was not 14 based in reality. It was simply a numbers exercise. 15 This, though, is based on real and I believe to be correct 16 data.

I agree. I'm just trying to clarify here 17 Ο. because I think someone translated for me what 1.0 would 18 19 be in pounds per megawatt hours, someone said that that 20 was approximately equal to .07 pounds per million BTU's. 21 (by Mr. Davis) That would be -- I was saying, Α. in the example, the .07 would translate into .07, and I 22 23 believe I said that pounds per megawatt hour to pounds per

million of BTU is approximately a factor of 10. 1 per

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pound megawatt hour would translate of BTU .1 pounds per
 megawatt hours.

Q. I would just like to go over our discussion
yesterday then, because if that's the translation,
yesterday we talked about .07 pounds per million BTU as
being pretty clean, I believe, if I'm characterizing the
testimony correctly.

8 A. (by Mr. Davis) Yes. And I believe I had 9 said, you know, .07 as the example given in the previous 10 handout and the difference between the 1.0 and the .7 11 would be the only thing that a source would receive.

12 Q. So, then -- So, now we're saying the cutoff to 13 obtain any credits is approximately .1 pounds per million 14 BTU; am I doing the math correctly on that?

15 A. (by Mr. Davis) Yes.

Q. So, how would you characterize .1 -- I apologize. I, like everyone else, is surprised when I get a signal in here. So, how would we characterize -- How would you characterize .1 pounds per million BTU's in terms of, for lack of a better word, cleanliness?

21 A. (by Mr. Roston) Would you please repeat the 22 question?

Q. How would you characterize -- We're saying
that units that achieve less than .1 pounds per million

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BTU's will be eligible for CASA credits presuming that they meet the other criteria; is that correct? A. (by Mr. Ross) We characterized .10 pounds per million BTU as a fairly clean emission rate, a low emission rate of NOx.

What is that characterization based on? 6 Ο. 7 (by Mr. Ross) Based on existing emission Α. 8 rates of NOx as we've evaluated for all the coal-fired 9 EGU's based on the level that CAIR anticipates that EGU's 10 will reduce to, based on research of existing documents on achievable emission rates, with the addition of add-on 11 12 control devices.

One additional -- One or two additional 13 Q. 14 questions. Most of the permits -- If we refer back to --15 There was a list of -- It's Exhibit 13, new coal and solvent fired, fuel-fired units for Illinois. Most of 16 17 these permits that you're familiar with, are the permitted emission rates for NOx less than 1.0 -- I'm sorry -- let 18 19 me rephrase that -- pounds per million BTU, .1 pounds per million BTU's? 20

A. (by Mr. Ross) I really don't know. I'd have to go back and review them. I would state that typically emission rates for new units are lower than emission rates for existing units. Newer units are inherently cleaner.

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1 They have more advanced technology. Permitting 2 requirements are more stringent. They typically have to 3 undergo a best available control technology, do a batch 4 review. So, therefore, as I stated, typically the 5 emission rates that we permit new units at is low. Does anyone on the panel know what BACT is 6 Ο. 7 considered to be for NOx for a new TC plant? (by Mr. Ross) Well, BACT is different for 8 Α. 9 each case. It's a case by case determination. So, I 10 think it would be hard to point to one single limit. 11 Α. (by Mr. Roston) It's ever changing. 12 MS. BUGEL: I have no further questions. HEARING OFFICER KNITTLE: Mr. Bonebrake? 13 14 BY MR. BONEBRAKE: 15 I have some follow-up. Mr. Ross, do you know 16 Q. 17 roughly what the typical uncontrolled NOx emission rate would be for pulverized unit? 18 (by Mr. Ross) Off the top of my head, no. We 19 Α. had as an Exhibit AP 42, emission factors passed around 20 21 yesterday. I believe it's contained in there. 22 MS. BASSI: You said AP 42? (by Mr. Cooper) It's not the complete AP 42 23 Α. section, but I believe it would have the relevant table to 24

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1 answer the question. 2 3 BY MR. BONEBRAKE: 4 Q. Do you happen to know what the table would be? 5 Α. (by Mr. Roston) If I get it in front of me. 6 You asked about NOx? 7 Ο. Typical uncontrolled NOx emission rate for a 8 pulverized unit. 9 MR. MAHAJAN: The typical is .7 both for the BTU and 10 for the coal-fired --MR. ROSS: That's not right. Absolutely not. 11 (by Mr. Roston) I believe Table 1.3. 12 Α. 13 BY MR. BONEBRAKE: 14 15 Q. And can you direct us to a page number? 16 (by Mr. Cooper) It looks like Page 1.1-17, I Α. 17 believe. And that table carries on for several pages. 18 Okay. And based upon the table then, what Ο. 19 would be the response to the question I had asked? 20 Α. Your question was? 21 Q. A typical uncontrolled NOx emission rate from 22 a pulverized unit. I could calculate an average if you so chose. 23 Α. MS. DOCTORS: We could address that more in a comment 24

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1 rather than trying to do it --

2 Α. (by Mr. Cooper) The numbers appear to range 3 from as low as -- for pulverized coal, the numbers appear 4 to range from at low as 7.2 to as high as 31 pounds per 5 ton. 6 7 BY MR. BONEBRAKE: 8 And how do you convert pounds per ton to Q. 9 pounds per megawatt hour? 10 Α. (by Mr. Cooper) Pounds per ton to ton per 11 megawatt hour? Well, you need to know the heat content of the particular fuel and then perform a conversion. 12 13 Q. We've been talking about roughly a .1 pound 14 per million BTU number. Is there a rough way to correlate 15 a pound per ton number to a pound per million BTU number? Not off the top of my head. You would need to 16 Α. 17 account for the various fuel, bituminous, the 18 sub-bituminous, the heat content. I believe it could be 19 done, but I wouldn't venture a guess right now. 20 Ο. Is it true, Mr. Ross -- following up on an 21 answer that you earlier provided -- that for an existing 22 unit that undergoes a modification, for instance, might be very different from BACT for a new unit? 23 24 Α. (by Mr. Ross) Yes, that's true. Just to give

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1 a ballpark number, and this is just a ballpark number and a guess, I think for an uncontrolled emission rate of NOx 2 3 from an existing non-specified type of pulverized coal 4 boiler is .7 to 1.2 pounds per million BTU per hour. 5 ο. I'm sorry. That was .7 to --6 Α. то 1.2. 7 ο. And that was pounds per megawatt hour? 8 Α. For a million BTU, since we were speaking in 9 terms of pounds per million BTU, but that's pretty readily 10 converted into pounds per megawatt multiplied by a factor of 10. 11 So, that's between 7 and 12 times. What is 12 Q. the .1 pound per million BTU threshold for the CASA that 13 14 would be applicable to SIPCO; is that correct? 15 Α. (by Mr. Ross) Yes. That's correct. MR. BONEBRAKE: I had some questions in some other 16 17 areas if we're ready to move on. 18 MS. DOCTORS: Can the document be admitted? 19 HEARING OFFICER KNITTLE: You're moving to admit Agency --20 21 MS. DOCTORS: 20. 22 HEARING OFFICER KNITTLE: Any objection to Agency 20 being admitted into the record? 23 24 (No response.)

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1	HEARING OFFICER KNITTLE: Seeing none, that will be
2	admitted as Exhibit 20.
3	MS. DOCTORS: And I wanted to lay some foundation for
4	Agency Exhibit 5, or, John, would you like to?
5	MR. KIM: You can go ahead.
6	
7	BY MS. DOCTORS:
8	Q. Mr. Cooper, are you familiar with Agency
9	Exhibit 5?
10	A. (by Mr. Cooper) Yes.
11	Q. Was this How are you familiar with this
12	document?
13	A. I believe I am the primary author of this
14	document.
15	Q. Did you write it for the most part?
16	A. I think that that's what that meant.
17	Q. Was this document relied on in preparing the
18	rule?
19	A. No, it was not.
20	Q. Was the document completed, in fact, after the
21	filing of the rule?
22	A. Yes, it was.
23	Q. What was the purpose of the document?
24	A. The purpose of the document was partially in

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1 preparation for the hearings. It was, as the title 2 states, simply a summary of potential emission reductions 3 and power offsets in attempt to get a grasp on what the 4 particular program could achieve. 5 ο. Is the Agency representing that this 6 information and the document is a hundred percent accurate 7 or is to be interpreted as providing some estimates? It is definitely to be interpreted as 8 Α. 9 providing estimates. It's clearly labeled "draft". It 10 makes many assumptions. I'm sure other people would perform this analysis differently. This was one approach. 11 12 And I hope it to be conservatively estimated. MS. DOCTORS: That's all I have. 13 14 HEARING OFFICER KNITTLE: Are you moving for admission of this document? 15 MS. DOCTORS: Yes, I am. 16 HEARING OFFICER KNITTLE: Any objection? 17 (No response.) 18 19 HEARING OFFICER KNITTLE: Seeing none, this will be admitted as Exhibit No. 5. Mr. Bonebrake, you had 20 21 additional questions. Of whom would you like those? 22 MR. BONEBRAKE: I think, actually, Mr. Cooper was involved in drafting the document. That would probably be 23 24 the best recipient.

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1 HEARING OFFICER KNITTLE: You can proceed. 2 3 BY MR. BONEBRAKE: 4 Q. Did you say that you were the sole author 5 or --6 (by Mr. Cooper) No, that is not the phrase I Α. 7 used. Who else was involved in preparing this 8 Q. 9 document? 10 Α. Review and suggestions were taken from the -as Jim called it, the CAIR advisory group. 11 12 Q. And then you implemented those suggestions and recommendations? 13 14 As appropriate, I believe so, yes. Α. 15 ο. So, from your perspective then, you were the lead author on the document? 16 17 I believe I would characterize that as Α. 18 correct. Again, I think you mentioned that the document 19 Q. was completed after the CAIR proposed rule was submitted 20 21 to the Board; is that correct? 22 As completed as a draft can be, yes. Α. And did you start drafting it then before --23 Q. Did you start drafting the document before the CAIR 24

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1 proposal was submitted to the Board? 2 Α. Oh, no. 3 Ο. From your perspective, what was the purpose of 4 Exhibit 5? 5 Α. I think I already gave that not five minutes 6 ago. Maybe I didn't understand. Can you refresh my 7 ο. 8 recollection? 9 I believe its two purposes were for in Α. 10 preparation for the hearing process, as well as to attempt, make an effort to quantify what this particular 11 12 program may achieve. 13 And this particular program is the CASA? Q. Yes. That's all this document has relevance 14 Α. 15 to. 16 And I think Ms. Doctors asked you the question Q. 17 about whether there were estimates in the document, and 18 the way the question was framed, she also referred -- I think she used the term "accuracy". It leads me to a 19 follow-up. Is there any information in Exhibit 5 that you 20 21 currently view to be inaccurate? 22 Not to my knowledge. Α. 23 And I wanted to walk through some of the Q. numbers on this Exhibit so we all have an understanding 24

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involved in the general use of some of these things and 1 what these numbers mean. 2 3 Α. Sure. 4 Q. Let's perhaps start with Table 1. To the 5 left, you have what looks to be the identification for 6 four different rows, and those are the various CASA 7 categories; is that correct? 8 Α. Yes, they are. 9 Q. And then you have the heading "Total," and can 10 you tell us what's in that column? Those are the percentage of the budget 11 Α. allotted to each category. 12 13 And that would be of both an annual and Q. seasonal basis? 14 I believe this only addressed annual, but it 15 Α. would be. Well, I guess --16 17 Ο. Are you amending the answer? 18 Yes. I apologize. Α. It's both annual and seasonal? 19 Q. 20 Α. Yeah. 21 Q. And the next column is headed "CASA," and then 22 there are a number of numbers below that? 23 Α. Yes. What are those numbers? 24 Q.

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1 Α. Those are the percentage breakdowns within the 2 CASA category. 3 Q. I see. So, 48 percent for EE/RE --4 Α. Right. 5 ο. -- is that percent -- that category represents 6 48 percent of the total CASA? 7 Α. Of the total 25 percent. 8 And then the next category column is entitled Q. 9 "Allowances," and you have annual and seasonal, and can 10 you tell us what those numbers reflect? Those numbers reflect the percentage of the 11 Α. budget allotted to that category. 12 percent of the total 12 budget is 9,150 approximate. I believe it didn't entirely 13 14 work out because of the fractions, but as stated in the 15 rule, those are the values. It's approximately 12 percent, though, I believe. 16 17 So, for instance, you're anticipating that Ο. 18 there will be 9,150 annual NOx allowances available in the 19 EE/RE category? As stated in the rule, the rule carves out 20 Α. 21 that block. So, I would certainly expect that to be the 22 case. And then the next column there's a dollar 23 Q. 24 amount, 2,250, and it states "per allowance," and can you

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1 tell us what's reflected in that column?

2	A. That particular column represents the a
3	potential dollar value that would be associated to that
4	block of allowances, and as attempted by the footnote,
5	which is then directed to reference 14, I called from an
6	EIA document, where they predict, as the footnote notes,
7	between 2,000 and \$2,500 per allowance in the future
8	between 2009 and 2030.
9	Q. And you took the middle of those two numbers
10	and used that as a value of an allowance?
11	A. It seemed reasonable.
12	Q. So, what were you projecting in terms of total
13	dollar value associated with the CASA allowance?
14	A. I believe it is the summation in the right
15	most column.
16	Q. That's \$42,882,750?
17	A. Assuming 2,250 an allowance.
18	Q. The next table, as we move down the first page
19	of Exhibit 5, is entitled "Table 2: Potential Emission
20	Reduction Due in Part of the CASA," and I'd like to
21	similarly walk through the entries in this table so we
22	have an understanding of the information that's in this
23	table. Can you describe for us what's in the left-hand
24	column with the heading "EE/Conservation/RE"?

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1 A. You want to know what's in the column? 2 Q. You have various entries underneath that 3 heading, and I just wanted to know what those entries 4 represent.

5 A. Those entries represent various eligible 6 project types under the EE/RE category. And then just for 7 other people looking at this document, Page 1 is the 8 summary where all of the following pages provide the 9 justification and estimates and various assumptions to 10 where these numbers were derived from. So, I wanted to 11 point that out.

12 Q. And then you've got a "Capacity" column "Low" 13 and "High," and what information is reflected in this 14 column?

A. That column reflects ultimately the analysis that is later performed in the document, and it simply summarizes that based on certain data and certain assumptions, I provided a range of capacity in megawatts that could be provided.

20 Q. And, for instance, you have a high of 162 for 21 wind power -- excuse me -- a low of 162 for wind power and 22 a high of 270 megawatts for wind power. Is that your 23 projection of potential wind power to be constructed that 24 would be eligible for the CASA?

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1 Α. That is my projection based on this analysis. 2 There are certain assumptions made in that category which 3 derive those numbers. 4 Q. But is it correct that that's capacity 5 generation you're projecting may be constructed? 6 I'm not necessarily projecting. I'm saying Α. 7 potential. 8 Q. And I understand that you're looking at the 9 future, and this is just your estimate of --10 Α. Using data from what I felt were reputable 11 sources and making certain conservative estimates that the 12 American Wind Energy Association states there is this block of wind capacity expected to be built. I make 13 14 certain assumptions that, let's say, only 30 percent of 15 that block comes to pass, and that's where we get the low 16 end, and I get the high end the same way by saying, "Let's 17 assume 50 percent." 18 And you're looking into the future then, your Ο. 19 crystal ball suggests that there may be as high as 386 megawatts or so of additional capacity that may be 20 21 constructed and eligible for EE/RE allowances in the 22 summary; would that be correct? I wouldn't use the phrase "crystal ball". 23 Α. 24 Again, everything here is based on data that I have

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called. I'm making no independent assumptions. I'm not a
 wind energy expert. I'm not a solar power expert. I've
 relied on data I found and made certain assumptions based
 on other who I deem to be experts.

5 Q. Well -- And subject to your comments regarding 6 my use of the term "crystal ball," would you otherwise 7 agree with the question that I asked you?

8 Other than that, I believe it to be accurate. Α. And in the next column is "Capacity Factor". 9 Ο. Can you tell me what information is reflected there? 10 "Capacity Factor" denotes the percentage to 11 Α. which the capacity is utilized. The first column, for 12 example, "energy efficiency," I chose 100 percent because 13 14 it's not something that you turn on or off. It's inherent

15 in the technology. Wind power, as we all know, the wind 16 does not always blow. Various documents suggest that 17 there's roughly a 30 percent capacity factor. I felt it 18 important to include these to give a realistic picture of 19 the actual emissions offsets, as well as power offsets.

Q. Okay. And then the next category is "Output".Can you tell us what information is in that category?

A. That category affectively combines the before
mentioned capacities with the capacity factors to
determine an annual output in gigawatt hours.

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1 Ο. And, again, that's a prediction into the future? 2 3 Α. That is a straight mathematical conversion. 4 Q. Right. I understand that. But you're 5 predicting potential output in some future year? 6 MS. DOCTORS: This is repetitive. We've already 7 established that this is his estimate, that we don't know 8 what's going to happen. 9 MR. BONEBRAKE: I'm just trying to make sure that the 10 record is clear that this is just a prediction of something in the future; you're not calculating some 11 existing generation or output? 12 13 HEARING OFFICER KNITTLE: I think the record is 14 pretty clear at this point that that's what he's trying to 15 do, and you can move on. 16 17 BY MR. BONEBRAKE: 18 Then you have three columns to the right. Ο. They're entitled "Emission Offsets/Reduction Ton". Can 19 20 you describe to us what information is in those columns, 21 Mr. Cooper? 22 (by Mr. Cooper) These three columns represent Α. 23 exactly what the column heading says, an emission offset/reduction tons based on data I called from 24

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1 reference 15 and 16, which, if memory serves, reference 15 2 I believe is the 9-10 report. I believe it provided a 3 summary of the fleet NOx and SOx emissions. I believe the 4 year was 2002. And I've labeled those particular emission 5 rates there. The 9-10 report did not, I believe, account for PM. That data, I believe, I acquired from CAMD 6 7 perhaps is reference 16. Reference 16 was -- actually, I 8 called from our iceman database, which is comprised of 9 plant annual emission reports. 10 And I think you just described for me where Ο. 11 you extracted emission rate information for purposes of 12 the -- calculated the numbers in that column; is that 13 correct? 14 I believe that's what I just -- Yeah. Α. 15 ο. And how did you use those emission rates then 16 to generate the numbers in that column? Again, it's a straight mathematical. It's an 17 Α. emission factor essentially using the average fleet 18 19 emission factor in pound per megawatt and using the before 20 calculated, in this case gigawatt, one can determine what 21 quantity of NOx, SOx and PM would have been created had this power been generated by the average utility EGU in 22 23 Illinois. 24 HEARING OFFICER KNITTLE: You need a moment,

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1 Mr. Cooper?

2	MR. COOPER: No.
3	
4	BY MR. BONEBRAKE:
5	Q. The methodology that you just described for us
6	in terms of how you calculated the I think you
7	described it the emission that would have occurred at
8	the average generator generated at that level of
9	electricity, that you're instead, I think for purposes of
10	this table, assuming would be generated by an $\mathtt{EE}/\mathtt{RE}$
11	source. Is that calculation methodology consistent with
12	the methodology of the proposed rule for calculating the
13	allowances that would be available to the EE/RE project
14	sponsor?
15	A. (by Mr. Cooper) This has nothing do with
16	allowances. There is no There's nothing to be
17	consistent with. This simply states, in my opinion, based
18	on data from what I believe to be experts, that had this
19	quantity of power been generated at the typical EGU, these
20	are the emissions. It's a straight multiplication,
21	gigawatt hours times emission rate divided by 2000.
22	That's it. There's no allowance methodology. There's no
23	heat input conversion. There's no de-rating for oil or
24	gas.

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1 Ο. So, in other words, in order to calculate what kind of allocations would be associated with various EE/RE 2 3 projects, you have to, for instance, take the output 4 column for generation and put that through whatever the 5 appropriate formula is in the proposed rule and then 6 calculate the allowances? 7 Α. That would be correct. 8 Q. The next, it looks like it's a separate table, 9 although you can tell me, the Clean Coal Tech entry, is 10 that part of your Table 2, or is that from your perspective a different table? 11 No. It's Table 2. 12 Α. And below "Clean Coal Tech," you've got a 13 Q. 14 reference to Taylorville? 15 Α. Yes, I do. 16 Q. Can you describe for us what the Taylorville 17 item is? Taylorville is one of the proposed new 18 Α. coal-fired units. It's actually, I believe, the first 19 item on reference 13, which was the web printout that I 20 21 provided yesterday for Ms. Bassi. It is an IGCC plant. 22 MS. DOCTORS: Could you say what "IGCC" is? "IGCC" is "integrated gasification combined 23 Α. 24 cycle" called from the permit filed. It's actual capacity

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1 as denoted in the table is 770 megawatts. I believe it's 2 two 335 megawatt units. IGCC is a syn gas process. 3 4 BY MR. BONEBRAKE: 5 Q. And then you're predicting in the NOx, SO2 and 6 PM columns anticipated emission levels? 7 (by Mr. Cooper) No, I am not. Α. 8 Q. Can you describe for us what information is in 9 those columns? 10 Α. As denoted next to the column headings, the small triangle, for those that don't know, is the Greek 11 12 symbol Delta, which means difference. What is attempted to show in this particular column is the difference in the 13 14 emission rate of Taylorville from the average Illinois 15 fleet EGU. Is that --HEARING OFFICER KNITTLE: Ms. Bassi? 16 17 BY MS. BASSI: 18 So, you're saying this is a difference between 19 Q. 20 what your calculations are saying the Taylorville site 21 might emit more NOx as compared to the average EGU? 22 (by Mr. Cooper) Did you say " more"? Α. The difference, I said. 23 Q. What this table is attempting to state is that 24 Α.

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1 in the generation of -- as the middle column shows, 2 roughly 5,000 gigawatt hours, Taylorville can generate 3 that much power while producing roughly 8,500 tons less 4 than the average EGU. 5 MS. BASSI: Thank you. That clarifies. 6 MR. COOPER: You're welcome. 7 BY MR. BONEBRAKE: 8 9 And has Taylorville been constructed at this Ο. 10 point? (by Mr. Cooper) No, it has not. 11 Α. And at the bottom of the first page --12 Q. 13 BY MS. BASSI: 14 I just have to ask another follow-up about 15 ο. 16 Taylorville just so I understand the differences here. 17 Α. Yes. On Exhibit 5, under "Capacity Actual 18 Ο. megawatts," you have 770; is that correct? 19 I believe so, yes. 20 Α. 21 Ο. Okay. And if I look at the Taylorville entry 22 for Exhibit 13, I believe Taylorville -- the one you're talking about is the very first entry on Exhibit 13; is 23 24 that correct?

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1 Α. I don't have it in front of me. I believe it is -- Now I have it in front of me. Yes. 2 3 Ο. Okay. In the fifth column from the left on 4 Exhibit 13, the one that's labeled "Rated Output Megawatt 5 E," it says that the Taylorville site will have two units 6 at 330 megawatts E, 278 net? 7 Α. Yes. How does that -- How does that correlate with 8 Q. 9 your megawatt at 770? 10 Α. It does not. 11 Q. Okay. As stated yesterday, I don't maintain this 12 Α. particular web listing. Through the process, it is 13 14 conceivable that their initial application requested two 15 330 units, and during the permit review, they may have 16 changed their minds and increased that number. The 770 17 number I pulled straight from the in-process permit. I 18 spoke with the analyst who's performing the review, and 19 this is the data I was given. Are those two -- Recognizing the differences 20 Ο. 21 then those numbers --22 Α. I would --23 Q. Can I ask my question? 24 Α. You may.

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Q. But the capacity actual megawatt on Exhibit 5 is to equate to the rated output megawatt on Exhibit 13; is that correct, even though there has been a change at Taylorville? These are not intended to be different units?

- 6 A. No.
- 7 Q. Okay.

There are two units, and it's unfortunate that 8 Α. 9 we have a conflict here. Again, I don't maintain this 10 list. I'm at least happy that the numbers are close. It's entirely conceivable that they did change their 11 minds. They decided to go with a different vendor, a 12 slightly larger unit. They got a better unit with a 13 14 larger unit. I'm not entirely certain. I can say, 15 though, that the 770 was pulled directly from the in-process permit after speaking with the engineer 16 17 reviewing that particular application.

Q. I was merely trying to verify that these are
not representing different characteristics of the project?
A. No.

21 MS. BASSI: Okay. Thank you.

22

23 BY MR. BONEBRAKE:

24 Q. A follow-up, as well, regarding the EE/RE

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1 portion of the Table 2 that we just talked about --(by Mr. Cooper) Yes. 2 Α. 3 Ο. -- and we talked a little bit about how you 4 calculated the numbers that are the NOx, SO2 and PM table 5 and columns, and as I understood it, you essentially were 6 attempting to predict the emission reductions that would 7 be -- that would occur if a particular level of generation would be provided by one of the EE/RE projects as opposed 8 to by an EGU at average emission rate of the state; is 9 10 that roughly correct? I believe that is the attempt, and --11 Α. 12 Q. My follow-up is, it's true in Illinois, is it not, that over the next 10 or 20 years we're projecting an 13 14 increase in demand for electricity? 15 Α. I believe that to be case. 16 Q. So, if, in fact, electricity generation from 17 coal-fired EGU's is not displaced, that is EGU's continue to generate by buying allowances and the EE/RE projects go 18 forward, we, in fact, do not have a reduction in 19 20 remissions; do we? 21 I do not agree with that, no. Α. Can you explain to me what's wrong in what I 22 Ο. 23 just said? 24 Α. I believe, as summarized on Page 2 of the

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1 document, while one potential outcome is that wind or 2 other EE/RE's could offset and effectively negate the need 3 for coal-fired capacity, I believe it is my opinion that, 4 as the statement reads, it effectively elevates the base 5 load generating capacity high enough that the future power demand is met or at least offset without the need to add 6 7 additional fuel combustion plants that increase emissions. 8 So, I would not say that there would not be an 9 environmental gain from adding wind. If, as you stated, 10 there is a projected increase in demand, that demand could 11 perhaps be met by the capacity added by the wind. 12 Q. Well, let me try it a little bit differently. 13 That same paragraph refers to increases in expected demand 14 of 24.4 percent by 2025, with a peak of 27.1 percent in 15 2017. Do you see that? Yes, I do. 16 Α. 17 And when you said 27.1 percent in 2017, was Ο. that an annual increase, or what's the nature of that 18 19 number? 20 Α. I believe that was the increase for the 21 annual, yes. In 2017, we're expecting an increasing in 22 Q. 23 demand of 27.1 percent as compared to 2016? 24 Α. No. As read by the sentence, EGAS shows that

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1 from the base year 2002.

2	Q. Okay. Then I guess what you're suggesting
3	then is that the demand peaks up to 27.1 percent as
4	compared to that baseline and then drops somewhat to 2025?
5	A. I believe that's what I'm attempting to say.
6	Q. If we look at the year 2017 where we're
7	predicting a 27.1 percent increase in demand, do you
8	know
9	A. I am not predicting. This is not my expert
10	testimony whatsoever. This is based on a piece of
11	software developed by USEPA, and admittedly, in this case,
12	I'm using it as a proxy. As stated, EGAS is used to
13	generate emission gross factors.
14	HEARING OFFICER KNITTLE: Mr. Cooper, "EGAS" is what
15	exactly?
16	A. I forgot the acronym.
17	MR. KALEEL: It an economics model. I'm not exactly
18	sure the
19	MR. DAVIS: I can't be sure, but I thought it was
20	Economic Growth Analysis Software.
21	HEARING OFFICER KNITTLE: And it's USEPA software?
22	MR. DAVIS: Yes. It's uses growth factors from USEPA
23	and DOC.
24	HEARING OFFICER KNITTLE: Sorry. Mr. Bonebrake, you

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1 can continue.

2	MS. DOCTORS: I think we have a clarification.
3	HEARING OFFICER KNITTLE: First the clarification.
4	A. (by Mr. Cooper) Just so there's no confusion,
5	I'm not this document does not suggest that between
6	2016 and 2017, there will be a 27.1 percent increase.
7	Again, this is what the software that I'm using as a proxy
8	predicts as an increase from the base year of 2002. Is
9	that
10	
11	BY MR. BONEBRAKE:
12	Q. And I understand that clarification, and I
13	appreciate your attempt to present some light on this. My
14	follow-up question that I had for you was, do you know if
15	the existing, that is constructed and operating electrical
16	generating capacity in this state could provide
17	electricity at a level of 27.1 percent above 2002 levels?
18	A. (by Mr. Cooper) I do not know.
19	Q. So, is it, in fact, conceivable that the EE/RE
20	kind of generation would be needed on top of existing EGU
21	generation to attain 27.1 percent increase in generation?
22	A. I believe so.
23	Q. And then if that is true, wouldn't that, in
24	fact, mean that the EE/RE projects would not in any way

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1 displace EGU generation?

4

A. I don't believe that to be true.
Q. Again, I guess I have to ask you to explain

why you disagree with that statement.

5 Α. When you say "displace," when I think of 6 "displace" in terms of electrical generating units, I 7 think of economics comes into play. A unit will run until 8 there is an economic disadvantage. It's conceivable that 9 if someone can get power cheaper from a neighboring wind 10 farm, there may be no need for that particular plant. It's also conceivable that we may need all of the current 11 12 generating base load capacity in addition to EE/RE and 13 other efforts, as well as new generation capacity.

Q. And my question to you, I think, assumed that it would be necessary by 2017 to have all of the existing generation and, in addition, new generation, and in that scenario, would you agree that existing generation essentially would be running at capacity, and, so, therefore, whatever new generation was built would not operate to displace the existing generation?

A. I honestly don't follow your question.
Q. Your calculation -- I'll say your prediction
of emission reductions assumes, as I understand it, that
EE/RE projects have less or no emissions, and that they

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1 will generate a level of electricity that had they not 2 been built would be generated by existing EGU's; is that 3 correct?

4

A. I would agree with that.

Q. But if the existing EGU's continue to operate
at existing levels because of an increase in demand, even
with EE/RE projects, there is no reduction in emissions as
compared to the current time with respect to the existing
EGU's; is there?

10 A. If I'm following you, I believe that to be11 correct.

HEARING OFFICER KNITTLE: We have something from Ms.Bugel.

14 (by Mr. Bloomberg) I have something to add to Α. 15 that. I wanted to point out that the purpose of the cap 16 and trade program is not only to reduce emissions, but to 17 limit future growth in emissions. So, therefore, if there is this growth in demand, then something is going to have 18 19 to be built to supply it, and obviously the EE/RE or zero 20 emission would be more beneficial to the environment in 21 reducing further emissions than continuing with building -- well, with the existing plants. 22

HEARING OFFICER KNITTLE: Let Ms. Bugel -- she's had
a question for awhile.

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1 MS. BUGEL: Mr. Bloomberg foresaw my question and 2 answered it. 3 HEARING OFFICER KNITTLE: Thank you, Mr. Bloomberg. 4 5 BY MR. BONEBRAKE: 6 ο. And as I understand -- Just to make sure I 7 understand your testimony, Mr. Bloomberg, you're suggesting that there's need for additional new 8 9 generation, and the new generation would be of the sort 10 that would be covered by the EE/RE and, therefore, have a lower emission rate than a new unit burning, for instance, 11 coal, pulverized or cyclone; that's the scenario that 12 you're positing? 13 14 (by Mr. Bloomberg) I'm saying that's one of Α. 15 the possibilities. 16 And is it true that, in fact, the CAIR caps do Q. 17 not include a growth factor? 18 (by Mr. Bloomberg) That's my understanding of Α. 19 the cap and trade. And back to Page 1, Mr. Cooper, I had some 20 ο. 21 questions on what's referred in the bold as "PC Upgrades," 22 which is at the bottom. (by Mr. Cooper) Yes. 23 Α. In the far left column, there are three items 24 Q.

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1 there, "SCR/SNSCR," "FDG" and "baghouse," and then to the 2 right of each of those rows, there's the number, and you've got "2," "7," "5". Can you tell us what those 3 4 numbers represent? 5 Α. Those numbers represent -- And this is a 6 summary. This refers back to attachment 2, which is the 7 second to last page, Page 8 I believe, and it refers to 8 the pieces of equipment that are believed to be installed 9 and the quantity. 10 Ο. And attachment 2, does that list all Amren or EEI facilities? 11 I'm not familiar with EEI. 12 Α. 13 Q. Electric Energy. 14 Is the answer "yes"? Α. 15 MS. DOCTORS: I don't know. 16 Α. Yes. 17 18 BY MR. BONEBRAKE: 19 And on what basis did you include in Ο. 20 attachment 2 only those particular projects? 21 It's my understanding that partially due to Α. 22 the interaction with the MPS, I believe, and this particular program working in concert, that these pieces 23 24 of equipment may be installed.

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1 Ο. And if these pieces of equipment were to be 2 installed, would they be eligible for the CASA category 3 associated with air pollution equipment? 4 Α. I believe that is the intent. 5 MR. ROSS: I would like to clarify. This is just one 6 possible list of controls that Amren may install that we 7 developed through press releases that Amren has put out there and discussions with Amren. This may or may not be 8 9 the actual controls that they install in the future. 10 BY MR. BONEBRAKE: 11 I was going to ask about the source of the 12 Q. controls that are being predicted in attachment 2. Do you 13 14 have anything to add to that explanation that Mr. Ross 15 just gave? 16 Α. (by Mr. Cooper) No. 17 And if I understood you correctly, you were Ο. indicating that the controls referenced in attachment 2 18 19 are being predicted, subject to the caveat that Mr. Ross provided, as a result of the MPS provisions of the mercury 20 21 rule; is that correct? 22 Not entirely. I said the MPS, as well as this Α. 23 particular program in part. 24 Q. And then you have some columns with the

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headings "NOx," "SO2" and "PM" in that same portion of the table. Can you tell us what numbers -- what those numbers reflect?

4 Those numbers reflect what I believe would be Α. 5 the emission reductions had those pieces of controls been applied to the particular units. And as Table 2 shows, 6 7 I've provided, again, a range of control levels, 8 80 percent and 90 percent, which I believe are both conservative, as well as the .02 and .01 for the baghouse. 9 10 Did you assume a level of future generation to Ο. calculate the emission reduction? 11 12 Α. No, I did not. 13 Q. So, can you describe for us the calculation 14 beyond the emission rates? 15 Α. It's simply a subtraction of the control 16 efficiency that the device would provide. As you can see in attachment 2, I've provided -- I attempted to use 2002 17 as my base year since that's what was provided by EGAS. 18 19 As labeled there, apparently row 22 from my self 20 spreadsheet, I'm not sure which Newton units that is, but 21 in 2002, it would emit 3,037 tons, an 80 percent reduction would result in the difference, and then the summation is 22 provided at the bottom. So, it's simply plant submitted 23 24 data minus what I had hoped was a conservative estimate of

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1 that particular control device's emission rate -- or 2 control device's control level, and it's simply a 3 difference. That's all it is. 4 5 BY MS. BASSI: 6 Q. What does "CONT" mean? 7 Α. It's an abbreviation for "control". 8 MS. BASSI: Oh, control. Dah. 9 10 BY MR. BONEBRAKE: And I did have a related question for you on 11 Ο. 12 attachment 2. For the NOx column, for instance, you have "607" and then "443," and then below that you have a 13 14 number to be non-applicable. 15 Α. (by Mr. Cooper) Correct. From the information, as Jim stated, it's my understanding that 16 17 Coffeen, Duck Creek, Edwards and Joppa will be installing no control device that would be applicable to the CASA. 18 And I look at "607" and "443," and I go down 19 Ο. to the bottom, and I come up with a number different from 20 21 4202. 22 That's the difference. The column, I believe, Α. 23 is summating the reduction. Then what does the "607" number represent? 24 Q.

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1 Α. I believe it is the 20 percent leftover. 2 Q. I see. 3 Α. Perhaps it's -- Again, this was a work in 4 progress, not totally flushed out. 5 ο. I'm not a mathematician, but even those 6 numbers caught my eyes. 7 Α. Well, I sympathize. 8 Q. And then the predicted emission reduction as a 9 result of the projects identified in attachment 2, and you 10 have these emission reductions on Page 1, what would be necessary to determine the level of allowances that would 11 12 become available to Amren and EEI as a result of those predicted emission levels? 13 In reference to the CASA? 14 Α. 15 ο. In reference to the CASA. 16 You would need to know the particular Α. 17 variables in their appropriate equations, the megawatt 18 hours generated, the two-year baseline emission rate 19 before based on CEM, and then control periods average emission rate based from the CEM. Using those three 20 21 pieces of data and running the math would calculate the 22 number of allowances specified by the relevant equation. And has the Agency made any of those 23 Q. calculations? 24

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1 A. Not to my knowledge.

2 Q. Mr. Ross, any further information? 3 Α. (by Mr. Ross) What calculations are those? 4 Any prediction of the level of allowances that Q. 5 would become available to Amren and EEI as a result of the 6 pollution controls that are identified in attachment 2 or 7 that otherwise are predicted? 8 Α. (by Mr. Ross) Yes, we have estimated those. 9 (by Mr. Cooper) I misspoke. Α. 10 And who is the "we" in the royal we's? Ο. (by Mr. Ross) Agency staff. 11 Α. Does it include Mr. Cooper? 12 Q. (by Mr. Ross) He was involved. 13 Α. 14 And are the level of allowances predicted to Q. be available -- Well, first step. The clean coal 15 technology category of CASA is -- Actually, the pollution 16 17 control upgrade category, you have that separately 18 identified in your Table 1 as a category for which there would be CASA allowances available; is that correct, 19 20 Mr. Cooper? 21 Α. (by Mr. Cooper) Correct. 22 And the number of annual allowances that would Ο. be available under the program is 3,811 for the pollution 23 24 control upgrade category?

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A. Yes.

1

2	Q. And that's a category from which allowances
3	would be made available to Amren as a result of pollution
4	control activities that are identified in attachment 2; is
5	that also correct?
6	A. Amren and anyone else eligible. As a point of
7	clarification to your prior question, I thought you or
8	I interpreted your question to mean the entire gamut of
9	categories. I did misspeak.
10	Q. And the calculations that have been made with
11	respect to expected Amren CASA allowances under the
12	pollution control upgrade category, does that number
13	exceed 3,811?
14	A. I believe it does.
15	Q. So, it's the Agency's expectation that the
16	pollution control upgrade category will be oversubscribed
17	solely based upon Amren's anticipated pollution control
18	activity?
19	A. It could be.
20	
	Q. It sounded like you've made a calculation that
21	Q. It sounded like you've made a calculation that indicates it will be; is that correct, Mr. Cooper?
21 22	
	indicates it will be; is that correct, Mr. Cooper?
22	indicates it will be; is that correct, Mr. Cooper? A. Calculations make certain assumptions. I

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1 on. To be eligible for that category, first you have to 2 install controls. 3 Ο. I had a related question for you, Mr. Cooper, 4 and it's in Section 225.460, subsection 3. 5 MS. DOCTORS: What did you say? 6 MR. BONEBRAKE: 225.460, subsection 3. 7 BY MR. BONEBRAKE: 8 9 Are you with me? Q. 10 Α. (by Mr. Cooper) Energy efficiency and --Right. 11 Q. I believe I am. 12 Α. 13 And this provision of the regulation carves Q. out certain activities from eligibility for CASA 14 allowances; is that correct? 15 16 I believe that is its attempt. Α. 17 And the first line of that subpart refers to Ο. 18 energy efficiency, conservation, renewable energy of clean technology. Do you see that? 19 Yes, I do. 20 Α. 21 Q. And I think, as we discussed yesterday, clean 22 technology includes both air pollution control upgrades and clean coal technology projects; is that correct? 23 Α. 24 Yes.

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Q. So, d would be -- subpart d would be applicable generally speaking to assessing whether or not air pollution control projects would be eligible for CASA allowances?

A. Air pollution control projects would be
select. So, air pollution control would be eligible for
CASA, yes.

8 Q. But, I mean, one of the assessments that would 9 need to be made is whether air pollution controls projects 10 are eligible pursuant to the terms of subpart d of this 11 particular section; is that correct?

12 A. Yes.

Q. Now, the provision regarding eligible projects here reads, "Energy efficiency and conservation, renewable energy or clean technology projects listed in subsections a and c through this section shall not include," and then there's a number of headings. The first category is nuclear power projects; is that correct?

19 A. Yes.

20 Q. And the next category is projects required to 21 meet emission standards or technology requirements under 22 state or federal law or regulation (except for the 23 installation of a baghouse). Do you see that, Mr. Cooper? 24 MS. DOCTORS: I think we made a motion to amend that

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1 section.

2	MR. BONEBRAKE: I don't think that language has
3	changed, but you can let me know if the phrase I just
4	read I don't think was affected.
5	MS. DOCTORS: I'm just going to All right.
б	MR. BONEBRAKE: Did you have a different view?
7	MS. DOCTORS: Just keep going. I'm sorry I
8	interrupted you.
9	MR. BONEBRAKE: I want to make sure that I'm working
10	with the current set of rules.
11	MS. DOCTORS: Let's work off the motion and the
12	current language.
13	MR. BONEBRAKE: We can do that. We can turn to the
14	attachment to the motion, but the particular phrase that I
15	just read, I believe, has not been affected by the red
16	lining of this document. 225.460d. It's on Page 3 of the
17	attachment of the motion. Actually, that's a section in
18	the motion.
19	
20	BY MR. BONEBRAKE:
21	Q. And I had just read to you, Mr. Cooper, the
22	language relating to state or federal law regulation. Do
23	you recall that?
24	A. (by Mr. Cooper) Yes.

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1 Ο. And is the MPS, if adopted, a state 2 regulation? 3 MS. DOCTORS: I'm going to have Mr. Ross answer these 4 questions. 5 Α. (by Mr. Ross) Yes, it would be contained in 6 the state regulation, but it's not our intent to exclude 7 those from the use of the CASA. MS. BASSI: Sorry? 8 9 The MPS would be a state regulation -- part of Α. 10 a state regulation in the proposed Illinois mercury rule, provided that it's adopted as proposed with the MPS 11 12 contained therein, but it's certainly not our intent to exclude those from -- those projects from utilizing the 13 CASA. 14 15 16 BY MR. BONEBRAKE: 17 In fact, the MPS, does it not contain emission Ο. 18 standards? 19 Α. (by Mr. Ross) It does. So, under the reading of this language of this 20 Ο. 21 provision, Mr. Ross, it certainly seems that MPS projects 22 would be carved out of eligibility for CASA; would you 23 agree? (by Mr. Ross) I think it's something that we 24 Α.

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need to review. One point may be that the MPS is
 voluntary. How that works in here -- Certainly we
 appreciate you bringing that to our attention. Again,
 it's something that we'll need to review to ensure that
 that is not the case.

MR. KIM: Before Mr. Ross goes any further, I wanted 6 7 to point something out that was brought to my attention, 8 and this kind of plays on what you're bringing up, Mr. Bonebrake. In the motion to amend that we filed 9 10 yesterday that we provided copies of yesterday, we made 11 some language changes to Section 225.460 and 225.465. 12 Those changes were intended to also be reflected in Sections 225.560 and 225.565. So -- Which was an 13 14 oversight, and I think largely attributed to the case in 15 which the motion to amend was prepared. So, what I intend 16 to do over the lunch break is, I guess, put together 17 another motion and just include those two sections that did not have that language. Maybe what we can do in 18 19 recognition of your question, however, is we can discuss 20 this over the lunch hour, and if some further -- it's as 21 good an opportunity as ever -- if there's some way we can clarify that point you just made and maybe have that 22 23 reflected in the language, then we'll take a look at that 24 because I understand what your point is. But you

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understand I think what Mr. Ross was saying, as well, but there was a distinction we were trying to make, and maybe that's not as well borne out as maybe we could have had it.

5 MR. BONEBRAKE: We have to work with regulatory 6 language, and I understand Mr. Ross' comment regarding 7 intent, but obviously one of our concerns is the language 8 of the proposed rule itself.

9

10 BY MR. BONEBRAKE:

And, Mr. Ross, I did have a follow-up about 11 ο. the distinction on the grounds of voluntary consent, and 12 13 Mr. Cooper in his testimony also suggested that there were 14 certain kinds of activities that were going to be carved 15 out because they were deemed not to be voluntary, and can 16 you provide for us an explanation as to what the Agency 17 views to be an involuntary project that would not be CASA 18 eligible?

19A.(by Mr. Ross) Well, I think one example would20be projects that are required to be undertaking --21undertaken as a result of a court order or consent decree22or consent order.

Q. Do regulations impose requirements?A. (by Mr. Ross) Yes, they do.

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1 Ο. And when applicable, regulated entities are required to comply with them? 2 3 Α. (by Mr. Ross) Absolutely. 4 Q. Compliance is not voluntary; is it? 5 Α. (by Mr. Ross) No, it is not. 6 I'm wrestling with the distinction then that Ο. 7 you are attempting to draw between compliance with the regulation and compliance with a consent decree or court 8 9 order. 10 Α. (by Mr. Ross) Well, I think a consent decree or a consent order is somewhat punitive in nature. It's 11 usually the result of an enforcement action that's been 12 undertaken and where the parties are agreeing to a 13 14 resolution. 15 Don't consent decrees typically, in your Ο. experience, Mr. Ross, contain provisions that do not 16 17 concede liability? 18 Yes, I have seen that language. Α. And, in fact, aren't they typically viewed to 19 Q. be a settlement document by which parties resolve their 20 21 disputes? 22 Α. Yes. Just like the MPS resulted from discussions in 23 Q. 24 the first instance between the Agency and some company; is

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that correct -- to resolve regulatory language?

A. I don't believe the arrival at the MPS revisions to the rule were a result of any enforcement action and certainly not punitive in nature. It was meant as additional flexibility for that rule given the fact that we would achieve additional reductions through the emission limits imposed by the MPS.

8 Q. Are all enforcement actions punitive in9 nature?

10 A. I don't believe so.

11 Q. So, for those that are not punitive in nature, 12 do you have a different response with respect to whether 13 compliance --

MS. DOCTORS: I'm going to object to this line of questioning. We've already said that we're going to look at if there's some ambiguity as to what is meant by the language and whether something is a voluntary project or not. So, I think that covers that issue, that there's something that's unclear here, and we're going to take a look at it.

HEARING OFFICER KNITTLE: Mr. Bonebrake, I think they're going to revise that language, and if you have further questions that --

24 MR. BONEBRAKE: Well, there's a point of

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1 clarification that needs to be made here. I think what 2 we've heard from the Agency is that they're going to look 3 at the language that deals with the state or federal law 4 or regulation to make clear their apparent not to carve 5 out MPS projects. There is a separate provision -separate language in the same provision that refers to 6 7 projects used to meet the requirements of a court order or 8 consent decree, and I have not heard from the Agency that 9 it is going to be looking to revise that language. If so, 10 then perhaps further discussion could be tabled, but I have not heard that. 11

12 Α. (by Mr. Ross) No. I believe we made a decision that the installation of controls and the 13 14 achievement of emission rates required by a consent decree 15 or consent order are not eligible to some extent for 16 allowances from the CASA. They are eligible, as the 17 amendment identifies, for the amount of over-compliance they achieve. "Over-compliance" being defined as by the 18 19 amount they go beyond the levels specified in any consent 20 order or consent decree.

21

MR. BONEBRAKE: Excuse me just a moment.

22

23 BY MR. BONEBRAKE:

24 Q. Mr. Ross, is it true that parties in

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litigation will typically enter into consent decrees
 voluntarily inasmuch as the alternative would be to go to
 trial and obtain a court order?

4 MR. KIM: I'm going to object to the relevance of 5 this question. I believe it's already stated that a 6 decision was made that we were not going to include 7 certain projects. We're now getting into the what's and 8 the whereabouts of enforcement actions and consent 9 decrees, and I don't understand the relevance of that.

10 MR. BONEBRAKE: If I may. My understanding has been 11 that the Agency's decision regarding consent decrees is 12 predicated upon the distinction between voluntary and 13 involuntary, and I'm trying to probe the Agency on the 14 issue of what is voluntary and what is the --

15 HEARING OFFICER KNITTLE: Mr. Ross we understand.16 Mr. Kim, anything further?

MR. KIM: Well, again, short of getting into an oral 17 argument about whether or not an entry into a consent 18 19 decree or finding yourself in a situation where you're 20 negotiating a consent decree is the result of an 21 enforcement action, which clearly implies some sort of at least violation on the part of a party, I just don't see 22 the point of getting into this, other than we've made a 23 24 decision, as expressed by Mr. Ross, of certain types of

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1 projects would not be included within this language, and 2 it's not -- I understand what Mr. Bonebrake is saying. If 3 he wants to ask Mr. Ross what his opinions are about 4 whether or not a consent decree is voluntary or 5 involuntary, I don't see that's anything other than maybe an exercise on what Mr. Ross' views are of the enforcement 6 cases, but that has nothing to do with the language of the 7 8 rule. We've already expressed why we made our decision. 9 HEARING OFFICER KNITTLE: I'm going to overrule that

10 objection. I do think that the Agency's rationale as to 11 why this language is in there as opposed to any other 12 language is something we want to hear. So, you can go 13 ahead with the questions, Mr. Bonebrake. Mr. Ross?

14 (by Mr. Ross) Well, I would like to clarify. Α. 15 He's made the implication that that is the reason that we 16 excluded companies that have entered into a consent order 17 from using or from being eligible for the CASA. That is part of the rationale. Another part of the rationale 18 19 would be that there is no need for incentive to be 20 provided to companies that are already required in a 21 consent order to install controls. CASA, as we've stated numerous times, its primary purpose is to provide an 22 23 incentive, which in turn provide environmental benefits. 24 So, if the company is already required to meet certain

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emission limits and install certain controls as a result 2 of a consent order, there's absolutely no need for an 3 incentive from the CASA. 4 5 BY MR. BONEBRAKE: 6 Well, if a company is already required by the Ο. 7 MPS to install certain pollution controls, isn't that the 8 same incentive question? 9 (by Mr. Ross) The MPS is voluntary, and they Α. 10 are not required to install any controls. They are just required to meet certain emission rates. I believe in one 11 particular consent order for Dynegy, it spells out 12 specifically what control equipment must be installed to 13 14 some level and emission rates or caps that must be 15 achieved. 16 HEARING OFFICER KNITTLE: Ms. Bassi? 17 BY MS. BASSI: 18 Under the MPS, I believe you just stated that 19 Q. 20 the MPS requires sources that opted to meet certain 21 emission rates; is that correct? 22 (by Mr. Ross) That's correct. Α. 23 Q. Does the MPS also preclude trading emission allowances? 24

1

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1 Α. (by Mr. Ross) To the extent that those allowances were obtained as a result of actions taken to 2 3 comply with the MPS, there are restrictions on those 4 allowances. 5 ο. And, therefore, if a source cannot obtain 6 allowances to meet those emission rates that are imposed 7 by the MPS, does it have a choice, other than to shut down 8 or add equipment or change how it operates, in order to 9 comply with those emission rates? 10 Α. (by Mr. Ross) The MPS also allows that source if needed to comply to purchase allowances, to do whatever 11 12 needs done to comply. So, after 2012, the sources purchase 13 Q. 14 allowances to meet the emission rate? 15 Α. (by Mr. Ross) To meet the emission rates of the MPS? 16 17 Ο. Yes. (by Mr. Ross) No, it cannot. 18 Α. 19 Q. Okay. (by Mr. Ross) But to comply with CAIR, it 20 Α. 21 can. 22 That wasn't the question. It was to comply Q. with the MPS. So, the question is, in order to comply 23 with the MPS, is there a choice, other than to install 24

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control equipment or change operation or shut down?
 A. (by Mr. Ross) I would concede that the
 logical way to comply with the MPS would be to install
 control equipment.

- 5 6
- BY MR. BONEBRAKE:

7 ο. The motion to amend, Page 3, contains in addition to 225.460, in the second part of that addition 8 9 in red line indicates that CASA allowances may be 10 allocated for projects used to meet the requirements of a court order or consent decree entered into on or after 11 12 May 30, 2006. If the court order/consent decree does not 13 specifically preclude to whom such allocations, so, is it 14 correct that the Agency is making distinctions regarding 15 the eligibility of projects undertaken pursuant to the 16 consent decree based upon the date of the consent decree? (by Mr. Ross) Yes, I think that's true. 17 Α. What is the rationale for that, Mr. Ross? 18 Ο. 19 (by Mr. Ross) Well, we didn't want to Α. 20 predetermine that any future consent decrees should not 21 allow the use of a CASA. That should be determined in the 22 settlement discussions of the consent decree. 23

24 BY MS. BASSI:

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1 Ο. What if the Agency isn't a party to the consent decree? 2 3 Α. (by Mr. Ross) Well, then I assume the parties 4 will be aware of the regulations, and they will discuss it 5 accordingly. The Agency, I anticipate, would be a party 6 to a consent decree. 7 Ο. This doesn't distinguish that I can see, and 8 perhaps I'm missing it, and you can point it out. It's 9 just says "a consent decree." 10 Α. (by Mr. Ross) That's true. There could be a consent decree that deals 11 Ο. 12 with SE security issues; is that not right? I'm not sure if I understand the relevance --13 Α. 14 Well, that's kind of the point. Q. 15 Α. (by Mr. Ross) I'm just uncertain as to the implications of the question. If there's a consent order 16 17 or consent decree, does it have an environmental issue at 18 the core? It doesn't --19 Ο. HEARING OFFICER KNITTLE: Mr. Rieser? 20 21 22 BY MR. RIESER: Would a consent decree under the SCP be likely 23 Q. to require the installation of pollution control equipment 24

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1 or set emission limits?

-	
2	A. (by Mr. Ross) No, it would not.
3	Q. And would another distinction between a
4	consent decree entered before May 30th, the date the
5	rule is filed May 30th was the date the rule was filed?
6	A. That's correct.
7	Q. Another distinction would be that the consent
8	decree entered into May 30th would not obviously since
9	the rule wasn't there, there was no opportunity for the
10	Agency to decide how that worked on pursuant to the
11	consent decree would coordinate with the availability of
12	the allowances under CASA because it didn't exist at that
13	<pre>time; correct?</pre>
14	A. (by Mr. Ross) Correct.
15	Q. But approved consent decrees after that date
16	that require the installation of control equipment, the
17	Agency now has the opportunity to decide whether it should
18	step in and limit CASA allowances or not limit CASA
19	allowances depending on the status?
20	A. (by Mr. Ross) That's correct.
21	
22	BY MR. BONEBRAKE:
23	Q. That answer assumes, does it not, Mr. Ross,
24	that the Agency is a party to the consent decree?
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1 Α. (by Mr. Ross) That answer did assume that the 2 Agency was a party to the consent decree. 3 Q. If the Agency is not a party to the consent 4 decree, then the Agency has no control over the provisions 5 of the consent decree that might allow a company to 6 participate in the CASA; is that correct? 7 Α. (by Mr. Ross) Could you repeat the question? Sure. My question was, if the Agency is not a 8 Q. 9 party to a consent decree, then the Agency has no control 10 over whether or not the consent decree contains a provision that permits participation in CASA? 11 (by Mr. Ross) That's correct. 12 Α. HEARING OFFICER KNITTLE: Mr. Rieser? Go ahead. I 13 14 didn't know you weren't finished. (by Mr. Ross) However, I would say unless the 15 Α. -- as the language is written, unless the consent order or 16 17 consent decree precludes the affected party from utilizing 18 the allowances of the CASA, then in that case, they would be able to utilize the allowance. 19 20 BY MR. BONEBRAKE: 21 22 So, parties that enter into consent decrees Q. after May 30th, 2006 may well have no preclusion on using 23 CASA allowances? 24

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1 Α. (by Mr. Ross) That may be a result of a 2 consent order or a settlement agreement, that's correct. 3 Ο. As compared to those who entered into consent 4 decrees before May 30th, 2006, as you've described, 5 they're not eligible for CASA allowances simply by virtue of the fact that they entered into a consent decree 6 7 earlier in time; is that correct? 8 Α. (by Mr. Ross) No, that is not correct. They 9 are eligible for CASA allowances for over-compliance, the 10 amount they go beyond what is already required. Okay. I appreciate --11 Ο. (by Mr. Ross) And we are aware of some 12 Α. consent orders existing. We examined them. They do 13 14 contain trading restrictions. They already require 15 control equipment to be installed. They require certain emission rates to be met. And there is absolutely no 16 17 reason to provide an incentive or a reward, if you want to use that term, for the installation of controls that are 18 19 already required as a result of any existing consent 20 order. 21 ο. And I appreciate your clarification regarding 22 over-compliance because that was something that was

24 I appreciate that clarification.

23

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incorrectly assumed not to be present in my question. So,

MR. KIM: First of all, can I ask just one or two
 questions to maybe further clarify this?

3

4 BY MR. KIM:

5 ο. Mr. Ross, let's assume for the sake of 6 argument, as Mr. Bonebrake suggested, there may be a 7 consent decree that's negotiated in which the Illinois EPA 8 is not a party to those negotiations. If such a consent 9 decree does involve discussions concerning emission rates, 10 what would the regulations -- what regulations would be the basis of those discussions? Where would those 11 12 regulations be found?

A. (by Mr. Ross) I believe the multi-pollutant standard of the mercury rule would be one regulation that would need to be looked at. Another would be CAIR as proposed in Illinois and existing Board rules and other applicable rules.

Q. So -- And specifically in terms of the CASA, what rules would be looked to in terms of -- Strike that. So, if that's the case, any party that's negotiated, those cases would be looking at the -- as you've just discussed, assuming that is adopted by the Board and JCAR, the Illinois mercury rule and the Illinois CAIR rule; is that right?

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1 Α. (by Mr. Ross) That's correct. 2 ο. And where are the provisions discussing the 3 CASA that we are talking about today; which set of rules 4 are those found in? 5 Α. (by Mr. Ross) The proposed CAIR rule. 6 And, so, is it your assumption then that any Ο. 7 party, regardless of whether the Illinois EPA is or is not 8 involved, that is negotiating a consent decree with an 9 identified respondent or defendant would be looking to all 10 relevant provisions of the Illinois CAIR rule and the Illinois mercury rule? 11 12 Α. (by Mr. Ross) That is correct. That would be a responsible thing to do in negotiating a consent order. 13 14 And we generally find our federal counterpart Q. 15 to be somewhat responsible in that? (by Mr. Ross) For the record, yes. 16 Α. MR. KIM: That's all I have. 17 HEARING OFFICER KNITTLE: Mr. Rieser? 18 19 BY MR. RIESER: 20

21 Q. Well, just following up on that line of 22 questioning, are you aware -- and you may not be the right 23 person to answer this question, Mr. Ross, but are you 24 aware of a consent decrees that require either setting

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1 emission limits for an Illinois source or requiring 2 controls, I should say, for a coal-fired generating 3 facility in Illinois in which the State of Illinois was 4 not a party? 5 Α. (by Mr. Ross) I am not aware of any or at 6 least where consultation was not sought. 7 8 BY MS. BASSI: 9 To follow-up a little before on this Ο. 10 distinction between before and after May 30th, 2006 and 11 how the Agency views consent decrees negotiated before and 12 after, I believe one of the things that you mentioned is that a consent decree in the Agency's mind is a result of 13 an enforcement action; is that correct? 14 15 Α. (by Mr. Ross) My understanding is typically that is the case. 16 And what is the distinction between -- And 17 Ο. setting aside the -- Well, no, not setting aside the 18 19 incentives. Why is it more appropriate to provide an 20 incentive for someone in an enforcement action to enter 21 into a consent decree after May 30th than before? MR. KIM: I'm going to object. This question has 22 23 already been asked and answered. MS. BASSI: I don't think we've talked about 24

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1 incentives.

2	MR. KIM: I believe that the distinction was made
3	concerning dates, and that's what was answered.
4	HEARING OFFICER KNITTLE: I tend to agree, but let's
5	let Ms. Bassi ask the question, and then we'll move on.
б	
7	BY MS. BASSI:
8	Q. The question is, why would you provide an
9	incentive to a source entering into a consent decree after
10	May 30th?
11	A. (by Mr. Ross) We are providing an incentive
12	to all sources to install additional control equipment. I
13	think we are not making a prejudgment that the consent
14	order would preclude them from any incentives provided by
15	the CASA.
16	Q. If a consent order does not contain an
17	admission of liability, regardless of when it's entered
18	into, is there some kind of prejudgment involved that
19	there is liability if someone enters into a consent
20	decree?
21	MS. DOCTORS: Objection. This is calling for him
22	to
23	HEARING OFFICER KNITTLE: Calling for what?
24	MS. DOCTORS: to offer a legal opinions about

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1 HEARING OFFICER KNITTLE: I'm going to overrule. I think it's relevant to hear what Mr. Ross has to say. 2 3 Α. (by Mr. Ross) Well, I would say I can't 4 speculate on the intent of why a consent decree is entered 5 into, or in a future case. There may be a multitude of 6 reasons. The most obvious one that comes to mind is the 7 result of an enforcement action. HEARING OFFICER KNITTLE: Go off for a second. 8 9 10 (A brief recess off the record.) 11 HEARING OFFICER KNITTLE: Let's go back on the 12 record. Ms. Bassi or Mr. Bonebrake, I don't know which 13 14 one wants to go first. 15 16 BY MR. BONEBRAKE: 17 Mr. Ross, in 225.640d, as we were talking 0. 18 about before, there is the reference to projects required to meet emission standards or technology requirement under 19 state or federal. There's also a reference to projects 20 21 used to meet requirements of a court order or consent 22 decree. In both instances, determination needs to be made 23 regarding what projects it needed to meet what requirement 24 whether it be a rule or a consent decree. How is that

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1 determination going to be made?

2 Α. (by Mr. Ross) I believe that would be part of 3 a CASA application, that the source would need to 4 elaborate on their reasons for installing control 5 equipment for the example that we're discussing. So, they would need to identify if that control equipment is being 6 7 put in place as a result of a consent order. 8 Or a regulation? Q. 9 (by Mr. Ross) Or a regulation as it currently Α. 10 reads. And is there going to be a formal application 11 Ο. 12 where it will have that information required, check off boxes and such? 13 14 (by Mr. Ross) We're still discussing that, Α. 15 whether we develop application forms or not. We would certainly provide some level of assistance in that area. 16 17 We've talked a little bit during this week Ο. about the fact that we could be seeing some beyond CAIR 18 19 rules and visibility rules in the future that would 20 include EGU's within their coverage. 21 I think we may see some future rules that may Α. include EGU's in their coverage, that's correct. 22 And to the extent that EGU's were to construct 23 Q. 24 projects in the future and there were such rules, how

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1 would the Agency go about determining whether projects 2 were being implemented to obtain CASA allowances from an 3 economic perspective or comply to future rule? 4 Α. (by Mr. Ross) I would think in the same 5 manner that I just stated, that they would need to address 6 that in their CASA application. 7 Ο. If a rule contains an emission standard but 8 not a specific requirement to install technology, if a 9 company installs a technology, is that required by a rule? 10 Α. (by Mr. Ross) To the extent that it's needed to meet the standard of emission standard, I would say, 11 12 yes. But apparently your intent nonetheless carves 13 Q. 14 out MPS out of that general proposition; is that correct, 15 Mr. Ross? 16 Α. (by Mr. Ross) That is correct. 17 BY MS. BASSI: 18 19 Q. And why is that? 20 Α. (by Mr. Ross) To provide an incentive for the 21 installation of controls. The MPS requires the meeting of 22 an emission rate, and it restricts allowances. It 23 addresses the use of any allowances obtained. We don't 24 want to remove the incentive to install controls.

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1 Ο. Can I throw out a hypothetical here? If the 2 Agency decides that -- You said the Agency may come back 3 and request -- seek further reductions from EGU's for 4 purposes of the SIP or RFP or whatever reasons. "RFP," 5 "reasonable further progress." If the Agency does that 6 and it does this by establishing an emissions limitation 7 on NOx, for example, that would be applicable to all EGU's in the state, does this cut into the number of allowances 8 9 that would be available under the CASA for the MPS? 10 (by Mr. Ross) I don't believe so. Α. And why wouldn't it, because this would be 11 Ο. 12 required by a different rule, even though you have the voluntary rule over here, which would be on top of that? 13 14 Wouldn't it reduce the number of allowances available 15 under the CASA from the MPS? (by Mr. Ross) I don't think so. It is a 16 Α. hypothetical situation. 17 Is it an unlikely hypothetical? 18 Ο. 19 (by Mr. Ross) I can't answer that. Α. We're 20 still evaluating the need for additional controls from 21 EGU's to meet our air quality goals. However, I think 22 they'd need to distinguish in a CASA application between controls that are installed to meet the MPS limits and 23 24 controls that are installed to meet the emission standards

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1 of any other regulation. 2 Q. Wouldn't they overlap? 3 Α. (by Mr. Ross) They may or may not. 4 5 BY MR. BONEBRAKE: 6 ο. Is the cap in a cap and trade program an 7 emission standard? (by Mr. Ross) No, not technically speaking. 8 Α. 9 So, when the proposed rule refers to "emission Q. 10 standards," can you define for us what that term means? "An emission standard" is, in my mind -- there 11 Α. may be a legal definition, but in my mind, it's a rate or 12 a -- I would say a rate of emissions that's required of a 13 unit to be at or below. 14 And is the term "emission standard" defined 15 ο. anywhere in the proposed rule? 16 17 MS. DOCTORS: I'm referring Mr. Ross to Section 227, 18 225.130. The pages are not numbered. (by Mr. Ross) The answer is, no. 19 Α. MS. DOCTOR: It's not there. 20 MR. BONEBRAKE: I think we can take a break at this 21 22 point. 23 HEARING OFFICER KNITTLE: Are we finished with consent decrees? 24

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1 MR. BONEBRAKE: I believe so. HEARING OFFICER KNITTLE: Let's go off the record, 2 3 please. 4 5 (A brief recess off the record.) 6 7 HEARING OFFICER KNITTLE: Let's get back on the record then. Mr. Cooper, you're still being questioned is 8 9 my understanding. 10 MR. COOPER: Somewhat. HEARING OFFICER KNITTLE: And, Ms. Doctors, do you 11 have anything to add before we get started with the 12 questioning again? 13 MS. DOCTORS: No, I don't have anything to add. 14 HEARING OFFICER KNITTLE: I think Mr. Bonebrake. 15 16 17 BY MR. BONEBRAKE: 18 I have some more questions for Mr. Cooper, and 0. we were talking about Exhibit 5, and I had a couple 19 follow-ups regarding calculation that you've mentioned you 20 21 had done with respect to CASA allowances in the pollution 22 control upgrade category. 23 (by Mr. Cooper) Again, this does not Α. calculate allowances. 24

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1 Ο. I know, but we did talk about whether or not 2 you had made a calculation about anticipated CASA 3 allowances for Amren and EEI. Do you recall that? 4 Α. Yes, I do. 5 ο. Okay. And I think you testified that you 6 anticipated that the allowances that would be made 7 available to these companies as a result of the pollution control projects that were identified in attachment 2 8 9 would fully exhaust the pollution control upgrade 10 category? 11 Α. It had the potential. 12 Q. And would that exhaustion then be, in fact, assuming it occurs, for a period of 15 years? 13 14 To the extent that there were no other Α. 15 eligible projects, but in the current structure, the 16 pollution control upgrade category is eligible for 15 17 years. So, I would assume if they depleted it for the 18 first year, they would for the remaining 15. At some 19 point as new projects came in, there would be a pro rata 20 distribution. 21 ο. And in addition to pro rata distribution, that 22 scenario would implicate the possibility of flow-over allowances from other categories, as well? 23 24 Α. Yes, as discussed during the presentation

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1 yesterday, that is the intent of the flowings, that before we ever get to retirement, we waste -- from the EGU's 2 3 point of view, we waste nothing. Every allowance is put 4 to use. 5 Ο. And I had a couple related questions on that 6 for you, and I thought maybe we could use one of your 7 overheads to walk through a couple of the related questions, and I thought maybe 25. 8 9 Α. Slide 25? 10 Yeah, which is where you had the various ο. columns that were partly full and empty. I thought that 11 might be useful. 12 13 HEARING OFFICER KNITTLE: You're referring to Agency Exhibit 11, Mr. Bonebrake? 14 MR. BONEBRAKE: Let me make sure of the number that 15 16 is the overhead presentation by Mr. Cooper. 17 HEARING OFFICER KNITTLE: The CASA presentation? 18 MR. BONEBRAKE: That is correct. 19 BY MR. BONEBRAKE 20 21 ο. And slide number 25 is entitled 22 "Over/Undersubscribe Fill In"? Correct. 23 Α. And that page is bifurcated, and you have 24 Q.

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1 before filling and after filling; correct, Mr. Cooper?

A. Correct.

2

24

Q. Can you briefly explain then what you wereintending to portray on this slide?

5 A. The left-hand on the before filling is prior 6 to allocation during this period, and the right-hand side 7 is post allocation.

8 Q. And what are the circumstances then under 9 which allowances will be taken from one category that's 10 undersubscribed and placed into another category that's 11 oversubscribed?

12 Α. I believe, as explained yesterday, the only 13 circumstance is after a category has filled to over twice 14 its value, and at that point, as explained yesterday and, 15 I believe, in the new language, which clarifies our 16 intent, it first goes to those categories that are 17 oversubscribed, as the picture details, on a pro rata basis, and then if there is surplus after those needs have 18 19 been met, it continues to fill to the remaining categories 20 that have yet to double, and that's denoted in the 21 right-hand picture. I don't know if you have a color copy, but it's the very small blue squares. Again, the 22 23 aim being we want to waste nothing.

Q. How would -- Assuming there's a situation in

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1 which there are multiple oversubscribed categories like in 2 your scenario as depicted on slide 25 and there's an 3 undersubscribed category where there is more than two 4 times the base amount of allowances. So, therefore, we're 5 asking the question of moving these allowances to another category. How is it that the Agency will decide which of 6 7 the undersubscribed categories will receive how much? 8 It's pro rata. There's no decision. The Α. 9 eligible projects will get as much pro rata as can be 10 given. It's deterministic. 11 Ο. Well, for instance, in the right portion of your slide 25, you have the blue amounts there that are 12 13 showing some allowances that are going into those 14 categories; is that correct? 15 Α. That's the intent, yes. 16 Q. And would it be anticipated by the Agency that the amounts of oversubscribed allowances that would go 17 into the undersubscribed categories would be at the same 18 19 level in each of the categories? 20 Α. No. At that point, it is also pro rata. 21 ο. When you use the term "pro rata" here, can you describe what you mean by that? 22 23 Α. The mathematical percentage. 24 Q. I guess what I'm struggling with, it sounded

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1 to me like the first thing that would happen is that the 2 oversubscribed categories would be replenished; is that 3 correct? 4 Α. Yes. 5 ο. And then the second thing that would happen is 6 that those who had not previously received sufficient 7 allowances would be made whole? 8 Α. No. 9 Okay. Then maybe I misunderstood. Could you Q. 10 describe again the sequence? I would refer back to slide 24. Does that 11 Α. 12 answer your question? Well, your second bullet says, "Excess for the 13 Q. 14 double category will pro rata supplement to the 15 oversubscribed categories first, then pro rata fill all others that are not yet doubled." And when you're using 16 17 the term "pro rata supplement to the oversubscribed 18 categories first," I guess one of the questions that that 19 raises in my mind is, will the allowances that get 20 transferred then go first to the companies in the 21 oversubscribed category that previously received only a pro rata portion of their otherwise eligible allowances? 22 I believe so. 23 Α. 24 Q. Then once those companies are made whole, then

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what would be the next step in terms of filling the
 oversubscribed category?

Α.

3

I'm at a bit of a loss.

4 (by Mr. Davis) I believe what you're asking, Α. 5 in the first round where it says "before filling," what Mr. Cooper means by "pro rata" is pro rata based upon the 6 7 amount of oversubscription. For instance, if one category 8 was oversubscribed by 90 allowances and one category was oversubscribed by 10, then they would be filled 90 percent 9 in the one that is oversubscribed by 90, 10 percent in the 10 11 one oversubscribed by 10. In the second one, it's the 12 same system, except it's pro rata in proportion to the 13 category size and how much that category may need to get 14 to double its size.

15 So, for instance, if the EE/RE category requires 100 16 allowances to get to double the size and, say, the early adopters requires 200, the early adopters would get twice 17 the amount of -- and perhaps if there's only 75 allowances 18 19 to go to spill in there, the early adopters needing 75 --20 or needing twice the amount would get 50 of the 75, and 21 the one needing half as many to be fully up to double would be getting 25, meaning half the amount. So, it's 22 23 pro rata based upon the need and the size of the category 24 on the second one. And the same system applies to the

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1 oversubscription, the pro rata of the oversubscription and 2 then pro rata in the second round proportional to the need 3 in the category. 4 Α. (by Mr. Bloomberg) Just to add, that's pretty 5 well laid out in the motion to amend. Can you point us to the particular provision 6 ο. 7 to make sure we're all --8 Α. (by Mr. Bloomberg) 225.475b, 2 and 3 in 9 particular. 10 Α. (by Mr. Davis) And I should note, in both 11 cases, the oversubscribed categories would reach zero at 12 the same moment based upon the math, and, also, if all were not oversubscribed, all would reach double their size 13 14 at precisely the same moment. 15 And when you were describing, Mr. Davis, the Ο. 16 two-step process with the two different pro rata 17 determinations, were you referring essentially to the first step being reflected in subsection (b)(2) of 225.475 18 19 and then the second step being reflected in subsection 20 (b)(3)? 21 MS. DOCTORS: I'd like to clarify. Are you talking 22 about the initial allocations of the CASA, or are you talking after the initial allocations from the CASA that 23 24 occurred and what we're going to do with the extra

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1 allowances?

2 MR. BONEBRAKE: What we're going to do with the extra 3 allowances. 4 Α. (by Mr. Davis) Yes, that would be (b)(2) and 5 (3). 6 HEARING OFFICER KNITTLE: Mr. Rieser? 7 8 BY MR. RIESER: 9 With respect to (b)(2) in the proposed amended Ο. 10 rule, my understanding from the discussion yesterday --Strike that. (b)(2) talks about allocating allowances pro 11 12 rata to projects rather than to categories. So, it strikes me that that is a change from how it was 13 14 originally proposed, in that originally, it's my 15 understanding that the additional -- extra allowances 16 would be distributed to the different categories and then 17 to specific projects. So, is it correct that now under 18 the proposed revision that it's going to projects and not 19 categories? (by Mr. Bloomberg) It's really the same 20 Α. 21 thing, in that the number of approved -- the number of 22 allowances for approved projects determine how oversubscribed a given category is. So -- I don't want to 23 24 start throwing out a bunch of numbers and getting confused

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1 here. If there were multiple projects in an 2 oversubscribed category, the overflow would go to that 3 category as much as possible and be divvied up pro rata 4 among those projects in that category. 5 ο. Does an oversubscribed category include one in 6 which projects had distributions -- previously had 7 distributions pro rata? 8 Α. (by Mr. Bloomberg) Yes. 9 In other words, there weren't enough Q. 10 allowances in that category to take care of all the 11 projects? 12 Α. (by Mr. Bloomberg) Yes. By definition, if a project doesn't have the 13 Q. 14 allowances asked for, it's in an oversubscribed category? 15 Α. (by Mr. Bloomberg) If it doesn't have the 16 allowances it was approved for. 17 Excuse me. Thank you. It's in an Ο. oversubscribed category. Okay. I understand. And, 18 19 actually, if I can just follow-up on the timing of this. 20 When -- We talked yesterday about when these things 21 happened, when these decisions got made. So, given a date 22 of October 1st set out in the regulations for when the Agency identifies allocable allocations, although it 23 24 doesn't allocate them, with respect to that date, when

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1 does this process described in (b)(2) and (b)(3) occur? 2 Α. (by Mr. Bloomberg) It would occur sometime 3 after October 1st but before the date when you have to 4 send the allocation in to USEPA. 5 ο. So, after the Agency decides what allocations 6 it is approving to distribute, then it can make a decision 7 as to what categories are oversubscribed and not and 8 re-distribute within that time frame? 9 (by Mr. Bloomberg) Yes. And let me make a Α. 10 slight correction. The proposed regulation says "by October 1st". So, it is possible the Agency could 11 determine the number approved prior to October 1st and, 12 13 therefore, run this whole thing at that point, but --14 MR. RIESER: Okay. 15 BY MR. BASSI: 16 17 Did you just say you anticipate it will be Ο. after October 1st? 18 19 (by Mr. Bloomberg) The regulation says that Α. 20 by October 1st, the Agency shall determine the number of 21 allowances that are approvable for allocation. So, if we 22 took our entire time and went to October 1st, then at some point after October 1st is when we would run the numbers 23 to see which overflows, where the overflow goes. 24

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Q. Okay. Thank you. I have a question about the motion to amend, if I may. On Page 9 of the motion to amend, at 225.450(a) and (c), yesterday we talked --4 450(a) is referring to the installation of watt meters, and yesterday we raised the notion that the installation of a watt meter will require an outage. Does someone recall that?

8 MS. DOCTORS: Just let the record note, you had given 9 a suggestion yesterday -- Mr. Bonebrake had given a 10 suggestion that there were other ways that units and 11 sources could measure gross electrical output, and that 12 perhaps in your comments, you would provide us with some 13 examples so we could amend to include some other device, 14 besides the watt meter, to meet this requirement.

15

16 BY MS. BASSI:

Q. Okay. The concern I was attempting to raise here is the January 1st date for installation of watt meters. I realize this is a little over a year into the future, and if an outage is required, do you anticipate that all of the units could install them if they weren't using some other approach?

A. (by Mr. Davis) Again, I would say that theAgency wasn't anticipating that anyone would have to

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1 install any new equipment to measure output.

2 Q. Okay.

3 A. (by Mr. Davis) And, so, to the extent that4 there may be an amendment there.

Q. Okay.

5

A. (by Mr. Davis) I think it's really a matter
of the definition of a watt meter for a system for,
measuring wattage or whether it looks like the spinning
wheel on the outside of your house.

Q. Okay. Thank you. With respect to 450(c) as in cat, this amendment says that "within 15 days of the effective date of this rule, that owner or operator has to report to the Agency gross electric output," or -- I assume it goes on to heat input. How will the sources know the effective date of this rule?

16 A. (by Mr. Bloomberg) Their lawyers will tell17 them.

18 Q. How will I know what the effective date of the 19 rule is?

20 A. (by Mr. Ross) Public notice. It will be in 21 the Illinois register. It will be on our web site. I 22 guess what type of notification do you believe is 23 appropriate for companies --

24 Q. I think 15 days is pretty short. It's even --

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1 And is it not the case that this is even less than the appeal time for the rule? In other words, the time for a 2 3 source to appeal this rule is longer than 15 days; is that 4 not correct? 5 MS. DOCTORS: This is an -- Objection. This is 6 asking for knowledge of the law. 7 HEARING OFFICER KNITTLE: Excuse me. I'll allow him to answer it. Mr. Ross? 8 9 (by Mr. Ross) I'm not certain of the appeal Α. 10 period for a rule. However, the 15 days, if reasonable argument could be made, if that needs to be longer, we 11 12 could look at that. 13 MS. DOCTORS: I have a Re-Direct. 14 BY MS. DOCTORS: 15 16 Mr. Bloomberg, do you know of any companies Q. 17 that have already submitted the information to us? 18 (by Mr. Bloomberg) Yes. Α. 19 BY MS. BASSI: 20 21 Q. Who are they? 22 Α. (by Mr. Bloomberg) Dynegy. 23 Q. And has anyone else? (by Mr. Bloomberg) No, but there's currently 24 Α.

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1 no other requirement. 2 Q. Okay. 3 4 BY MR. GIRARD: 5 ο. Could I ask a related question? Why do you 6 need the information within 15 days of the effective date 7 of this rule? 8 Α. (by Mr. Ross) I believe we need the 9 information as soon as possible to avoid the fifth 10 requirement, that is that US -- to prevent USEPA from doing another round of allocations, which would in turn 11 12 prevent us from implementing our allocations. So, we are 13 kind of in a race to allocate emissions with the USEPA. 14 MR. GIRARD: Thank you. MS. BASSI: What I have left is kind of a hodgepodge 15 16 of questions. So, just start in and let them be 17 hodgepodge? 18 HEARING OFFICER KNITTLE: Yes. Though when you start 19 the hodgepodge, you folks in the back row of the panel, if you're wanting to ask a question, could you please 20 21 identify yourself for the Court Reporter because I don't 22 think she knows your names. Mr. Bonebrake, do you have 23 questions for Mr. Cooper? MR. BONEBRAKE: Yeah. 24

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1 BY MR. BONEBRAKE:

2 Mr. Cooper, turning back to Exhibit 5, Q. 3 specifically Page 3, and your discussion of energy 4 efficiency, and in the first paragraph in that section you 5 discuss a Massachusetts EE/RE set-aside program; is that 6 correct? 7 Α. (by Mr. Cooper) Yes. And that would have been under the NOx SIP 8 Q. 9 Call? 10 Α. I assume. And that states the EE/RE set-aside program 11 Ο. had a total of 464 allowances; is that correct? 12 13 That is what it reads. Α. 14 And that compares to 9,150 annual EE/RE Q. set-aside allowances in Illinois; is that correct? 15 16 I'm not sure what you mean by "that compares Α. 17 to" it. 18 Well, the counterpart in the Illinois proposal Q. for EE/RE contains 9,150 annual NOx allowances; does it 19 20 not? I believe so. 21 Α. 22 Now, the term "commenced construction" is used Q. in various places in the regulations; is that correct, 23 Mr. Cooper? 24

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1 MS. DOCTORS: Are you referring to the definition for "commenced construction"? 2 3 4 BY MR. BONEBRAKE: 5 ο. Let's take an example. Let's see if I can 6 give you concrete. On Page 4 of your testimony, and in 7 the second full paragraph on Page 4, in the third sentence, you refer to fluidized bed coal combustion 8 9 projects, and then you use the term "commenced 10 construction". Do you see that in the sentence? (by Mr. Cooper) Yes. 11 Α. And then similarly in -- just as an example, 12 Q. of the rule, 225.460(f). 13 14 MS. DOCTORS: I'm sorry. Can you repeat that section 15 again? 16 MR. BONEBRAKE: 225.460(f) as in Frank. 17 Α. Yes. 18 BY MR. BONEBRAKE: 19 And subpart "f" uses the term "commenced 20 Ο. 21 construction"; does it not? 22 (by Mr. Cooper) Yes. Α. And similarly in 225.470, subpart (a)? 23 Q. MS. DOCTORS: Say that again. 24

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1 MR. BONEBRAKE: 225.470, subpart (a). 2 Α. Yes. 3 4 BY MR. BONEBRAKE: 5 Ο. Subparts 1 and 2 of subpart (a) also uses the 6 term "commenced construction"; is that correct? 7 Α. (by Mr. Cooper) Yes. I have looked in the definition section of the 8 Q. 9 rule, and somebody can correct me if I'm wrong, but I do 10 not see a definition of "commenced construction," although there are references to "commenced operation". 11 One second, please. 12 Α. Did you find a definition of "commenced 13 Q. 14 construction"? 15 Α. I do not believe in the specific proposal, but I believe we incorporate -- Part 201's definitions contain 16 17 both the definition for "commenced" and "construction". Well, 225.130, the lead in for the definition 18 0. section refers to incorporation of definitions from Part 19 20 211. 21 Α. It appears that it's not. I believe it's a 22 comment we need to take under consideration. What was the Agency's intended definition of 23 Q. "commenced construction"? 24

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1 Α. Exactly what is in 201, I believe. 201 definition is what is intended? 2 ο. 3 HEARING OFFICER KNITTLE: You'll be able to address 4 that issue with comments; correct, Ms. Doctors? 5 MS. DOCTORS: Yes, we'll be happy to address it in 6 comment after. 7 HEARING OFFICER KNITTLE: Ms. Bugel? MS. BUGEL: I just wondered if -- I have more 8 9 questions before we move on to the hodgepodge. I have 10 some more specific questions on --HEARING OFFICER KNITTLE: Sure. I'm not sure 11 12 Mr. Bonebrake is done. 13 MR. BONEBRAKE: Are these questions for Mr. Cooper? 14 MS. BUGEL: These are questions for the panel on the CASA. 15 16 HEARING OFFICER KNITTLE: I think these are 17 hodgepodge questions. 18 MS. BUGEL: Mine are not hodgepodge questions. My 19 questions are never hodgepodge. HEARING OFFICER KNITTLE: I'm sure they're very fine 20 21 questions. I don't think Mr. Bonebrake is finished yet. 22 MS. BUGEL: I will wait. MR. BONEBRAKE: Hang on just a second. I'm getting 23 close. I'm trying to find out which of my questions I 24

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1 have I have already dealt with. Give me just a minute. 2 3 BY MR. BONEBRAKE: 4 Q. Mr. Cooper, Page 8 of your written testimony, 5 in the "Economic Impacts" section --6 Α. (by Mr. Cooper) Yes. 7 ο. -- the second sentence reads, "In 1999, USEPA estimated the economic benefits that can accrue from a 8 9 five percent energy efficiency and renewable energy 10 set-aside into the NOx budget trading program across the SIP Call region," and it goes on from there. Do you know 11 if, in fact, set-asides under the NOx budget trading 12 program have had the effects predicted by USEPA? 13 14 (by Mr. Cooper) No, I do not. Α. 15 Ο. Can anybody on the panel address that 16 question? 17 MS. DOCTORS: I don't believe there's anybody on the 18 panel can answer your question. 19 BY MS. BASSI: 20 21 Ο. I have some questions about that particular 22 spot or issue. Oh, no, I don't. It was number five that was jumping out. Sorry. Back to my hodgepodge. And I 23 24 think we can move on to some other questions.

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1 HEARING OFFICER KNITTLE: Ms. Bugel, you want to start us off? 2 3 4 BY MR. BUGEL: 5 Ο. These are questions that are still about the 6 clean air set-aside, specifically the renewable 7 energy/energy efficiency aspect of that set-aside. 8 Mr. Cooper, were you involved in the decision regarding 9 the size? 10 Α. (by Mr. Cooper) Again, we stated a number of times, there was no one particular individual that was 11 12 responsible for any particular number. I was involved, but no one person really had the final decision on a 13 14 particular number. 15 I'm just trying to find out who would be best Ο. to answer these questions. Perhaps Mr. Ross then. 16 17 Α. Perhaps. Very good. Were higher levels considered than 18 Ο. the -- is it 11 percent or 12 percent --19 (by Mr. Ross) 12 percent. 20 Α. 21 Q. -- for renewable energy/energy efficiency? 22 (by Mr. Ross) We looked at a range for the Α. 23 renewable energy/energy efficiency set-aside. So, I would say higher levels were contemplated, yes. 24

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1 Ο. What was the range that was considered? 2 Α. (by Mr. Ross) Anywhere from zero to the 3 entire pool, I guess. 4 Q. A hundred percent? 5 Α. (by Mr. Ross) I mean, that's unreasonable. I 6 would say a reasonable range, in our opinion, was from 5 7 to 15 percent as recommended by the guidance documents. 8 And taking as a hypothetical, if 15 percent Q. 9 had been selected, would the same benefits have been 10 achieved, just proportionally higher? 11 Α. (by Mr. Ross) Perhaps. I mean, that's hard 12 to speculate. I mean, we have obviously attempted to assess and quantify a reduction that could occur as a 13 14 result of the use of EE/RE, but there really is no 15 standard mechanism available to do that. So, we just went 16 with the premise that the greater the NOx reductions that 17 could occur as a result of any EE/RE encouragement, the 18 better. So --19 Ο. Taking that statement then, the greater the NOx reductions that could occur, the better, increasing 20 21 the size of the renewable energy/energy efficiency 22 set-aside would have made more incentives available for 23 energy efficiency/renewable energy; is that correct? 24 Α. (by Mr. Ross) Yes.

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Q. And if in turn more projections were constructed as a result of those incentives, then those projects would -- if they were meeting demand for generation, they would proportionally decrease the demand for generation that would have needed to be met by new coal; is that correct?

A. (by Mr. Ross) Yes, that's correct to the
extent -- and there's been a lot of discussion about an
increased need for generating capacity through the years,
but in general, yes, your statement is correct.

11 Q. So, based on that, why was a higher -- the 12 highest level of the range you considered based on 13 guidance, and I believe it's the NOx SIP Call guidance 14 that said 5 to 15 percent could be set-aside, why was 15 15 percent rejected and the lower level of 12 percent 16 selected?

(by Mr. Ross) We looked at the total package 17 Α. of what we are doing. We evaluated different levels. We 18 19 looked at potential projects in Illinois that are 20 currently planned or that could occur. And essentially it 21 was a policy call, a judgment call on the level of set-asides in each particular category. Giving 12 percent 22 23 to energy efficiency/renewable energy allowed us perhaps 24 to increase the set-asides to pollution control upgrades

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1 or clean coal technologies. I mean, it's a trade-off. Of 2 course, a large set-aside pool in Illinois is going beyond 3 what any other state we know is doing, including in the 4 area of EE/RE. To some extent, as has been discussed 5 here, it could potentially result in additional costs to the regulated community. So, there is some trade-off 6 7 there that we need to take into consideration. So, after 8 evaluating different levels, we arrived at 12 percent. 9 12 percent is on the high side. The Governor's energy policy also promotes energy efficiency/renewable energy. 10 11 So, we felt it was an appropriate level. It's on the high 12 side. It's consistent with the Governor's energy policy. 13 These are environmentally desired policies. And we 14 arrived at 12 percent. 15 And you mentioned the Governor's energy Ο.

policy. Do you know in terms of a percentage generation of electricity from renewable sources, what percentage the Governor's energy policy selects -- or suggests?

A. (by Mr. Ross) I did. We have discussed that policy with personnel from the Department of Commerce and Economic Opportunity. We have internal personnel here who are familiar with the Governor's policy. I believe it scales up the amount based on certain years what the final level is. I think it's in the neighborhood of 8 to 10

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1 percent.

7

2 Q. Does 10 percent in 2015 sound about right? 3 A. (by Mr. Ross) That sounds about right, yes. 4 Q. And then referring -- And that is just from 5 renewable energy; is that correct, or does that sound 6 right?

A. (by Mr. Ross) That sounds right.

And then referring to Exhibit 5, second page, 8 Q. 9 could you please for the record indicate what percentage 10 the CASA allowances might offset -- let me rephrase my question -- what percentage of future electric need is 11 12 expected to be offset as a result of the CASA allowances 13 for energy efficiency/renewable energy? And I'm looking 14 in the first full paragraph, about the third to last 15 sentence that begins, "Through the conservative 16 estimates."

A. (by Mr. Cooper) You're referring to thesecond page?

19 Q. Yes.

A. (by Mr. Cooper) Are you referring to -- I don't see the "through the conservative". I think you're attempting to ask -- Are you referring to the 150 to 275 megawatt?

24 Q. No. A couple lines up. I'm referring to a

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1 percentage. A percentage that will be offset through 2 renewable energy/energy efficiency. 3 Α. (by Mr. Cooper) 5 and 8 percent? 4 Q. Right. So, is it correct to say that the 5 expectation is that the CASA will lead to energy 6 efficiency/renewable energy projects offsetting 5 to 8 7 percent of electric -- future electrical need; is that 8 correct? 9 (by Mr. Cooper) That is, I believe, the Α. 10 intent of the statement. 11 Ο. And in the Governor's energy plan, the goal is 12 that 10 percent of electricity be generated from renewable sources not even considering energy efficiency; is that 13 14 correct? 15 Α. (By Mr. Cooper) I believe that is correct. And in light of this, do you believe that a 16 Q. 17 clean air set-aside is consistent with meeting the goals of the Governor's energy plan? 18 (by Mr. Cooper) I believe it is a very good 19 Α. 20 step toward meeting that goal, yes. 21 ο. And do you believe that if the CASA for 22 renewable energy/energy efficiency had been set higher, it would be a step even closer to meeting the goals of the 23 24 Governor's energy plan?

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1 Α. (by Mr. Ross) You know, that's really hard to 2 say. We are providing an incentive for like projects, 3 projects that would put us on a path to meet the goals set 4 in the Governor's energy plan. Our intent with this rule 5 is not to implement the Governor's energy plan. Our intent is to provide environmental benefits that are 6 7 consistent with CAIR. So, the set-asides do, in fact, 8 promote renewable energy similar to the Governor's energy plan, but, again, our program isn't designed to achieve 9 10 the Governor's goals. Okay. I just have a couple more questions on 11 ο. 12 the availability of the whole allowance pool baseline allocations plus the set-aside. 70 percent of the pool 13 14 goes to -- is open to facilities that burn coal through 15 the baseline allocations; is that correct? 16 (by Mr. Cooper) Not entirely. Α. 17 Α. (by Mr. Ross) Or natural gas or fuel. To affect the parties, I think we stated there's 59 18 19 coal-fired units in over -- or approximately 170 gas or fuel and oil fire mixed. 20 21 But coal can get some appropriate part of that Ο. 70 percent; is that correct --22 (by Mr. Ross) That's correct. 23 Α. 24 Q. -- coal-fired units? And then the new units

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1 set-aside, new coal-fired power plants are eligible to get some of that set-aside; is that correct? 2 3 Α. (by Mr. Ross) As others are also, correct. 4 Ο. And then new coal-fired units are eligible to 5 get the clean coal set-aside; is that correct? 6 Α. (by Mr. Ross) Provided they are an IGCC or a 7 PSB boiler, correct. 8 Q. And then coal projects -- Coal-fired units 9 that undertake eligible retrofits are available to get the 10 pollution control set-aside; is that correct? (by Mr. Ross) Existing coal-fired units are 11 Α. 12 eligible for the pollution control upgrade category, that's correct. 13 14 And then coal-fired units are also eligible Q. 15 for the renewable energy/energy efficiency set-aside 16 specifically if they do energy efficiency demand by management; is that correct? 17 (by Mr. Ross) Everyone is eligible for that 18 Α. 19 category. It doesn't exclude anyone. Is there a category of the ones that I listed 20 ο. 21 off that excludes coal-fired units? 22 (by Mr. Ross) I don't believe so. Α. MS. BUGEL: Thank you. I have no further questions. 23 HEARING OFFICER KNITTLE: Thank you, Ms. Bugel. Ms. 24

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1 Bassi, I know you had your hand up somewhere in the middle 2 there. 3 MS. BASSI: I was looking at legislative intent for 4 the Governor's intent. 5 MR. BONEBRAKE: I had some follow-up. 6 MR. RIESER: I have a group -- a relatively small 7 group of questions relating to some of the language in the rule. So, I don't know where that falls on the continuum 8 9 from Ms. Bassi's hodgepodge to Ms. Bugel's focused 10 approach, but I can go whenever. MS. BASSI: Part of my hodgepodge includes the 11 12 language. MR. RIESER: So, then it may well be addressed. 13 14 HEARING OFFICER KNITTLE: Why don't -- Mr. Bonebrake, 15 you can go ahead and then Ms. Bassi, and we can wind up 16 with Mr. Rieser. 17 18 BY MR. BONEBRAKE: 19 Mr. Ross, you mentioned in response to some Q. 20 questions from Ms. Bugel the 5 to 15 recommendation by 21 USEPA, and I think I know the answer to this question 22 based upon earlier conversation, but you were referring, 23 were you not, to the guidance issued in connection with 24 the NOx SIP Call as opposed to the CAIR rule?

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1 MS. DOCTORS: Objection. We've already talked about 2 the different places that that guidance was carried 3 forward into the CAIR rule. So, I'm not sure why we're 4 having to restate the fact. 5 MR. BONEBRAKE: He referred to it again in his 6 testimony. So, I want to understand what he was referring 7 to. 8 HEARING OFFICER KNITTLE: Mr. Ross, you can --9 (by Mr. Ross) That is correct. Α. 10 BY MR. BONEBRAKE: 11 That is correct? 12 Q. 13 (by Mr. Ross) Yeah, NOx SIP Call specific Α. 14 guidance has carried forward into the CAIR. 15 Q. And similarly, Mr. Cooper, you referred to 16 USEPA's suggested range of 5 to 15 percent in your 17 testimony. Were you similarly thinking about the NOx SIP 18 Call guidance? (by Mr. Cooper) Specifically, yes. 19 Α. I think you said, Mr. Ross, that Illinois' 20 Ο. 21 set-asides are the highest of any state that the Agency is 22 aware of in response to Ms. Bugel's question; is that 23 correct? (by Mr. Ross) That is correct. 24 Α.

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Q. And that includes not just the EE set-asides
 but the entirety of the set-aside pool?

3

A. (by Mr. Ross) That's correct.

Q. And I think, Mr. Davis, you had suggested yesterday that you might have a document that summarized what other states were proposing or may have adopted in connection with CAIR set-asides. Is that something that you've been able to locate?

9 A. (by Mr. Davis) No. I think I said that I 10 could track down some of that information, but I didn't 11 believe that there was any single document that listed 12 what every state was doing with CAIR.

Q. So, is that information that the Agency is planning to provide at this point, or what is the status of my question?

A. (by Mr. Davis) Being on the panel, I haven't really had the time to actually do that, but, yeah, I think I stated a couple times that I don't believe that anyone has come out with a single document. It would most likely be dealing with -- that lists everything everyone is doing for CAIR.

A. (by Mr. Ross) We can search for such a
document, and if we find it, we can make it part of our
post-hearing comment.

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1 HEARING OFFICER KNITTLE: We're going to have some 2 opportunity for the Agency -- at least it's my intention 3 to have some opportunity for you to answer some of the 4 questions, provide some of the documents between the two 5 hearings. So, we can talk about how long we'll need to do 6 that, and we'll do that before we leave today.

7

8

BY MR. BONEBRAKE:

9 Q. And one other follow-up question for Mr. Ross 10 at this juncture. We earlier talked about the consent 11 decrees before and after May 30, 2006. The follow-up 12 question for you, Mr. Ross, is, as the Agency thinks about 13 consent decrees after May 30, 2006, does it have in mind 14 any particular consent decree or consent decrees at this 15 point in time?

16 A. (by Mr. Ross) We recognize the potential for17 future consent decrees, consent orders.

18 Q. Is that a general recognition that they might 19 be issued, or is there a particular consent decree that 20 you're referring to?

A. (by Mr. Ross) Well, I think we recognize that Amren may eventually enter into a consent decree. I'm not aware of any enforcement action proceeding, any alleged violation being made at this time or any other existing

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1 coal-fired power plant in Illinois may also enter into future consent decrees, who so ever should enter into one. 2 3 Ο. And in drafting then the provision that we 4 were earlier discussing that contained the dichotomy based 5 upon time, that potential Amren consent decree was at 6 least one of the documents that the Agency was at least 7 contemplating? 8 Α. (by Mr. Ross) Yes. 9 HEARING OFFICER KNITTLE: Mr. Rieser? 10 (by Mr. Ross) You said "documents". I Α. wouldn't say -- There is no document. There is no consent 11 12 decree forthcoming or, like I said, there is no alleged violation that I'm aware of, but the potential for any 13 14 future one with Amren was something we contemplated. 15 HEARING OFFICER KNITTLE: Yes, Mr. Rieser. 16 17 BY MR. RIESER: And in contemplating the consent decrees prior 18 0. 19 to May 30th, did you have any specific consent decrees in 20 mind? 21 Α. (by Mr. Ross) Specifically, as I mentioned 22 earlier, was the Dynegy consent decree. And I notice that for consent decrees entered 23 Q. 24 into prior to May 30th, there is an exclusion from the

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1 exclusion for baghouses; is that correct? (by Mr. Ross) I believe that's correct. 2 Α. 3 Ο. And was that designed to deal with issues into 4 Dynegy? 5 Α. (by Mr. Ross) It was put in the rule in 6 consideration of Dynegy, yes. 7 MR. RIESER: Okay. 8 9 BY MS. BASSI: 10 Q. Why would Dynegy and Amren be treated disparately? 11 A. (by Mr. Ross) I don't believe we're treating 12 13 them different. 14 You don't think that excluding one consent Q. 15 decree and allowing another is not disparate treatment? 16 (by Mr. Ross) There's only one consent Α. 17 decree, and that particular consent decree, as we 18 discussed in detail already, requires that control equipment be installed and that certain emission caps be 19 met. So, there is no need to provide an incentive. 20 21 Q. So, what's the incentive for someone to enter 22 into a future consent decree? I'm sorry. I asked this before and --23 A. (by Mr. Ross) I can't speculate on why anyone 24

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1 would choose to enter into a future consent decree. 2 MS. BASSI: Hodgepodge? 3 HEARING OFFICER KNITTLE: I think so. 4 5 BY MS. BASSI: 6 ο. All right. In the Statement of Reasons at Page 36, this is -- and, actually, this kind of flows 7 8 along with what we've been talking about already, except 9 for the consent decrees. The Agency states that 10 12 percent of the allowances set-aside for the EE/RE is 11 consistent with the general assembly's legislative intent 12 in Section 910(a)(8), and I don't think the Statement of Reasons actually cited to that, but that's where it is. 13 14 And in 910(a)(8), it says that at least 5 percent of the 15 energy consumed, I believe, in Illinois is to be -- or by 16 2010 is to be energy efficiency or renewable energy and at 17 least 15 percent by 2020. How does the Agency's timing of 18 the EE/RE set-aside at 12 percent comply with this legislative intent of only 5 percent by 2010? And perhaps 19 "comply" is the wrong word. "Comport" would probably be 20 21 better. 22 (by Mr. Ross) Well, the timing is different. Α.

I can tell you that. It was a percentage that we looked
at and took into consideration. I guess I would state

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1 that it doesn't limit us to 5 percent. It says "at least 2 5 percent."

Q. Would you agree that the timing of the EE/RE set-aside is accelerated or greater? In other words, you are requiring -- or you are setting aside a greater percentage by 2010 than what the legislative intent suggested as the low end?

8 A. I would say, yes, it's greater than 910 less
9 than the Governor's policy. Maybe just --

10 Q. Sorry. What?

HEARING OFFICER KNITTLE: Ms. Bassi, do you mind if Ms. Bugel interjects?

13 MS. BASSI: Oh.

MS. BUGEL: I just had a follow-up on your questionbefore we get too far afield.

16 MS. BASSI: I do have one more line to this.

17 MS. BUGEL: Okay.

18 MS. BASSI: It's not totally hodgepodge.

19

20 BY MS. BASSI:

21 Q. How does the mandate in the rule regarding the 22 set-aside comport with the language in the statute that 23 says "merely should be promoted"?

A. (by Mr. Ross) We are promoting. This says

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1 "should be". I mean, I think that speaks for itself. MS. BASSI: Okay. 2 3 HEARING OFFICER KNITTLE: Ms. Bugel? 4 5 BY MS. BUGEL: 6 ο. Would you agree that the size of the set-aside 7 will, in fact, result in a different and lower percentage of electric demand being met by renewable energy and 8 9 energy efficiency? 10 Α. (by Mr. Ross) To the extent that it's utilized, yes, that is a potential outcome. 11 So, in fact, the set-aside would not be 12 Q. inconsistent with a legislative intent of 5 percent? 13 14 (by Mr. Ross) I believe that's true. Α. MS. BUGEL: Thank you. 15 16 17 BY MS. BASSI: 18 Q. I may have asked this before, but have you identified a series of projects that will use up the EE/RE 19 set-aside? 20 21 Α. (by Mr. Ross) No, we have not. 22 Q. Have you made any --(by Mr. Ross) We've identified some projects, 23 Α. and I believe those are identified in Mr. Cooper's 24

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1 testimony.

2 Α. (by Mr. Cooper) To the extent my document 3 covers that, specifically I would refer to the section on 4 wind power. 5 Ο. And when you say your document, you mean 6 Exhibit 5? 7 Α. (by Mr. Cooper) Agency Exhibit 5. That particular category has a relatively high degree of 8 9 potential of coming to pass. 10 And just below the wind power section in Ο. Exhibit 5 on Page 3, you have hydro power? 11 12 Α. (by Mr. Cooper) Yes. And, again, I apologize if I've asked this 13 Q. 14 before. Are there hydro electric facilities in Illinois? 15 Α. (by Mr. Cooper) Yes, there are. 16 Q. Where are they? 17 (by Mr. Cooper) There's one -- I could show Α. 18 you exactly the document that's referenced is U.S. Hydro Power Resource. It in gross detail breaks down each of 19 the existing hydro power sources, as well as all the 20 21 potential that exists. I believe there are -- It's not 22 stated here. One second. It looks like Page 109 of the TSD, Table 8-2, Hydro Electric Generation Capacity in 23 24 Illinois. Apparently there are nine hydro power projects

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1 currently -- that's the first line on that table -- with 2 power. The named plate capacity aggregated for those nine 3 projects apparently is 80 gigawatt hours, and they 4 actually estimated, according to the document, produce 5 around 41 gigawatt hours. 6 What does it mean "without power"? Ο. 7 Α. (by Mr. Cooper) The document specifically 8 makes reference to dams that simply do not have the water turbine and associated generator. 9 10 So, they could generate, but they aren't? Ο. (by Mr. Cooper) It's an existing dam. It's 11 Α. been in place for "X" number of years, and it simply 12 requires the addition of the turbine and the generator and 13 14 then the transmission lines. 15 Looking at Section 460(b) as in boy (1), I Ο. 16 believe that section precludes or excludes the expansion 17 of an existing dam --(by Mr. Cooper) Yes. 18 Α. 19 Q. -- or the construction of a new dam? 20 Α. (by Mr. Cooper) Yes. 21 Q. And why is that? (by Mr. Cooper) That relates to -- The 22 Α. Governor's plan points to a -- I'll attempt to find it. 23 24 MS. DOCTORS: It was attachment G to the Statement of

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1 Reasons.

2 Α. (by Mr. Cooper) I don't see it in front of 3 me. What I believe it is -- All I have in front of me is 4 the press release. I believe, when you go look at the 5 actual -- the renewable energy, if you have the document 6 in front of you, the second paragraph, "Eligible renewable 7 energy resources," it talks about the renewable 8 energy/energy efficiency and coal resources development 9 law of 1997. 10 Ο. This is in Exhibit G? 11 Α. (by Mr. Cooper) Yes. Upon looking into that 12 particular law, that was a stipulation in that law. So, in an attempt to be consistent with what the Governor had 13 14 suggested, we carried that over. I believe the concern is 15 new dams have other environmental impacts. So, the goal of this particular existing 1997 law was to utilize the 16 17 existing dams without further impacting the environment. Just looking at the same document because we 18 Ο. 19 have it open, in the paragraph below --(by Mr. Cooper) Which document are you 20 Α. 21 referring to? 22 This is Exhibit G, and it's the paragraph Ο. 23 below where you were just referring. 24 Α. (by Mr. Cooper) "Competitive Procurement" or

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1 the "For Illinois"?

2	Q. "For Illinois to Improve Air Quality," and the
3	section below that, "Competitive Procurement". Could you
4	tell us please Well, it says, "We recommend that
5	renewable energy procure to meet renewable portfolio
6	standards generated in Illinois," blah, blah, blah and so
7	forth. Does that indicate that it is the power generators
8	who are to provide the renewable energy?
9	A. (by Mr. Cooper) I'm reading this at face
10	value the same as you. I make no effort to try to
11	interpret the intent of the Governor's memo.
12	Q. Isn't that what you're doing with the CASA?
13	A. (By Mr. Cooper) I believe that is our goals,
14	to promote those in this particular case perhaps and
15	under-realized renewable resource.
16	Q. No. I meant isn't one of the things you're
17	doing with the CASA interpreting the Governor's memo?
18	A. (by Mr. Cooper) I believe we're supporting
19	it, not necessarily interpreting it.
20	Q. Okay. Does the Agency intend for the energy
21	production derived from dedicated crops to apply only
22	to or to only come from smaller EGU's? And this is in
23	Section 460(b)(2).
24	A. (by Mr. Cooper) I don't believe we've

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1 specified what EGU it would come from.

2 Ο. Okay. How much would a larger unit and, say, 3 a 500 megawatt unit have to burn in terms of crops in 4 order to satisfy the 50 percent requirement there? 5 Α. (by Mr. Cooper) I would not have any idea off 6 the top of my head. 7 ο. Do you think it would be a lot? (by Mr. Cooper) I wouldn't think without 8 Α. 9 having data in front of me. 10 Okay. That answers that question. Has the Ο. Agency determined whether there are sufficient biomass 11 12 crops available to meet this 50 percent requirement? (by Mr. Cooper) No, we have not. I'm not 13 Α. 14 really understanding what your intent of the question is. 15 Q. Well, are biomass crops available to be burned at a 50 percent rate in a boiler? 16 17 (by Mr. Cooper) If the boiler was, say, one Α. horsepower, absolutely. 18 Is a one horsepower boiler subject to this 19 Q. 20 rule? 21 Α. (by Mr. Cooper) This rule for CASA allowances 22 you don't have to be subject. Okay. Why are burning waste wood, tires, 23 Q. garbage, general household, institutional lunchroom or 24

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1 office waste, landscape waste or construction or 2 demolition debris excluded from qualify as RE projects? 3 Α. (by Mr. Cooper) Again, that is lifted 4 directly from the renewable energy/energy efficiency and 5 coal resources development law of 1997, if memory serves. Are those terms defined in that law, do you 6 Ο. 7 know? (by Mr. Cooper) I do not know for certain. 8 Α. 9 Okay. We'll check. Q. 10 (by Mr. Cooper) I believe many of those terms Α. are defined either as a waste in the act or directly 11 defined. I believe "used tires" -- I believe there's a 12 definition in 211 for "used tires," if memory serves. 13 14 Could you give me an example of what "general Q. household waste" is? 15 (by Mr. Cooper) I would consider and I 16 Α. believe the act defines that "general household waste" 17 would be normal refuge. 18 MS. DOCTORS: I'm referring him to Section 3.230 of 19 20 the Illinois Environment Protection Act. 21 (by Mr. Cooper) If I may read. ""Household Α. waste" means any solid waste, including garbage, trash and 22 sanitary waste in septic tanks, derived from households 23 24 (including single and multiple residences, hotels and

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1 motels, bunk houses, ranger stations, crew quarters, campgrounds, picnic grounds and day use recreation 2 3 areas)." 4 5 BY MS. BASSI: 6 ο. What is "institutional lunchroom waste"? 7 Would that be like --(by Mr. Cooper) I believe it would be exactly 8 Α. 9 like it sounds. 10 Ο. Institutional lunchroom. Okay. (by Mr. Cooper) Jailhouse lunch. No, I do 11 Α. not believe it is explicitly defined. 12 13 Q. What constitutes the life of an RE project? (by Mr. Cooper) The life? 14 Α. Uh-huh. 15 Q. (by Mr. Cooper) Define "life". 16 Α. 17 That's what I'm asking you to do. Q. 18 (by Mr. Cooper) Where are you -- Are you Α. referring to the distribution period? 19 Well, it could be. On Page 22, slide 22 of 20 ο. Exhibit 11. 21 22 MR. BONEBRAKE: Of his overhead presentation. A. You said Page 11? 23 24

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1 BY MS. BASSI:

Page 22. The renewable energy projects don't 2 Q. 3 have a termination date, and I just wondered how long you 4 anticipated renewable energy projects would last? 5 Α. (by Mr. Cooper) I believe, if you look at the 6 star, it's allowances given to the source as long as the 7 source is generating. So, hypothetically, until a wind turbine physically falls off, it would be eligible. 8 9 Okay. What if the renewable energy source was Q. 10 biomass and one year the crops weren't good? (by Mr. Cooper) That's where the 50 percent 11 Α. criteria comes in. 12 Okay. And, so, if it falls below 13 Q. 14 50 percent --15 Α. (by Mr. Cooper) It's ineligible. Can it start back up? 16 Q. (By Mr. Cooper) Yes. 17 Α. 18 MS. BASSI: Okay. 19 BY MR. BONEBRAKE: 20 21 Ο. By the way, how did the Agency decide on the 22 time frames that are delineated on slide number 22? (by Mr. Ross) In one manner how we decided 23 Α. the percentage of set-asides. We discussed them. We 24

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looked at internal documents. I mean, for energy
 efficiency --

3 Α. (by Mr. Cooper) Energy efficiency projects in 4 specific are generally technology based. A lighting 5 retrofit is a good example. Newer technologies are 6 continually coming out. And this is actually consistent, 7 I think, with most guidance and what other states have done. There's generally a finite period of time that they 8 9 allow for energy efficiency. We're not going to let 10 you -- Strike that. We do not wish to let someone change a light bulb once and then throw back in their older light 11 12 bulbs. So, in eight years, we will no longer provide an incentive. This gives them an incentive again to 13 14 re-evaluate whether a new lighting project would need to 15 take place.

16

21

17 BY MS. BASSI:

18 Q. With respect to your example with the light 19 bulbs and stuff as an energy efficiency project -- And I 20 know these little fluorescent --

A. (by Mr. Cooper) CFL's.

Q. -- have been really promoted lately. Do thosecontain mercury?

A. (by Mr. Cooper) I am not aware of that. I do

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1 not know.

2 Α. (By Mr. Bloomberg) Some do. Some don't. 3 Ο. Are you distinguishing between those as you 4 allocate your allowances? (by Mr. Cooper) Not as the rule's written. 5 Α. 6 Okay. When you say on Page 5 of your Ο. 7 testimony that "consideration is given towards the useful 8 thermal energy associated with combined heat and power 9 projects," what does this mean? 10 Α. (by Mr. Cooper) I believe it is a recognition that those particular devices are more efficiently using 11 12 the heat content and trained in the particular fuel, and we're attempting to reward those particular devices for 13 14 being more efficient. 15 In a combined heat and power project, is the Ο. heat often used for some type of a process? 16 17 (by Mr. Cooper) It could be. Α. 18 Okay. And then the power -- Is the power Ο. 19 derived from the heat that's captured that would otherwise be wasted? 20 21 Α. (by Mr. Cooper) It depends. There's two 22 There's a topping cycle and a bottoming cycle. types. Depending on whether they make power first or later. 23 24 Q. Okay. Okay.

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1 Α. (by Mr. Cooper) So, I believe the most prevalent form is a -- and I'll -- is the type that 2 3 generates power first, with an example from a turbine, and 4 there's usually a relatively high amount of high-grade 5 steam left over that that can be used for a process. The reverse of that is something -- I believe, basic oxygen 6 7 furnace comes to mind, where the heat goes to the process 8 first, and then you use the steam left over perhaps 9 supplementing to something to generate power. 10 Okay. Does this particular category of the Ο. 11 CASA, wherever it falls, provide allowance for both sides 12 of that -- of the CHP process or just one side of the CHP 13 process? 14 (by Mr. Cooper) Well, the combination has to Α. 15 do with how the allowances are allocated. There is an 16 equation. Someone help me out. Does it consider all of the heat that goes 17 Ο. into the CHP or just part of it? 18 19 (by Mr. Cooper) Does the -- Does what? Α. 20 Ο. When you're plugging the numbers into the 21 formula that's in the rule for a CHP project, do you consider all of the heat that goes into the CHP or just 22 23 part of the heat? (by Mr. Cooper) Well, the CASA category is 24 Α.

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1 independent of heat input. It's only output.

2 Q. I'm trying to understand what you mean that 3 "consideration is given towards the useful thermal 4 energy." 5 Α. With respect to allowance allocation, not 6 necessarily to the CASA. 7 (by Mr. Davis) Useful thermal energy in a Α. 8 topping cycle would be the thermal energy left in the 9 steam after generating electricity. So, you take the 10 gross output from the generator, and then you could then add the thermal energy on to that. 11 12 Q. So, it is the whole thing? (by Mr. Davis) I'm not certain what you mean 13 Α. 14 by "the whole thing".

Q. Well, if you are considering the gross electrical output that's generated by the heat in the first place and then you're giving consideration for the additional heat or the waste heat that's captured in the use --

A. (by Mr. Davis) Useful amount.
MS. DOCTORS: I need to provide a clarification. I
think we're going down a path that's not quite in line

23 with what's in the rule.

24 A. (by Mr. Cooper) The thermal consideration is

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1 for the allowance allocation. The CASA, as stated in the 2 equations, are based on electrical output. I do not 3 believe that we provide a conversion in the CASA to 4 convert the useful thermal energy for purposes of the 5 CASA. 6 7 BY MS. BASSI: Okay. So --8 Q. 9 (by Mr. Cooper) Perhaps that's a Α. 10 consideration on our part that we may need to reflect. If there's thermal energy that's not used for 11 Ο. 12 gross electrical output but is used for some process, that thermal energy is not considered; is that what you're 13 14 saying? 15 Α. (by Mr. Cooper) As at least currently written. It is considered for the allocation. 16 17 MS. DOCTORS: For the existing? Are you speaking of 18 the existing pool versus --19 Α. (By Mr. Cooper) Yes. MS. DOCTORS: -- the 25 percent pool for the CASA? 20 21 MS. BASSI: Okay. Got it. Thank you. 22 BY MS. BASSI: 23 And, further, with respect to the CASA at 24 Ο.

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1 Section 455(b).

2	A. (by Mr. Cooper) Repeat, please.
3	Q 455(b), this gets into the this is the
4	section that says that a source has to be in compliance in
5	order to apply for the CASA, and if the Agency makes a
6	finding of non-compliance, the source after the source
7	was allocated allowances from the CASA, it must return
8	them or, I assume, some equivalent allowances. What
9	comprises an Agency Maybe someone needs to answer this.
10	But what comprises an Agency finding of non-compliance?
11	A. (by Mr. Bloomberg) One moment.
12	MS. DOCTORS: We're going to address this in
13	comments.
14	
15	BY MS. BASSI:
16	Q. Okay. Let me ask you some more questions
17	then, including your comments then. What would be the
18	Board's role in this Agency finding of non-compliance?
19	MS. DOCTORS: Same.
20	
21	BY MS. BASSI:
22	Q. I understand. Would the Agency agree that the
23	return or restoration of allowances is a kind of penalty?
24	MS. DOCTORS: I renew.

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1

BY MS. BASSI: 2 3 Q. Where is the Agency's authority to exact such 4 a penalty? And if this is some kind of an automatic 5 thing, what is the State's authority to do this, exacting 6 of a penalty in the absence of some kind of an 7 adjudication under the act? MS. DOCTORS: As I said, we'll address in comment. 8 9 MS. BASSI: So, if it's in the transcript, then you 10 can find the question. 11 BY MS. BASSI: 12 13 Under Section 460(a)(2)(A) -- you may have Q. 14 answered this yesterday, and if, so I apologize --15 (a)(2)(A) -- oh, this is the one that says, "Energy star 16 qualified new home projects." Does this mean that a 17 homeowner can apply for allowances under the CASA? 18 (by Mr. Cooper) Potentially. Α. Okay. Energy source. In 465(c)(1) --19 Q. MS. DOCTORS: (c)(1) for 465? 20 MS. BASSI: Well, I don't know what I was talking 21 22 about there. Sorry. 23 BY MS. BASSI: 24

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1 Ο. Oh. If a project -- If I apply for CASA 2 allowances by May 1, 2012, based upon project emissions --3 or based upon emissions from a project or non-emissions 4 from a project, in 2011, will the vintage of the 5 allowances that I am issued be 2011 or 2012? (by Mr. Bloomberg) I think I answered this 6 Α. 7 question yesterday. If you apply, you make reductions or 8 you do whatever it is, your project in 2011, you apply by May 1st, 2012, you'll be given 2012 allowances. 9 10 Okay. Thank you. Ο. (by Mr. Bloomberg) Except -- Actually, let me 11 Α. take a step back. Except that that's presuming that 12 what's there -- it goes back to the first in and first out 13 14 discussion that you brought up. 15 Okay. I think the question I asked yesterday Ο. 16 had to do with the new source set-aside, new unit 17 set-aside, which is different. Could you explain just briefly why the Agency excluded FGD and baghouse projects 18 19 from the eligibility for the CASA in the seasonal NOx 20 program? 21 Α. (by Mr. Kaleel) I think the point to that is 22 that the seasonal program is intended to address ozone air 23 quality, and SO2 and particulate matter is controlled by 24 FGB's and baghouses are not precursors to ozone.

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1
             Ο.
                    Thank you. With respect to 225.130 -- I'm now
 2
        changing topics.
 3
             HEARING OFFICER KNITTLE: Let's go off the record for
 4
        a second.
 5
 6
                   (A brief discussion off the record.)
 7
             HEARING OFFICER KNITTLE: Back on the record. After
 8
 9
        a short break, and Ms. Bassi has questions that she's
10
        needing to ask of the panel.
11
        BY MS. BASSI:
12
13
                   Okay. With reference to 225.130, the
             Q.
        definitions, the definition of "boiler" -- And these might
14
        be things that you'll just have to list down and comment.
15
16
             MS. DOCTORS: I think so, it sounds like.
17
        BY MS. BASSI:
18
                   And the first question is, is the definition
19
             Q.
        of "boiler" different from the definition in Part 211?
20
             MS. DOCTORS: Let's address it in comment. I could
21
22
        comment on it, but I don't think I'm supposed to.
23
24
        BY MS. BASSI:
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1 Ο. That's all right. And then the next question, is a list of definitions that are included in 130, and the 2 3 question is whether these are different from the 4 corresponding terms used in Part 217, subpart U and W or 5 in Part 211, and those terms are the "CAIR authorized 6 account representative, " the "CAIR designated 7 representative" --8 MS. DOCTORS: Wait. I'm going to stop because I just 9 note for the record that they would necessarily be 10 different because that program took -- that program is the

NOx SIP Call program, and it didn't contemplate the CAIR program. So, they would be different definitions. In terms of "designated representative," there was no such thing.

MS. BASSI: Is the only difference the use of the word "CAIR"?

MS. DOCTORS: That I can't speak to at this time, butthey are different because there was no such thing.

19

20 BY MS. BASSI:

Q. There's more. The next is the "CAIR NOx
compliance account," other than the word "CAIR"?
MS. DOCTORS: I can't comment on it if it wasn't
contemplated. This definition was not contemplated at the

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1

5

23

Q.

time that the NOx SIP Call definition was --

HEARING OFFICER KNITTLE: I understand that. I think
Ms. Bassi wants to know besides the substitution of the
word "CAIR" if the definition is identical.

6 BY MS. BASSI:

7 ο. In other words, is the authorized account 8 representative under CAIR doing the same thing, the same 9 type of guy or person as the account representative under 10 the NOx SIP Call or wherever else? And then other ones in there are "coal-fired," "co-generation unit," "combustion 11 turbine," "common stack," "electric generating unit," 12 "fossil fuel," "fossil fuel-fired generator," "oil fired," 13 14 and "re-powering," and it's possible "re-powering" has a 15 different meaning. I think the rest of them, though, 16 you'll find are very similar or the same. 17 HEARING OFFICER KNITTLE: Ms. Doctors, you're going 18 to address those in your post-hearing comments, I take it? 19 MS. DOCTORS: Sure. MS. BASSI: Thank you. 20 21 22 BY MS. BASSI:

A. (by Mr. Bloomberg) Did you say "E" as in

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With respect to 225.435(e) --

1 Edward?

"E" as an Edward. And I apologize for jumping 2 Q. 3 around like this, but I warned you that there was 4 hodgepodge, and at one time there was a sequence. 5 HEARING OFFICER KNITTLE: Dually noted. 6 BY MS. BASSI: 7 Would you agree that part 96 regulates the 8 Q. 9 steps that must be used to monitor emissions for the CAIR 10 that are reflected in 435(e)? MS. DOCTORS: We'll address it in comment. 11 That's 12 going to require into looking into different sections. 13 MS. BASSI: That will be fine. Thank you. 14 BY MS. BASSI: 15 16 If that's true -- And this gets to a wording Q. 17 thing. If that's true, would you agree that it is 18 inappropriate to include the language, and I quote, "The product (an MM BTU per hour) of the gross calorific value 19 of the fuel (in BTU per pound) divided by 1 million BTU 20 21 per million BTU and multiplied by the fuel feed rate into 22 a combustion device (in pounds of fuel per time)" --MS. DOCTORS: Where are you reading from? 23 MS. BASSI: 435(e) I think. 24

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1 MS. DOCTORS: No. There's only three lines of text. MS. BASSI: Well, I don't know. 2 3 Α. Page 31? MS. BASSI: 440(a) it looks like. No, that's not it 4 5 either. I'll address this in post-hearing comment. 6 Sorry. I apologize. I guess I ought to look at it before 7 I speak. 8 9 BY MS. BASSI: 10 Q. Could you please explain what is meant by 410(d)(1)? Oh. In 410(d)(1), in the second line, there 11 is a phrase "the allowance transfers deadline". Is that 12 referring to March 1st? 13 14 (by Mr. Bloomberg) Yes. Α. 15 Ο. So, this is meant to effectively describe what March 1st of each subsequent year is? 16 17 (by Mr. Bloomberg) Yes. That's why it's Α. 18 broken off by commas. I had -- Okay. With regard to allocation 19 Ο. methodology, what is the incentive to retire older units 20 21 under Illinois EPA's chosen allocation methodology? How 22 does this intensify that? (by Mr. Cooper) Are you referring to a 23 Α. specific section, first off? 24

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1 Ο. Well, your allocation methodology is a 2 two-year look back based on gross electrical output, and 3 how does this intensify retirement of old plants, which I 4 think someone must have mentioned was one of the goals? 5 MS. DOCTORS: I think we've already addressed this 6 question in detail. I think Ms. Sims addressed it 7 yesterday maybe. 8 9 BY MS. BASSI: 10 Intensified the retirement of older units? Ο. HEARING OFFICER KNITTLE: Ms. Doctors, I just want to 11 warn you she's shaking her head "no". So, if you can find 12 someone --13 14 (by Mr. Davis) I think the assumption there Α. 15 is that older plants would be less efficient, and, also, we'd like to --16 17 18 BY MS. BASSI: 19 So, what you're saying is that because older Q. plants are less efficient, there is incentive construction 20 21 of newer plants that would be more efficient so that they 22 would get more allowances, plus the bonus of the CASA? (by Mr. Davis) Yes. And with respect to your 23 Α. question on the look back, in the -- well, in the model 24

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1 rule, as we've discussed, older plants will still receive allocation based on those baselines. 2 3 Ο. Is that an incentive for the shutdown of older 4 plants? 5 Α. (by Mr. Davis) Yes. 6 ο. The fact that they would continue to be 7 getting allowances, meaning allocated allowances under a 8 permanent baseline? 9 (by Mr. Davis) I don't believe that is an Α. 10 incentive to shut down. Well, if you shut down an old plant, 11 Ο. 12 presumably you're opening a new plant, and, so, you would be getting the allowances for the old plant, plus the new 13 14 plant; is that not incentive to shut down a plant? 15 Α. (by Mr. Ross) In that scenario, that certainly would be an incentive. 16 17 Okay. Going to the federal appeal procedures, Ο. 18 which are incorporated by reference, and I believe this is one, Ms. Doctors, you indicated yesterday you would want 19 20 to comment on. 21 MS. DOCTORS: Right. 22 BY MS. BASSI: 23 The federal appeal procedures at 40 CFR Part 24 Q.

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1 78 are incorporated by reference in this proposed rule. Could you explain why? 2 3 MS. DOCTORS: We'll address that in comment. 4 MS. BASSI: Okay. And in that addressing of this in 5 your comment, could you perhaps provide an example of when 6 the federal appeal procedures would apply? 7 MS. DOCTORS: Yes. 8 MS. BASSI: Thank you. 9 BY MS. BASSI: 10 Opt-in. The Agency -- Is the Agency proposing 11 Ο. not to allow opt-ins as -- which is different from the 12 model rule? 13 14 (by Mr. Kaleel) Could you repeat the Α. 15 question? I'm sorry. 16 Q. Is the Agency proposing not to allow opt-ins? 17 (by Mr. Kaleel) That's right. Α. And I believe someplace in the Statement of 18 Q. Reasons -- I'm sorry, I didn't write down the page 19 number -- I believe the Agency stated that a reason for 20 21 not including opt-ins is administrative complexities; is 22 that correct? (by Mr. Kaleel) I guess that's part of the 23 Α. reason. The other part of our rationale is that for our 24

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1 attainment strategy for ozone and for PM2.5, we may need 2 to seek specific control requirements on non-EGU's, and 3 having allowances and having compliance with a specific 4 state requirement would -- I mean, it's an overlapping 5 requirement. 6 ο. When I -- Are you viewing the inclusion of the 7 non-EGU portion of the NOx SIP Call into the CAIR, which I believe you said is not occurring, as an opt-in? 8 9 (by Mr. Kaleel) We're not -- No, that's Α. 10 not -- I think the federal rule allows opt-ins for non-EGU's during the summer season. We're not including 11 12 that. Were there any opt-ins in Illinois under the 13 Q. NOx SIP Call? 14 15 MS. DOCTORS: Does anybody know? (by Mr. Bloomberg) None that I'm aware of. 16 Α. 17 18 BY MS. BASSI: 19 Does the Agency anticipate perhaps from that Q. 20 experience that no one would be interested in opting in 21 under the CAIR trading program? 22 (by Mr. Kaleel) I think that's a fair Α. 23 assumption based on the history of that program. Okay. Economic reasonableness in the 24 Q.

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1 Statement of Reasons at Page 33, the Agency states that, 2 "USEPA's energy efficiency/renewable energy guidance 3 projects certain annual savings if 5 percent of the 4 regional allowances are set-aside for this purpose." Does 5 someone recall that? 6 Α. (by Mr. Cooper) Yep. 7 ο. Are you the economic reasonableness person? 8 Α. (by Mr. Cooper) Not necessarily. 9 You hope not? Q. 10 (by Mr. Cooper) Not necessarily. I believe Α. the passage you're referring to was lifted from the 1999 11 USEPA document. 12 Okay. And, so, we could find this figure in 13 Q. 14 that document if we looked; is that correct? 15 Α. (by Mr. Cooper) Yes. Okay. Can you tell me how much of the 5 16 Q. billion in consumers' energy bills that the Agency claims 17 18 that USEPA estimates could be saved regionally is attributable to Illinois? 19 (by Mr. Cooper) We don't have that estimate. 20 Α. 21 Q. Is it likewise then that the Agency does not 22 know how much of the 150 million dollars in air quality compliance costs are attributable to Illinois sources? 23 (by Mr. Cooper) Also, we do not know. 24 Α.

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Q. All right. With the 12 percent set-aside for EE/RE, how much does that translate into for consumer energy savings and compliance cost savings? In other words, how much savings in terms of money is there from the 12 percent EE/RE set-aside?

6 A. (by Mr. Cooper) I don't believe there is such 7 a calculation.

8 Okay. In the Statement of Reasons at Page 42, Q. 9 the Agency states that it has relied upon the cost 10 analyses performed by USEPA with respect to the SO2 portion of the CAIR proposal to determine economic 11 12 reasonableness. What is the impact on the economic reasonableness if all companies subject to this rule --13 14 all coal-fired generators subject to this rule opted into 15 the MPS?

A. (by Mr. Ross) We haven't made that A. (by Mr. Ross) We haven't made

Q. On that same page, the Statement of Reasons
says that, "Some Illinois EGU's use coal washing, blending
low and high sulfur coals and FGD's," and that is at the

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1 top of Page 42, in that first full paragraph. Okay. It 2 also says -- It also refers to blending with limestone. 3 Isn't that done in the CFB? 4 Α. (by Mr. Ross) It is done in the CFB. 5 ο. It says it's not used in Illinois. (by Mr. Ross) Limestone blending in the CFB? 6 Α. 7 Well, what it says here is, "Blending coal Ο. 8 with limestone is not currently used in Illinois." 9 MS. DOCTORS: Excuse me. Let me object. This is on 10 a citation from the TSD Section 5.1. So, in order to 11 understand how this statement is made, we'll have to look at that section of the TSD rather than just taking a 12 13 statement. 14 MS. BASSI: Okay. 15 HEARING OFFICER KNITTLE: Ms. Doctors, is that 16 something you want to address in comments, as well? MS. DOCTORS: Yeah, I'd be happy to address it in 17 comments. If you're referring to just sentences that are 18 19 cited under the TSD, let's talk about the TSD document not 20 the Statement of Reasons because that would be a more 21 accurate description for the people listening as to what the question relates to. 22 MS. BASSI: Well, what I'm getting at is -- What I 23 24 want to know is, is this an inaccurate statement because

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1 somebody is blending limestone or maybe that's not what is considered? 2 3 MS. DOCTORS: We'll address that in comment. 4 5 BY MS. BASSI: 6 Q. Is it not the case that most of the EGU's in 7 Illinois use low sulfur coal or powder river basin coal that is not blended? 8 9 (by Mr. Ross) That's my understanding. Α. 10 That's correct. The Statement of Reasons discusses consumer 11 Q. electricity rate increases projected to result from 12 13 implementation of the CAIR, and these are expressed in 14 terms of percentage rate increases, and I apologize 15 because I don't have a page number written down, but it's 16 referenced in the TSD at Section 6.4 on Page 63. 17 MS. DOCTORS: That's Page 63? 18 MS. BASSI: Uh-huh. 19 BY MS. BASSI: 20 21 Q. All right. Ready? What is the baseline, I 22 guess, for which these percentage increases are being applied? When you say there's a 2.6 percent increase, 23 from what? 24

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A. (by Mr. Ross) Well, we went over the IPM modeling in some detail the first day. Again, they ran two scenarios, a base case, which is CAIR CAMR being implemented in Illinois, and a second case, which is CAIR as proposed by the Illinois EPA and CAMR, and the difference was the projected increase in electricity prices.

8 Q. Yeah. But it says "by 2010," which means 9 you're comparing it -- This Table 6-10, for example, has a 10 base case that says "2010," but you're saying that 2.6 11 increases by 2010. By 2010 from what?

12 Α. (by Mr. Ross) Well, I think it's simply saying that in 2010, there will be a negligible or very, 13 14 very small increase in electricity prices from the implementation of CAIR in Illinois as Illinois is 15 proposing to implement it and in comparison to the model 16 17 federal CAIR. So, it's evaluating the cost in 2010 in 18 both cases, and it's saying that the Illinois policy will result in a very small increase in electricity prices. 19 MS. BASSI: Okay. 20

21

22 BY MR. BONEBRAKE:

23 Q. Mr. Ross --

24 A. Yeah.

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1 0. -- doesn't Section 6 of the TSD deal with 2 USEPA analysis of the federal CAIR model, whereas Section 3 7 deals with the --4 Α. I stand corrected. I thought we were talking 5 about the IPM model. But this is still USEPA's IPM model. 6 So, we are talking modeling. 7 MS. BASSI: I would never talk about the IPM. 8 Α. Yeah. Well --9 10 BY MR. BONEBRAKE: For clarification, for instance, in 2015, 11 Ο. USEPA was projecting that CAIR would increase rates by 4.3 12 13 percent as compared to a scenario where CAIR was not in 14 place; is that correct? 15 Α. (by Mr. Ross) That's how the USEPA did their modeling, that's correct. The cases they modeled was CAIR 16 17 and without CAIR. And any additional increase in rates 18 0. 19 associated with the Illinois proposal, including any 20 increase that might flow from the CASA -- I think we 21 talked about whether or not that would occur earlier --22 any additional increase in rates would be an add-on to 23 what USEPA has projected for the federal CAIR program; is 24 that correct?

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1 Α. (by Mr. Ross) That is correct. 2 3 BY MS. BASSI: 4 Q. And concerning the analysis that was done in 5 Illinois, without asking a question about IPM, I 6 presume -- is it correct that this analysis did not 7 anticipate any of the current rate increases that are resulting from the death of the moratorium? 8 9 (by Mr. Ross) Those were not modeled. Α. 10 Q. Were they considered? No, I don't believe so. 11 Α. 12 Q. With regard --MS. DOCTORS: Can you be more specific when you speak 13 of "the death of the moratorium"? Where are you talking 14 15 about? 16 MS. BASSI: There has been a ten-year moratorium on electrical rates in Illinois that was an ease into 17 18 deregulation, I believe. MS. DOCTORS: I want the record to be clear as to 19 20 what we're speaking about. 21 22 BY MS. BASSI: Q. With respect to SO2, there's currently pending 23 in the D.C. Circuit of Appeals -- I'm sorry -- there 24

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1 currently in the D.C. Circuit appeals of various aspects 2 of the federal CAIR rule as adopted by USEPA, and the 3 fundamental challenge to this is to your EPA's reliance on 4 the acid rain program as the basis for the SO2 CAIR. Is 5 there some provision in Illinois' proposal that recognizes 6 that if the rule on the federal level is found to be 7 inappropriate by the court that this will trickle down to 8 Illinois?

A. (by Mr. Kaleel) Well, there is a severability section in the rule. I think it's 225.100 in the general provisions, and I think it's intended to address that. For example, if the acid rain program or the SO2 portion of the trading program is found invalid, that the other portions of this rule would still apply. The NOx portions of the rule would still apply.

MS. DOCTORS: Mr. Kaleel will answer that?

17 MS. BASSI: Okay. Thank you.

18

9

19 BY MR. BONEBRAKE:

Q. A related question on that. Severability
provisions relate to the Illinois proposal; correct?
A. (by Mr. Kaleel) Yes, this is an Illinois

23 proposal.

24 Q. The challenge in the D.C. Circuit is with

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1 respect to the federal rule; is that correct?

A. (by Mr. Kaleel) Yes.

2

3 Ο. Are you suggesting, Mr. Kaleel, that a D.C. 4 invalidation of the portion of the federal rule would 5 automatically result under this provision an invalidation 6 of the implementing provisions of the Illinois proposal? (by Mr. Kaleel) We're implementing the 7 Α. program through the federal acid rain, at least the SO2 8 9 portion in the federal program. 10 MS. DOCTORS: We'll address the legal -- I understand your question, Mr. Bonebrake, and we'll address the legal 11 implication of what would happen when that decision comes 12 13 out. 14 MR. BONEBRAKE: Thank you. 15 BY MS. BASSI: 16 17 Also on appeal in the Federal D.C. Circuit is Ο. 18 the NOx portion of the CAIR, and I don't believe that Illinois is relying on the federal NOx CAIR to the extent 19 that it is on the federal SO2 CAIR; is that correct? 20 21 MS. DOCTORS: As I'm unfamiliar to that lawsuit, I 22 would ask that you provide me with a copy of what you're speaking of, and we'll address it in comment. 23 24

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1 BY MS. BASSI:

2	Q. Well, my question is a little more general
3	than that. You said that I believe your response to my
4	first question was that if the federal SO2 CAIR falls as a
5	result of this lawsuit because of the intent of Illinois'
6	program on that, it would automatically fall, as well, but
7	Illinois' NOx proposal appears to be very different from
8	the federal NOx rule, and my question is, what happens if
9	the federal NOx rule fails, as well?
10	MS. DOCTORS: And I'd like to address that in comment
11	because we can't testify as to the legal intricacies of
12	how Illinois' program is, in fact, implementing the
13	federal CAIR rule at this time.
14	
15	BY MS. BASSI:
16	Q. So, based on the implications of your
17	non-testimony
18	MS. DOCTORS: Right. I mean
19	
20	BY MS. BASSI:
21	Q is it the Agency's position that the NOx
22	CAIR rule in Illinois is not an independent program?
23	MS. DOCTORS: It is my statement that we will address
24	this in comments.

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1 HEARING OFFICER KNITTLE: Are you asking that of Mr. Ross? 2 3 MS. BASSI: I can ask that of Mr. Ross. 4 Α. (by Mr. Ross) We will address that in 5 comment. 6 7 BY MS. BASSI: Okay. And all I'm getting at is, as you 8 Q. 9 address it in comment, is it an independent program that 10 would have meaning in Illinois if the federal CAIR were not there. So --11 12 Α. (by Mr. Ross) Okay. 13 Does the SO2 CAIR reduce emissions an Q. 14 additional 3.8 million tons by 2015 beyond the 3-and-a-half million tons in 2010? 15 16 (by Mr. Cooper) Where are you looking? Α. 17 I don't know. It's in the Statement of Ο. 18 Reasons, I'm sure. MS. DOCTORS: If it's in the Statement of Reasons, it 19 always refers back to the TSD with a fuller explanation, 20 21 more comprehensive. 22 BY MS. BASSI: 23 The Statement of Reasons at Page 41 -- I wrote 24 Q.

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this one down -- describes low sulfur coal as an SO2
 control measure.

MS. DOCTORS: As I stated, I'm going to state an objection. The Statement of Reasons is a legal document, and it represents what's in the TSD. If counsel has a question about the technical support for the rule versus some legal arguments or summaries made in the Statement of Reasons, I believe that the proper place in the section to be referring to this information is the TSD.

MS. BASSI: Well, then strike my reference.
HEARING OFFICER KNITTLE: And that's been noted, I
think, for the record, Ms. Doctors, and I think Ms. Bassi
understands that you're going to have to refer back to the
TSD to answer some of these question. We can try to do
that.

16

17 BY MS. BASSI:

18 Q. I'll restate. The Agency describes low sulfur 19 coal as an SO2 control measure. To what extent is this 20 measure applied in Illinois?

A. (by Mr. Ross) To what extent is the use oflow sulfur coal applied in Illinois?

23 Q. As an SO2 control measure.

A. (by Mr. Ross) It is widely utilized.

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1 Ο. What SO2 control measures does the Agency project will be implemented in Illinois in order to comply 2 3 with each of the CAIR caps for SO2? 4 Α. (by Mr. Ross) The most likely is flue gas 5 desulfurization and scrubbers. MS. BASSI: And I have a few questions with respect 6 7 to trading. I have not so many, but I do have one. I'm 8 done. 9 HEARING OFFICER KNITTLE: Ms. Bassi, I thought you 10 were finished with that one portion of your --MS. BASSI: No. I'm done. 11 12 HEARING OFFICER KNITTLE: We will go to Mr. Rieser, Mr. Bonebrake or Ms. Bugel. 13 14 BY MR. RIESER: 15 16 Turning to 225.530 of the Page 6 of the Q. 17 proposal, the date for the Agency's submittal of the 18 initial ozone seasonal allowance allocations was changed from October 31st, 2006 to within 30 days of the effective 19 date of the subpart. Is that 30 days after the effective 20 21 date of the subpart expected to be consistent with the 22 CAIR requirements? (by Mr. Bloomberg) We hope so. The date was 23 Α. 24 changed in recognition that the rulemaking is taking

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1 longer than perhaps it was hoped when it was originally 2 written and may bump up again to the fifth deadline. Then 3 obviously we're not going to hit October 30th. 4 Q. So, the basic idea is that you'll get those 5 allocations into USEPA as soon as you can after the rule becomes effective? 6 7 Α. (by Mr. Bloomberg) 30 days for the Agency, 8 but 15 days for other -- No never mind. 9 Looking at 225.435, again, in the amended Ο. 10 rule, specifically (d)(1)(C), there's a formula for if the unit is neither coal fired or oil fired. Do you see that? 11 12 Is there anything -- Are there any units that are neither coal fired or oil fired that are fired by anything other 13 14 than natural gas? 15 (by Mr. Davis) Not that I'm aware of. Α. 16 Q. Is there a reason not to simply reference "natural gas" here? 17 (by Mr. Davis) That was the language that was 18 Α. 19 used in the CAIR model rule and just carried it into our 20 rule. 21 Α. (by Mr. Bloomberg) And it also has the 22 possibility even if we don't know about something now, that there was some other fuel that we were unaware of and 23 it just said "natural gas," we would be left without any 24

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1 factors?

(by Mr. Cooper) Syn gas would be a potential 2 Α. 3 candidate. 4 Q. Again, looking at that same -- (b)(1)(A), (B) 5 and (C), which of these formula are used if the unit is a 6 dual-fired unit, in other words, sometimes natural gas, 7 sometimes fuel? (by Mr. Cooper) I believe it's a definition. 8 Α. 9 It states -- Coal fired is defined in 225.410. 10 MS. DOCTORS: He's reading up in the definition. Let me direct him to --11 (by Mr. Cooper) 225.130, "coal-fired" means 12 Α. combusting any amount of coal or coal-derived fuel alone 13 14 or in combination with any amount of any other fuel during 15 a specified year. 16 17 BY MR. RIESER: 18 Okay. So, if it's dual fired and uses coal as Ο. 19 one of the fuels -- I'm sorry? MS. DOCTORS: Mr. Rieser, can he finish his response? 20 21 MR. RIESER: I'm sorry. Of course. 22 There was a definition for "oil-fired unit". Α. "Oil-fired unit" is defined as -- means a unit combusting 23 fuel oil for more than 15 percent of the annual heat input 24

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1 in a specified year and not qualifying as coal fired. MR. RIESER: All right. I may have some more. 2 3 Α. (by Mr. Davis) I can clarify that. MR. RIESER: Go ahead. 4 5 Α. (by Mr. Davis) I believe the distinction was 6 dual fired usually is between gas and oil and not coal. 7 8 BY MR. RIESER: 9 Thank you. In that same section, 225.435, now Ο. 10 we're looking at (b)(2), (b)(2) makes a reference -- I should say describes what happens if the unit uses heat 11 input rather than electrical output, but the baseline 12 13 years for heat input are 2007 and 2008. In (b)(1), the 14 unit looks to the two years prior to the year -- prior to 15 the 2012. So, what is the difference -- What is the basis 16 for this difference in the baseline years in these two? 17 MS. DOCTORS: Ms. Sims will answer. 18 (by Ms. Sims) I don't understand your Α. 19 question. Can you repeat it and give me the section 20 again? 21 22 BY MR. RIESER: Looking at 225.435, starting with (b)(2) --23 Q. MR. COOPER: "B" as in boy? 24

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1 Ο. "B" as in boy. This is in the new revised 2 proposal to the rule. For units relying on heat input, 3 your baseline years are the heat inputs from 2007 and 4 2008. Under (b)(1), which looks to gross electrical 5 output, is the two most recent years. And the question 6 is, what is the basis for this difference in the baseline 7 years? (by Ms. Sims) Since we allocate for control 8 Α. 9 period 2012 and 2009, we go back two years, which would be 10 2007 and 2008. Does that answer your question? MS. DOCTORS: Are you saying no difference between 11 the two; it's just stated slightly differently? 12 13 MR. RIESER: I see nodding heads. 14 (by Ms. Sims) Yes, there may need to be a Α. 15 language change here. 16 17 BY MR. RIESER: 18 Q. So, the intent is that you looked at those 19 same two years, whichever means you're using? 20 Α. (by Ms. Sims) That's correct. 21 HEARING OFFICER KNITTLE: Ms. Doctors, you'll address 22 that in comments if there needs to be a language change to 23 rectify that? MS. DOCTORS: Yes. 24

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1 BY MR. RIESER:

2	Q. Turning to 225.450(c), which is on Page 9 of
3	the motion, I believe Ms. Bassi already explored the basis
4	for the 15 days of the effective date of the rule for
5	compliance of types of information, and I think the
6	response was that that was something that you all would be
7	willing to look at?
8	MS. DOCTORS: Yes.
9	
10	BY MR. RIESER:
11	Q. Okay. Similarly, and I believe we talked to
12	Ms. Sims about this, in 225.450(d), there's a requirement
13	for quarterly reports, and the questions we asked before
14	was what the basis for requiring quarterly reports were,
15	and I was wondering if the Agency had had a chance to look
16	at that issue a little more closely.
17	MS. DOCTORS: Not in the last 48 hours.
18	
19	BY MR. RIESER:
20	Q. Okay. Been busy? And in looking at that, I
21	guess the question is whether it would be possible to
22	coordinate the dates of whatever that reporting is with
23	other reports that are due, some of which are due on the
24	30 days excuse me quarterly reports are due on the

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1 30th day after the quarter rather than the 31st of the month, some of which are due 45 days after the quarter, 2 3 and some of which are just due annually. 4 MS. DOCTORS: Do you have specific reports in mind? 5 MR. RIESER: The 45 day reports would be the reports 6 required under the Title 5 permits. The 30 day reports --7 The acid rain program reports are 30 days after the end of 8 the quarter. 9 MS. DOCTORS: Would you like to submit a suggestion? 10 MR. RIESER: I'd be happy to. MS. DOCTORS: Thank you. 11 12 Α. (by Mr. Bloomberg) One thing I'd like to note is that these reports would by necessity come in 13 14 separately. So, I'm not certain that there's a lot of 15 benefit gained by making them the same date. MS. BASSI: May I suggest that administratively 16 17 inside the companies there is. 18 (by Mr. Bloomberg) And that's possible. Α. 19 MR. RIESER: There's definite advantages gained by having things due at the same time, even if the Agency 20 21 treats those reports for different reasons. That's all I 22 have. Thank you. 23 HEARING OFFICER KNITTLE: Ms. Bugel? 24

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1 BY MS. BUGEL:

I have just a couple of questions on 2 Q. 3 distribution of the baseline allowances -- or for 4 allocation of the baseline allowances, and Ms. Sims 5 suggested that Mr. Ross might be the one to answer these. 6 Mr. Ross is suggesting he may not be the one to answer 7 these. 8 Α. (by Mr. Ross) Go ahead. 9 IEPA concluded that it was -- well, it Q. 10 proposed that the allowances be allocated without cost to the industry; is that correct? 11 12 Α. (by Mr. Ross) Yes. And were there -- Did the Agency consider 13 Q. other methods of allocation? 14 15 Α. Yes. We looked at the possibility of auctioning allowances. 16 17 And did the Agency conclude that there would Ο. be benefits from auctioning allowances? 18 19 Α. (by Mr. Ross) I believe we concluded that it 20 would be administratively burdensome for us to auction 21 allowances. We have no experience in that manner. We 22 have limited resources. And we also assessed that it would require some legislation for us to be able to do 23 24 that. So, we made a decision not to proceed with

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1 auctioning the allowances.

2 Q. Did the Agency examine whether there would be 3 any benefit? 4 Α. (by Mr. Ross) Benefit in the way of Agency 5 receiving revenue from auctioning? ο. Sure, that would be one benefit. 6 7 Α. (by Mr. Ross) Yes, we looked at that. And would the benefit of receiving revenue 8 Q. 9 balance against the cost of resources of auctioning? 10 Α. (by Mr. Ross) We don't know, but receiving revenue is one thing, being able to utilize it as needed 11 is another and -- I'll stop there. 12 13 Q. Will the Agency have to expend funds to 14 administer the CAIR program -- resources, revenue? 15 Α. (by Mr. Ross) Yes, to some extent. And where do those resources come from? 16 Q. (by Mr. Ross) Existing rev -- The resources 17 Α. come from internal staff, time and effort and --18 19 Have there been any challenges to external Ο. staff in terms of being under-resourced and --20 21 (by Mr. Ross) Absolutely. Yes, we have Α. 22 limited resources and limited ability to remedy that. Would an auction have been one possibility of 23 Q. 24 creating more revenue and resources for the Agency as a

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1 remedy to being under-resourced?

2 Α. (by Mr. Ross) It was a possibility we looked 3 at and decided it was not appropriate to pursue it. 4 Q. Is there any benefit to industry of not 5 pursuing an auction and distributing the allowances at no 6 cost? 7 Α. (by Mr. Ross) There's the benefit in that an 8 auction, they would have to purchase the allowances that 9 we have elected to give away for free. 10 And in considering an auction, did the Agency ο. consider that an auction would have imposed additional 11 cost on an entity subject to CAIR? 12 (by Mr. Ross) Yes. 13 Α. 14 MS. BUGEL: I have no further questions. 15 BY MR. GIRARD: 16 17 I just have one question along these lines. Ο. Mr. Ross, you mentioned in response to one of the 18 19 questions that you felt the Agency would have to go back 20 to the legislature to be able to auction off allowances. 21 Is that a way of saying that the Agency's position is it 22 does not have statutory authority to auction allowances? (by Mr. Ross) I believe, yes, that was legal 23 Α. 24 advice that was given to the decision makers, that we

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1 currently do not have the statutory authority to do an 2 auction. 3 Ο. And if you don't have the statutory authority, 4 then we can't write a rule that allows the auctioning of 5 allowances? Α. (by Mr. Ross) That's correct. 6 7 MR. GIRARD: Thank you. 8 HEARING OFFICER KNITTLE: Mr. Rao, do you have any? 9 MR. RAO: No. 10 HEARING OFFICER KNITTLE: Mr. Bonebrake? MR. BONEBRAKE: I have a couple follow-ups, and this 11 will be quick. They relate to 225.435. Mr. Rieser just 12 asked a couple questions about it. 13 14 MS. DOCTORS: Are you referring to the motion? MR. BONEBRAKE: Well, perhaps if we have both the 15 16 original proposed version and the motion proposed version, 17 it will be useful. It's Page 6 of the motion. 18 BY MR. BONEBRAKE: 19 20 Ο. Yesterday we discussed the fact that for the 21 initial allocation, the rule permitted the companies to 22 elect to submit and have the Agency rely upon either heat input or gross output, and my first question is, the 23 motion revision to 225.435(b), is one of the purposes of 24

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1 the revision to extend to the year 2012 the option to submit heat input or gross output data? 2 3 Α. (by Mr. Ross) Yes. 4 Q. And with that in mind, the section (b)(1), the 5 lead-in language is, "The units two most recent years in 6 control period gross electrical output, if available," 7 raises, again, the question of whether the rule is 8 intended to be optional, because the language "if 9 available" seems to be ambiguous, and in (b)(2), the 10 corresponding language seems to be, "If gross electrical output data is not provided." So, I guess my question to 11 12 the Agency would be, is the Agency willing to revise 225.435(b), and I think there's a similar issue with 13 14 225.435(a) and the other provisions that you talked about 15 yesterday, to make it clear that for the initial 16 allocation announcement in the year 2012, as well, that 17 the rule permits the companies to make the election? 18 (by Mr. Ross) Yes. Α. 19 BY MS. BASSI: 20 21 Ο. Does that include changing the word "shall" to 22 "may"? MS. DOCTORS: It's unclear exactly what the wording 23 24 change will be at this time, but the concept will be

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1 looked at.

2	MR. BONEBRAKE: And that is all I have for questions.
3	HEARING OFFICER KNITTLE: Do we have anything from
4	anybody else?
5	(No response.)
6	HEARING OFFICER KNITTLE: Let's go off the record for
7	a minute.
8	
9	(A brief discussion off the record.)
10	
11	HEARING OFFICER KNITTLE: Let's go back on the
12	record. After a quick recess There's a couple things I
13	want to note, and I was remiss earlier in not asking
14	And this is for you, Ms. Doctors. There's been some
15	references in your motion to amend the testimony regarding
16	certain dates, and I'm looking right now at Section
17	225.460 regarding the May 30th, 2006 date concerning court
18	orders and consent decrees
19	MS. DOCTORS: Yes.
20	HEARING OFFICER KNITTLE: there's been some
21	questions that have come up, and I think not only to this,
22	but to other dates, as well, that would at least implicate
23	a retroactive application of the rule, and we wanted you
24	to address that in public comments

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1 MS. DOCTORS: Okay.

2 HEARING OFFICER KNITTLE: -- or what we're calling 3 the post-hearing comments, if you could. Otherwise, I was 4 also remiss in noting that we've had a large number of 5 members of the public upwards -- I counted earlier 25 people, and now we're at about 10. So, I want to note 6 7 that there has been active public interest, and we've had 8 a number members of the public who are interested in this 9 proceeding, and we appreciate that.

Finally, we have had some off-the-record discussions, 10 11 and the transcript apparently will be available on 12 Tuesday, October 17th. Based upon that, the Agency is 13 going to file its post-hearing comments on or before 14 October 27th. The mailbox rule will not apply. So, we 15 need those in our hands on October 27th -- our collective 16 Board hands. And then on November 10th, we need the 17 prefile testimony for anybody wishing to testify at the next hearing, which is November 28th. Once again, the 18 19 mailbox rules does not apply. By Cool or if you have any 20 problems with Cool and you need to get it in on that day, 21 I would approve a fax filing, but you'd have to contact me beforehand. That applies to the Agency, as well, of 22 23 course.

24

So, other than that, I just want to thank everybody

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1 for their participation in the hearing and for your attention. If anyone has any questions about the 2 3 procedural aspects or any aspect of this rulemaking, you 4 can contact me. My phone number is 217-278-3111, and my 5 e-mail is knittlej@ipcb.state.il.us, and copies of the 6 transcript will also be available on the Board's web site 7 shortly after we receive them on October 17th, and that is at www.ipcb.state.il.us, and you'll also be able to find 8 9 previous Board orders and hearing officer orders on the 10 site. So, anything else from you, Ms. Doctors, before we 11 12 adjourn? MS. DOCTORS: No. 13 14 HEARING OFFICER KNITTLE: Anybody else? 15 MS. BASSI: Thank you very much. 16 HEARING OFFICER KNITTLE: Thank you all for your 17 time. Hearing is adjourned. 18 (Proceedings adjourned.) 19 20 21 22 23 24

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STATE OF ILLINOIS 1 ) ) 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 12, 2006, at the Illinois Environmental Protection Agency, Training Room, 1021 North 8 9 Grand Avenue East, North Entrance, Springfield, Illinois. IN WITNESS WHEREOF, I have hereunto set my hand and 10 affixed my Notarial Seal the 16th day of October, 2006. 11 12 13 HOLLY A. McCULLOUGH 14 Notary Public CSR #084-004265 15 RPR #821968 CCR #1011 16 17 18 19 20 21 22 23 24