



KEEFE REPORTING COMPANY

APPEARANCES

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Board Members present:

Chairman Claire A. Manning  
Board Member Nicholas J. Melas  
Board Member G. Tanner Girard  
Board Member Ronald C. Flemal  
Board Member Marili McFawn  
Board Member Elena Z. Kezelis  
Board Member Samuel T. Lawton, Jr.

Anand Rao, Senior Environmental Scientist  
Alisa Liu, Environmental Scientist  
Richard McGill, Senior Attorney in Charge of Research  
and Writing

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On behalf of the Illinois EPA

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## PROCEEDINGS

(October 6, 2000; 10:00 a.m.)

HEARING OFFICER JACKSON: Good morning, everyone. Right before we get started, I want to let you know I'm not going to go through my introductory remarks like I have all of the other hearings. I think most of you have probably heard them more times than you care to admit. If you do have any questions, however, Connie Newman is in the back of the room. She is the board's public information officer, and she will be glad to answer any questions that you have.

Susan Zingle with the Lake County Conservation Alliance is our first speaker this morning, and she's passed out a number of exhibits for the board. Before you begin speaking, I do want to go through them for the court reporter, and we can mark them as exhibits, so then as you refer to them, you can refer to them as a certain exhibit number.

We have had four exhibits so far entered on behalf of Ms. Zingle, so we'll start out with Zingle Exhibit 5, and that will be the document entitled "Typical Daily Load Curve" for Reliant Energy. Zingle No. 6 will be "The Status of U.S. Electricity Deregulation." It's a one-page handout. Zingle 7 will be an Arthur Andersen

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1 document entitled "Impact Analysis, Mallory--"  
2 M-A-L-L-O-R-Y-- "Parcel, Libertyville, Illinois."

3 Zingle 8 is-- appears to be an April 2000 document  
4 entitled "Effects of the Proposed Indeck Facility on  
5 Property Values, Land Use and Tax Revenues." Zingle 9  
6 is an August 15, 2000, letter to Mr. Kenneth Larson from  
7 the State's Attorney's Office of Lake County, Illinois,  
8 and finally, Zingle 10 is-- is that just one article?

9 MS. ZINGLE: There's three articles there.

10 HEARING OFFICER JACKSON: Three articles, newspaper  
11 articles, the first one being from the Daily Herald  
12 entitled "Ordinance would place provisos on peaker  
13 plants." And that's all I had; is that correct?

14 MS. ZINGLE: Yes, it is.

15 HEARING OFFICER JACKSON: Okay. All right. Then  
16 whenever you're ready to begin, please feel free.

17 MS. ZINGLE: Okay. Good morning. Thank you for  
18 letting me address you. Is this on?

19 HEARING OFFICER JACKSON: There's a button on top.

20 MS. ZINGLE: Good morning. Thank you for letting  
21 me address you this one last time on the issue of peaker  
22 electrical generating plants. You have been presented a  
23 wealth of information on air, noise, need, water,

24 regulations, siting and land use. The results of

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1 deregulation on the electric generating industry are  
2 complex and are not yet fully revealed. As we move  
3 towards consumer choice of provider, as surrounding  
4 states deregulate, as natural gas prices rise and fall,  
5 the industry will continue to change. The rush to site  
6 plants may completely stop. They may all shift to  
7 combined-cycle. Half may go bankrupt and leave us short  
8 of power. We don't know.

9 We need to devise a regulatory system that can  
10 adapt to future needs without our knowing now exactly  
11 what those needs will be. A system that requires  
12 issuance of permits regardless of circumstances does us  
13 all an injustice. The Governor should never again have  
14 to face a roomful of angry people who have a legitimate  
15 problem and have to say that his hands are tied.

16 One of the most interesting things about the  
17 process of deregulation has been the use of the word  
18 peaker. Peakers are designed to come on line quickly to  
19 supply an extra burst of power to accommodate short  
20 times of high demand. According to 4 CFR 75, peaker  
21 plants are expected to operate about 10 percent of the  
22 time, approximately 876 hours. Director Skinner in his

23 letter to the USEPA said that peakers were expected to  
24 run about 20 days a year. That's 300 hours. Here in

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1 Illinois, plants claiming to be peakers are being  
2 permitted for 2300, 3300, 4,000 hours, not 300 to 900.

3 Well, time is the horizontal axis of that  
4 equation. The other consideration with peakers is the  
5 vertical axis. How much of the total demand on any  
6 given day can be categorized as peak? In earlier  
7 testimony, Reliant Energy provided a typical daily load  
8 curve that clearly illustrates the concept. Not only do  
9 peakers only operate 10 percent of the time; when they  
10 are operating, they're only providing a small proportion  
11 of the total power that's needed. They're frosting on  
12 the cake.

13 As Dr. Overby explained, total demand on the ComEd  
14 system has been as high as about 21,000 megawatts, so  
15 peaking power within main should be about 2,000  
16 megawatts, not the 22,000 megawatts we have being  
17 permitted now. In the applications, most of these  
18 plants have some indication that they plan to operate  
19 year-round. I don't believe these are peakers. These  
20 are intermediate load plants.

21 The difficulty from a regulatory standpoint that

22 that brings, since peakers theoretically only operate a  
23 small proportion of the time and need to come on line  
24 quickly, they are not designed for efficiency. Peaker

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1 thermal efficiency is only in the low 30 percents. Heat  
2 and water vapor go up the stacks in copious amounts. A  
3 combined-cycle plant in recapturing that steam improves  
4 efficiency significantly, and a cogen plant can attain  
5 as much as 80 percent efficiency, saving both natural  
6 gas and emissions.

7         Allowing plants that are truly serving the  
8 intermediate load market to be as wasteful as peakers is  
9 inappropriate. We have talked about minor versus major  
10 status of these plants and the need to implement BACT  
11 and LAER standards. That need is clarified and  
12 highlighted by some of the agency's answers to your  
13 questions, and I will touch on those at the end of my  
14 presentation.

15         There are municipal concerns as well. Illinois is  
16 far ahead of the pack in the megawatts of generating  
17 capacity being planned. Wisconsin and Minnesota each  
18 report about 8,000 megawatts. Missouri had 5,000  
19 megawatts in June. As the map of the deregulated  
20 states, this next one, shows-- this came from the Wall

21 Street Journal in an article over the summer-- Illinois  
22 is a deregulated island in the middle of other regulated  
23 states. The plants will want to come here because our  
24 laws make it possible for them to do so. The subsequent

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1 burden on municipalities and on our environment is  
2 great.

3 The institution of public hearings on the air  
4 permits is a welcome improvement, but most villages are  
5 still not prepared to deal effectively with the  
6 technicalities of narrowly-defined air permitting.  
7 Verena Owen and I have read all of the permits and all  
8 of the applications, and there is a common element.  
9 Municipalities don't participate in a meaningful way in  
10 the air permitting process. Only the Great Lakes Naval  
11 Training Center and the Village of Wadsworth submitted  
12 detailed comments to the IEPA on permits from villages  
13 near them.

14 Even a municipality as sophisticated as  
15 Libertyville where air quality issues took up several  
16 planning commission meetings did not participate in the  
17 hearing or submit written comments on their permit, and  
18 air permitting alone doesn't even begin to cover the  
19 issues of water, noise, land use and so forth, the other

20 part of siting a power plant.

21 In preparation for this hearing, we have visited  
22 Web sites and talked to representatives in Wisconsin,  
23 Minnesota, Michigan, Ohio, Texas, California, Florida  
24 and other states researching their siting practices. We

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1 are still in the throes of putting together a final  
2 report. Now that the hearings are ending, we can devote  
3 a little bit more energy to that.

4 The practices are as different as the states  
5 themselves. Again, however, there is one common  
6 element. No state leaves the siting of power-- No state  
7 that we found yet leaves the siting of power plants  
8 exclusively to local control with no guidance or  
9 supervision from state environmental regulatory bodies.

10 We are starting to see signs of distress in  
11 Illinois. During the air permit hearings in Zion,  
12 without commenting specifically on the permit, several  
13 governments did ask for help. The Villages of Wadsworth  
14 and Winthrop Harbor, Benton and Newport Townships,  
15 presented resolutions opposing the plants on their  
16 borders. Lake County board members spoke. State  
17 senators and representatives attended. U.S.  
18 congressional candidate Lance Pressl attended and

19 commented on the hearings.

20 During the Libertyville hearings, Grayslake and  
21 Fremont Township opposed Indeck. Warrenville has  
22 actually sued the City of Aurora and now is contributing  
23 financially towards residents' continuing efforts.  
24 Indeck is suing McHenry County. Wadsworth recently

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1 authorized its attorney to analyze its options regarding  
2 the Zion plants. We are developing a siting program for  
3 peaker plants. It's the courts.

4 The landfill siting procedure commonly described as  
5 SB 172 has great potential for easing some of the  
6 distress over determining the proper locations for  
7 peaker electrical generating plants. Among other  
8 things, it calls for the issuance of an overall permit  
9 to operate the facility; it provides structure for the  
10 decision-making process and highlights areas of concern;  
11 it provides for expert technical advice and guidance; it  
12 provides for input and some control from neighboring  
13 communities. Most importantly, it allows, I think, for  
14 local control of the process and upholds local zoning  
15 ordinances.

16 Now, I read that from Director Skinner's comments  
17 on SB 172. I've had some conversations with folks here

18 in the audience today that think that SB 172 trumps  
19 local zoning ordinances. I don't-- I want to keep an  
20 element of local control in all of this. Villages have  
21 a right to be stupid or not as they choose with some--  
22 within some parameters, so I'm supporting SB 72,  
23 assuming that it does in fact provide for local control  
24 input.

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1 The first seven criteria used in the landfill  
2 siting decision process are fairly easy to adapt to the  
3 peakers. Points 8 and 9 pertaining to counties with  
4 solid waste management plants obviously don't apply to  
5 peaker plants. There is need, however, for more  
6 specificity in point 2, which is the facility is so  
7 designed, located and proposed to be operated that the  
8 public health, safety and welfare will be protected.  
9 There is no way for the local community or the siting  
10 board to adequately ascertain those facts without, one,  
11 the draft air permit, including analysis of the effect  
12 of PSD increments and future economic development in the  
13 area, the point of maximum impact, the effect on local  
14 and regional air quality in conjunction with other  
15 pollution sources in the area, effect on soils,  
16 livestock, habitat and so forth.

17           Second, confirmation from the Illinois Water Survey  
18           on the potential effect on the aquifer, or, alternately,  
19           confirmation from the Department of Natural Resources  
20           that sufficient Lake Michigan water is available, again  
21           in conjunction with other demands on the water supply in  
22           the area. Now, if the advisory committee ultimately  
23           does come up with a permitting program for water usage,  
24           then that permit should be a part of this review as

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1           well.

2           Confirmation that the design of the plant will meet  
3           Illinois noise standards, the relationship of that noise  
4           to the existing ambient noise level and the probable  
5           effect on nearby homeowners, and then last, any other  
6           permits that may be required, MPDES, storm water runoff,  
7           particularly containment of potentially polluted water,  
8           wetland fill and any other permits that may be required.

9           Further, as Verena Owen explained in Grayslake, the  
10          applicant should be required to provide studies on the  
11          effect on biology, visual quality, landscaping, burning,  
12          traffic. Oil backup for some of these plants is a major  
13          concern. The Skygen plant in Zion will use 7 million  
14          gallons of oil during the season, and that is from 600  
15          tanker trucks coming up an unpaved township road

16 separating two plants that's no farther apart than the  
17 distance of this room. Natural gas supply, impacts of  
18 alternatives to the proposed project, socioeconomics and  
19 local services, jobs, taxes, roads and so forth.

20 We'd recommend that we-- that siting permits will  
21 be required of any plant more than 30 megawatts. We  
22 would like the Illinois Pollution Control Board to  
23 conduct the siting hearing, providing your expertise,  
24 your impartiality and consistency between hearings. The

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1 siting hearing must not be scheduled until those  
2 separate reviews have been completed. Appropriate  
3 personnel from those various departments must attend the  
4 siting hearing to lend their interpretation of the  
5 permits and the standards.

6 Draft permits in all those areas are important,  
7 because they may very well change when you start looking  
8 at the confluence and the conversions of all these  
9 different elements coming together, and ultimately,  
10 before the plant can be built, all three hurdles must be  
11 crossed, all the environmental permits, overall siting  
12 permit from the Pollution Control Board and local zoning  
13 from the village.

14 Notice of the hearing should be sent much further

15        afield than they are now, including the county, state,  
16        municipalities within three miles of the plant,  
17        individual legislators, military bases, all the other  
18        regulatory agencies, including local ones like soil and  
19        water conservation districts and storm water management  
20        and local sanitary districts, all adjacent properties  
21        and neighbors within 1,000 feet of the property. In  
22        some areas that could probably be less, but up in my  
23        area, we're rural. If you only do 300 or 400 feet,  
24        you're only going to hit one neighbor. And prominent

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1        local community citizens' groups.

2                The file and all related documents must be  
3        available for public inspection at the offices of the  
4        government body hosting the plant and/or local library.  
5        Right now, notice only goes to people that have  
6        requested to be on the notice list, and that only  
7        sporadically. Neither Verena nor I received notices for  
8        the hearings of a plant in Zion, and subsequent  
9        extensions of public comment, we were not notified of  
10       that either.

11               The Pollution Control Board must keep an element of  
12       control. The regulations must be worded that the  
13       Pollution Control Board may issue the permit, although a

14 requirement that you must respond in a certain amount of  
15 time I think is completely appropriate.

16 The existing structure that requires the issuance  
17 of a permit does a disservice to the community in terms  
18 of market or regulatory change or other unanticipated  
19 events, and I think that the electric generating  
20 industry right now is still very much in flux. We  
21 haven't gotten to the point where consumers choose their  
22 own power provider yet. There's only a limited list of  
23 the companies that have signed up to provide power to  
24 local consumers. We could end up with an imbalance

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1 where we've got merchant plants here but nobody to  
2 supply local needs, and I don't want to have the  
3 environmental regulations get in the way, which I think  
4 they do now, of good policy decisions.

5 Should the plant change its configuration at some  
6 future date, go to combined-cycle or cogeneration, the  
7 siting process must be reopened to account for the new  
8 activity. Additions of new turbines in excess of 25  
9 percent of the original capacity will also trigger a new  
10 review beyond the applicable air permitting.

11 But even the best-designed siting program won't  
12 work if the input from the various permitting programs

13 is superficial or slanted. A rigorous, consistent and  
14 honest permitting system is necessary for this process  
15 to work. We did discuss this some yesterday. The  
16 technique of limiting hours to limit pollution has  
17 special risks. The arithmetic is fairly easy. If you  
18 want to stay under-- just under 250 tons of nitrogen  
19 oxide, you divide by the emissions from the turbine, and  
20 the result is the number of hours the plants can  
21 operate.

22 That's fine, but what if you have no real data on  
23 the turbine's performance? What if you don't include  
24 the heightened emissions in start-up or shut-down? What

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1 if you underestimate the number of start-ups? What if  
2 you assume that hazardous pollutants are low and don't  
3 bother to calculate them? What if you don't match the  
4 projected months of operation with the weather  
5 conditions? The efficiency varies wildly between cold  
6 weather and hot weather. I'd like to see a skeptical,  
7 critical attitude towards permitting. The power  
8 companies are not clients of the IEPA.

9 There were a few other miscellaneous topics left  
10 from previous meetings. We had talked about how  
11 turbines are not necessarily assessed property taxes and

12 the effect that that has on the community. In  
13 Libertyville, Arthur Andersen did a comparison of two  
14 scenarios, 300,000 square feet of office space and  
15 70,000 square feet of retail space versus a 300-megawatt  
16 peaker generating plant and 400,000 square feet of  
17 industrial space. The industrial retail combination  
18 yielded property and sales taxes of 1.9 million with  
19 employment impact of 1,480 jobs, while the peaker  
20 industrial combination provided taxes of only \$557,000  
21 and employment impacts of 403 jobs. The details and  
22 assumptions are in that packet.

23 Also enclosed there is a copy of a letter from Mr.  
24 Mike Waller, who's the Lake County State's Attorney,

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1 describing how the decision whether they're personal or  
2 real property is made, and then a study from Dr. Tolley  
3 at the University of Chicago about the effects on  
4 property values of homes near peaker-- any kind of power  
5 plant.

6 We also-- Most of the companies that are coming  
7 into Illinois are significant corporations with  
8 operations in multiple states, and in this book I put  
9 together for you are financial summaries that I just  
10 pulled off the Internet, corporate overviews and the

11 recent press releases from ten of the companies coming  
12 here. It's good reading. They are all large  
13 corporations, hugely profitable. Most of them have had  
14 their stocks hit new highs just this year. Most of them  
15 do operate in multiple states. A lot of them are  
16 already meeting California BACT and LAER standard, so I  
17 see no reason why they can't do so now. Some of the  
18 press releases will give you an insight into how they  
19 plan to expand in the future, how many megawatts of  
20 power they each plan to produce, how many turbines  
21 they're going to buy. I don't think we're going to have  
22 electrical shortage supply in the United States for very  
23 much longer.

24 As far as noise, the board had expressed interest

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1 in learning more about vibrations, which are often how  
2 low-frequency sounds are perceived. Unfortunately, I  
3 was unable to find additional information in time for  
4 this hearing, but I will continue to work on it.

5 Since I first prepared this presentation, we've had  
6 the opportunity to review the 23 questions and the  
7 answers from the agency that were submitted by the  
8 board, and I do have some comments there. Throughout--  
9 And we are going to submit detailed comments on those

10 answers, but I won't do it today. But throughout the  
11 packet, the agency seems to be focusing a lot on the  
12 prevention of significant deterioration rules and how  
13 they ultimately will protect us.

14 The difficulty we have is that as Chris Romaine  
15 submitted in his testimony in August, there were only  
16 two of the peaker plants that trigger PSD review.  
17 Virtually all of the peaker plants are coming in as  
18 synthetic minors, and so all of the protections that PSD  
19 offers are not being implemented in terms of the  
20 peakers.

21 There was also thoughts expressed through the  
22 questions that these are small sources; they are  
23 diminutive sources; each one does not have a significant  
24 impact on the air quality. I would disagree with the

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1 characterization of them as small sources, and I would  
2 repeat the plea that we've been saying all along, that  
3 we need very carefully to consider the cumulative effect  
4 of all these sources as they skirt the PSD regulations  
5 and come in as minors.

6 John Mullen, who's the attorney for Wadsworth,  
7 filed a comment on the Skygen permit in Zion, and I  
8 think I will just quote his comments here because he

9           said it better than I can. There are more than 25  
10 peaker plant applications pending before the IEPA, but  
11 the IEPA refuses to consider the cumulative effect of  
12 these plants. To ignore the cumulative effect is  
13 violative of the IEPA mandate and is indicative of its  
14 bias in favor of issuance of permits. This position  
15 also defies common sense. Common sense is not  
16 prohibited by statute. It is the aggregate effect of  
17 millions of cars in the United States that has prompted  
18 comprehensive regulations of automobile emissions, not  
19 the discharge from a single car. It is totally  
20 illogical to disregard the cumulative effects of the  
21 peaker plants.

22           Further, we were disappointed in the comments to  
23 noise. In fact, I think that noise is a significant  
24 factor in the peaker plants at least in Lake County,

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1           where they are coming into residential areas and will  
2 have an effect on homes far from their local source. We  
3 need to consider beyond just the threshold of 51 or 60  
4 decibels what the underlying ambient noise is.

5           You heard from Cathy Johnson from Rural and City  
6 Preservation out in Marengo, where they're looking at  
7 siting a plant in very, very almost wilderness areas,

8 wetlands, endangered species, endangered plants. There  
9 is going to be nothing to compete with that plant for  
10 noise, and the noise will carry for miles. It will have  
11 an effect on the future development of that area. In  
12 fact, it establishes almost an industrial beachhead out  
13 in the middle of nowhere.

14 In residential areas like Aurora, Bartlett, Zion,  
15 you have homes near it, and 60 decibels may be like an  
16 air conditioner sound, but in fact, there was an air  
17 conditioner running in the room when we had the Skygen  
18 and Carlton permitting process, and we had to turn it  
19 off to be able to hear ourselves talk. It further has--  
20 it's a different character of noise. If you go out and  
21 you sit on your deck in the evening, you're listening to  
22 crickets and cicadas and the wind in the trees, a  
23 mechanical hum is a-- it's just a terrible intrusion,  
24 even if it's not overwhelming the other sounds. So I

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1 would like the nature of the neighborhood to be  
2 considered as you consider noise considerations.

3 Clustering is still not addressed completely by the  
4 PSD rules. Zion is bragging that there are six  
5 companies talking to them. They are down-- They are  
6 south of the Pleasant Prairie coal-fired plant; they are

7 south of the Pleasant Prairie 1,000-megawatt  
8 combined-cycle plant; they are north of the Waukegan  
9 coal-fired plant; they are north of the Midwest  
10 Generation peaker plant; they are north of the North  
11 Shore Sanitary District; but almost all of those plants  
12 are considered technically minor sources.

13 Right now, thanks to Mr. Skinner's generosity, they  
14 did in fact do modeling on those, but if we were to play  
15 it by the rules, they would all be considered minor  
16 sources; there would be no modeling; there would be no  
17 public hearing; there would be no public comment period;  
18 those permits would just be issued. So it's important  
19 throughout those 23 questions that all the protections  
20 that are expressed in those questions, including  
21 modeling, BACT and LAER, public review, appeal,  
22 technically all disappear if these are minor sources,  
23 and that can be corrected by adjusting the list of 28  
24 exceptions either by taking out the word "steam

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1 generators" or by including peakers as a separate  
2 category.

3 So to summarize, do peaker plants need to be  
4 regulated more strictly than Illinois current air  
5 quality statutes and regulations provide? Yes. Peaker

6 plants escape major designation through the wording of  
7 that 28 exceptions listed in the regs. There is no  
8 reason that I can see for peakers to be regulated less  
9 strictly than any other electrical generating unit.

10 One of the hazards in this process is limiting our  
11 review and our thoughts to those plants currently being  
12 permitted. We have to consider the potential harm if  
13 all future plants are permitted in this same way and  
14 where the industry may be going. Given deregulation, we  
15 don't know how many plants that will be.

16 We should be conservative in our permitting  
17 programs. As it is, we are encouraging less efficient  
18 technology because the dirtier plants can be permitted  
19 easier than the clean plants. We also have to consider  
20 the overall effect of these plants. On page 29 of the  
21 23-question response, the modelers did acknowledge that  
22 so far, peakers have a small but noticeable effect on  
23 the ozone.

24 Question number two: Do peaker plants pose a

1 unique threat or a greater threat than other types of  
2 state-regulated facilities with respect to air  
3 pollution, noise pollution or groundwater or surface  
4 water pollution? I would say yes. Peaker plants are

5 not as efficient in their use of natural gas and in  
6 limiting emissions of NOx as combined-cycle or  
7 cogeneration plants. They are inherently more polluting  
8 than other natural gas-fired configurations, and  
9 according to Mr. Zak, peakers pose a particular noise  
10 threat. This is exacerbated by the siting philosophy  
11 that puts these plants in residential areas.

12 They also do provide some threat to groundwater  
13 usage. Most peaker plants don't use a lot of water, but  
14 that's not universal by any means. The Skygen plant in  
15 Zion uses power augmentation, which involves steam, and  
16 the Skygen plant in Zion will be using 2.1 million  
17 gallons of water a day. That is more than the entire  
18 city of Zion uses.

19 As they look at water usage and perhaps a  
20 permitting program for water, you need to consider the  
21 issue of thresholds too. The plants right now are adept  
22 at-- and I think it's deliberate, but I can't really  
23 prove that-- multiple locations, all of which keep them  
24 under the 250-ton limit. Reliant has three plants

1 between-- including McHenry and Lake. Indeck is trying  
2 for three locations between McHenry and Lake Counties.  
3 John Notch with Carlton is involved with ABB in

4 Bartlett, with Carlton Power in Zion and with a proposed  
5 plant in Waukegan.

6 By splitting the plants into multiple locations,  
7 they come under the thresholds. They do it with NOx,  
8 and I suspect they will do it with water too. So with  
9 all of these, some provision to look at ownership of  
10 multiple plants; this corporation is having a certain  
11 effect on our environment, not just each individual  
12 location.

13 Question three: Should new or expending peaker  
14 plants be subject to siting requirements beyond  
15 applicable zoning requirements? Yes. The difficulty  
16 municipalities are having-- is having is evidenced by  
17 the number of court cases. Most municipalities will  
18 site only one peaker. They never gain experience; they  
19 never develop expertise.

20 Question four: If the board determines that peaker  
21 plants should be more strictly regulated or restricted,  
22 should additional regulations or restrictions apply to  
23 currently permitted facilities or only to new facilities  
24 and expansions? I believe strongly that they should

1 apply to currently permitted and pending facilities.  
2 We've repeatedly asked for a moratorium to stop the

3        permitting while we can get this stuff sorted out. For  
4        whatever reason, everything is still going forward.

5                The power companies are very aware of the  
6        controversy, very aware of the existence of these  
7        hearings, and, just like the NOx SIP call, that everyone  
8        will have to apply within the trading program, that  
9        everyone will have to comply with it. I believe  
10       whatever new regulations come out of these hearings  
11       everyone should have to comply with.

12               So what we need, we need, we ask, that you  
13       recommend to the Governor and the legislature that we  
14       enact a moratorium on the air permits in the veto  
15       session to give us all some breathing room and to make  
16       the playing field level, make it fair for everyone. We  
17       ask that you lift the NOx waiver. More NOx is not a  
18       good thing. We need less NOx, not more. We ask that  
19       you adopt new air regulations, including peaker plants  
20       with those 28 exceptions, and we ask for a siting  
21       program to help the municipalities determine what to do  
22       with peakers.

23               In the course of some of the conversations, there  
24       have been some other questions at some of the hearings

1       that just I will briefly address. I believe Member

2       McFawn in Grayslake asked why we didn't come sooner to  
3       the Pollution Control Board. Frankly, ignorance. I've  
4       worked in Lake County about eight years, but I've never  
5       done anything on a state level before. I didn't even  
6       know you existed, and I'm going to remedy that in the  
7       future.

8               Second, the legislature was already well involved  
9       in this by the time we got involved. A year ago,  
10       Representative Franks in Woodstock was holding his own  
11       public hearings on peaker plants. By December, the Lake  
12       County Board was making legislative recommendations for  
13       a moratorium for siting. By the spring session, Senator  
14       Lauzen, Senator Klemm, Mary Lou Cowlshaw, Tim Schmitz,  
15       Tom Cross-- I mean, it just exploded, and we couldn't  
16       get it-- it was like herding cats. We couldn't get it  
17       organized. Obviously a lot of interest, but no focus or  
18       direction.

19               It was about at that time we did learn the  
20       existence of the board and start to do some research  
21       about would this be a good place to go, and about the  
22       time we made up our mind to do it was when the Governor  
23       trumped us and sent it to you anyway. So you're here.  
24       It's been a wonderful experience. You have now been

1 exposed to the environmental community in six counties,  
2 and I don't think you're going to be invisible anymore.

3 Lastly, someone yesterday asked about have there  
4 been contacts in other states. Yes. I have gotten  
5 phone calls from people in Georgia, Colorado, Rhode  
6 Island, Michigan and Washington State all starting to  
7 face the same problems as their city deregulates too, so  
8 this will be a national issue sooner rather than later.

9 With that, I'm available for questions. Thank you  
10 for your time.

11 HEARING OFFICER JACKSON: Thank you again, Ms.  
12 Zingle.

13 MS. ZINGLE: Thank you.

14 HEARING OFFICER JACKSON: We'll open it up for  
15 questions. Before we do take a question, the binder  
16 that you presented--

17 MS. ZINGLE: Yeah. That'll be-- I guess that's 11.

18 HEARING OFFICER JACKSON: Be Zingle Exhibit 11, and  
19 is there a title on the cover or anything?

20 MS. ZINGLE: "Business Overview, Electrical  
21 Generating Companies."

22 HEARING OFFICER JACKSON: Okay. Thank you.

23 MS. ZINGLE: Yes?

24 BOARD MEMBER MCFAWN: Well, I'll start. That was a

1 very nice summary.

2 MS. ZINGLE: Thank you.

3 BOARD MEMBER MCFAWN: I know you've been coming to  
4 all the other hearings, and-- thank you, Dr. Flemal--  
5 and I do want to thank you for that, and you certainly  
6 have given your group or your personal views on this  
7 very-- a good focus for us to read over and to  
8 contemplate and consider the entire record along with  
9 your points.

10 MS. ZINGLE: Thank you.

11 BOARD MEMBER MCFAWN: Because of that, I don't have  
12 a lot of questions, but you did say something, and maybe  
13 I'm taking it out of context, but I'd like you to  
14 elaborate on it, if you would. You said that  
15 environmental regs can get in the way of good policy  
16 decisions, and I didn't know if you meant the current  
17 regulations or exactly what you meant. Could you  
18 explain?

19 MS. ZINGLE: I mean the current regulations, and I  
20 also mean what could happen in the future. Our current  
21 regulations require the issuance of a permit in 180  
22 days, and so the IEPA is grounding new permits. They  
23 have to issue them or prove that in fact it is going to  
24 violate the Clean Air Act, which I think could be

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1 proven, but it takes a political will to take that stand  
2 to start denying permits when you have a history of  
3 working cooperatively with the industry.

4 So I think we've erred on the side of being way too  
5 loose with this and hurting our-- potentially hurting  
6 our environment. I think California went a little bit  
7 the other way and was so restrictive and didn't see the  
8 need for electricity increasing at the speed that it was  
9 that they left themselves flat-footed, but they didn't  
10 go back and change their policies to open the door a  
11 little bit wider either.

12 There was an article in-- on the Internet before I  
13 left, the California ISO is now soliciting development  
14 proposals from power companies to try to get California  
15 over the hump. Well, I can send them about 50, if  
16 they'd like to go. And particularly where dereg is not  
17 yet sorted out, we don't know where this is going to  
18 happen. We don't know how many power companies are  
19 going to come in in total. We could become the power  
20 generating capital for the entire Midwest. If the other  
21 states don't deregulate, folks, we're the-- we're it,  
22 and I don't necessarily know what that means for us, and  
23 I don't want to see a regulation that requires the  
24 issuance of permits, encourage that.

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1 BOARD MEMBER MCFAWN: Thank you.

2 MS. ZINGLE: Thank you.

3 BOARD MEMBER MCFAWN: You also suggested that  
4 plants that are 30 megawatts or greater be subject to  
5 the siting hearing. Any reason that you picked the 30  
6 megawatts?

7 MS. ZINGLE: Well, I copied it from Wisconsin, who  
8 requires a full environmental impact statement for  
9 anything over 30 megawatts. It is-- If it's overly  
10 restrictive on the industry, we'd be amenable to talking  
11 about that. It was a negotiating point that was placed  
12 to start with a precedence in Wisconsin, because that's  
13 where they start at.

14 BOARD MEMBER MCFAWN: Okay. You also suggested  
15 that the board conduct the siting hearings.

16 MS. ZINGLE: Yes.

17 BOARD MEMBER MCFAWN: That deviates from what we  
18 currently have for new or regional pollution control  
19 facilities. Is there any particular reason to-- Right  
20 now, that's with the local community, that type of  
21 siting. Any reason that you would have it be a state  
22 board?

23 MS. ZINGLE: Partly because the-- not that  
24 landfills aren't complex. They are, but they tend to

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1 focus on some groundwater issues and traffic issues that  
2 can be easily visualized by somebody living there, the  
3 height of the landfill, how much burning you need, that  
4 sort of thing. The environmental effects of peaker  
5 plants tend to be a little bit more esoteric. How many  
6 villages really want to talk about NOx and ozone? Our  
7 experience is that they don't participate in the air  
8 permitting process even though they can, and I don't  
9 know that having a siting hearing where they just-- we  
10 spell out you have to talk about it but they don't know  
11 what to do with it benefits as much.

12 This board's got the advantage. You're all  
13 technically capable. You have technical experts that  
14 you can call on to guide you and to guide the village,  
15 and from what I've seen so far, you are impartial. If  
16 you start to see a pattern in air permits time and time  
17 and time again, there becomes the policy input that you  
18 can provide some direction to the course as opposed to  
19 each of them being handled individually.

20 You would also have the ability to weigh things.  
21 It would be possible for the criteria for each  
22 individual environmental permit to be met and yet not  
23 have it be a good site for a peaker plant, or perhaps  
24 even for it to be a real close call on environmental

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1 permit but overall it would be a good place and it  
2 should have a power plant there either because the grid  
3 needs it or because there's no other better place or we  
4 need more power.

5 You would have the ability to encourage the  
6 placement of power plants as well, and I would like to  
7 see it get out of-- I want the local villages to have  
8 someone to help them. I don't-- I want them to be able  
9 to say no. I don't want to violate their zoning  
10 standards. I wouldn't want you to come into Lake County  
11 and place a plant. But the process needs oversight.

12 The Wisconsin process does trump local zoning and  
13 it does end up in lawsuits. There's a plant going in in  
14 Dane County, the RockGen plant, which is just a clone of  
15 what we're getting in Zion, and that's been bloody. The  
16 Wisconsin siting authority decided that they are over  
17 the protests of the village and local residents, and  
18 it's going to be in the Environmental Appeals Board and  
19 it's going to court. It's a mess.

20 BOARD MEMBER MCFAWN: Thank you. One just point of  
21 information. The Exhibit No. 2 that you gave to us, you  
22 mentioned during your testimony that it came from the  
23 Wall Street Journal?

24

MS. ZINGLE: Yes, and I no longer have the

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1 article. I'll have to go find it.

2 BOARD MEMBER MCFAWN: If you could just tell us the  
3 date so that we could more quickly locate it. And I  
4 thank you again for your comments today and other days.

5 MS. ZINGLE: Oh, thank you.

6 CHAIRMAN MANNING: I just want to thank you, Ms.  
7 Zingle, for your very effective participation in these  
8 proceedings. You've been here throughout all these  
9 proceedings and we really appreciate your comments and  
10 your testimony and your participation.

11 MS. ZINGLE: Thank you for letting me participate  
12 as much as I have. I'm grateful.

13 HEARING OFFICER JACKSON: Thank you very much.

14 MS. ZINGLE: Thank you.

15 HEARING OFFICER JACKSON: Next we have the Illinois  
16 Environmental Protection Agency, and as they're coming  
17 forward, I do have a couple of clarifications that I'd  
18 like to go through on the record. As I was compiling  
19 the list of exhibits from this matter, I noticed a  
20 couple of inconsistencies or changes that needed to be  
21 made, and I wanted to note those on the record so it  
22 would be easy for people to follow along in this

23 process.

24 First thing I noticed, from our August 27 hearing

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1 that was held in Chicago, when the industry  
2 representatives spoke, the exhibits were numbered 1  
3 through whatever chronologically without reference to  
4 the individual actually offering any of the exhibits, so  
5 that has been changed. For example, Indeck Energy  
6 offered two exhibits, and those would be referred to as  
7 Indeck 1 and 2, and then you would begin again with the  
8 next industry, MAIN, for example, MAIN Exhibit 1, as  
9 opposed to following along with 3, 4, 5 after Indeck. I  
10 hope that clarifies that problem.

11 Next, during our hearing in Naperville, Du Page  
12 County Board offered a report entitled the "Versar  
13 Report," V-E-R-S-A-R. The report they actually  
14 presented to us during the hearing was a draft report.  
15 A final report has now been filed, and it will be  
16 substituted in the record as Du Page County Board  
17 Exhibit 1 from that Naperville hearing.

18 Next thing, there were a couple of items that were  
19 presented but were not actually accepted into the record  
20 during the hearings. The first one was Chicago Legal  
21 Clinic. Keith Harley's comments have been now listed as

22 Chicago Legal Clinic Exhibit 2. And Du Page County  
23 Board again, Paul Hoss offered his written comments into  
24 the record, and they have been marked now as Du Page

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1 County Board Exhibit 3.

2 Two other things. Susan Zingle presented a number  
3 of exhibits throughout some of our earlier hearings, and  
4 somehow on the record we got off in the numbering  
5 process, so that has now been corrected in the final  
6 exhibit list that will be available to our notice list  
7 and on the Web site.

8 And last but not least, the Illinois Commerce  
9 Commission filed a motion for leave to file instanter  
10 their written prefiled testimony on August 23, and I  
11 just wanted to make sure that was officially granted on  
12 the record, and that prefiled testimony was accepted  
13 into the record.

14 Those were the only points of clarification that I  
15 had. With that, I do also want to add that we have one  
16 additional board staff member present who will be  
17 conducting some of the questioning of the Illinois EPA.  
18 It's Richard McGill up to my right. He is the board's  
19 senior attorney in charge of research and writing, so he  
20 will be participating in the questioning of the agency

21 panel. Do you have anything to add?

22 CHAIRMAN MANNING: Yeah, I think I do. I had a  
23 couple of comments myself. First of all, I wanted to  
24 commend the agency for your participation in this

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1 proceeding. In a very short time frame, we asked you a  
2 lot of significant questions that we've heard through  
3 the course of this proceeding, and I for one appreciate  
4 the document that you gave us and think that you did a  
5 very fine job giving us well-informed responses to those  
6 questions.

7 What I'd like to say as well, in terms of the  
8 existing laws and regulations that apply to peaker  
9 plants as well as all industry throughout the state of  
10 Illinois, I think you've done a fine job in terms of  
11 applying those laws and trying to be publicly  
12 responsible. This issue has hit you hard too as well in  
13 terms of all of the work that you've done in terms of  
14 trying to be publicly responsible, and I commend you and  
15 your agency and Director Skinner for trying to be  
16 publicly responsible on this particular issue.

17 What I also would like to say is that our job--  
18 it's our job now to determine whether those existing  
19 laws and regulations are effective and to make that--

20 the recommendation to the Governor and the members of  
21 the legislative assembly, so we don't intend really to  
22 ask you a lot of policy questions today in terms of what  
23 you think we should tell the Governor, okay? But we do  
24 have a lot of questions that we'd like to go through

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1 your responses in terms of making sure that we  
2 understand those responses and making sure that we have  
3 a full and complete record regarding all of the lot of  
4 complex issues in terms of the air permitting program  
5 and the air regulations that currently exist and those  
6 that may exist in the future.

7 So that's kind of where we are with all of this,  
8 and I'd like you to go ahead and go forward. Do you  
9 want to go through your responses or would you like us  
10 just to begin asking you questions?

11 MR. PHILLIPS: We have no formal presentation,  
12 Madam Chairman, so if you want to just start asking  
13 questions--

14 CHAIRMAN MANNING: So we did a pretty good job  
15 responding to everything you were going to say, right?

16 MR. PHILLIPS: Yeah.

17 CHAIRMAN MANNING: We sort of asked you everything  
18 we thought was left open and that might be gray in the

19 record, and that's kind of what our hope was and that we  
20 would go ahead and ask them. Okay.

21 MR. PHILLIPS: Would you like me to introduce the  
22 panel?

23 CHAIRMAN MANNING: Go ahead.

24 HEARING OFFICER JACKSON: Please. That's what I

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1 was going to ask you to do.

2 MR. PHILLIPS: My name is Scott Phillips, and I'm  
3 an attorney with the Illinois EPA. Immediately to my  
4 right is Greg Zak. To my left is Chris Romaine.

5 HEARING OFFICER JACKSON: You may want to spell the  
6 names for the--

7 MR. PHILLIPS: Oh, okay. R-O-M-A-I-N-E. To Chris'  
8 left is Todd-- T-O-D-D-- Marvel-- M-A-R-V-E-L-- and to  
9 Todd's left is Steve Nightingale, N-I-G-H-T-E-N--

10 MR. NIGHTINGALE: "I."

11 MR. PHILLIPS: -- I-N-G-A-L-E.

12 HEARING OFFICER JACKSON: I will note also that the  
13 responses to the board's questions that were filed by  
14 the IEPA have now been docketed in as Public Comment  
15 Number 9, and they are available on the board's Web  
16 site.

17 MR. PHILLIPS: And depending on the nature of the

18 questions, also we have Kathleen Bassi, B-A-S-S-I, who  
19 is sitting right behind us here, who may from time to  
20 time be responding to questions as well. Missing today  
21 is Rob Kaleel. Mr. Kaleel was not available today. He  
22 was here yesterday. Mr. Kaleel was our expert on  
23 modeling, so questions that deal with the modeling  
24 issue, we just need to preserve those questions in the

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1 record and then we will respond prior to the November 6  
2 closure date for the record in this matter.

3 HEARING OFFICER JACKSON: That'll be fine.

4 BOARD MEMBER FLEMAL: Thank you. I have a number  
5 of questions that focus on the area of NOx emissions  
6 from the peaker plants, and again, I appreciate, as the  
7 Chairman has indicated, the depth of your responses to  
8 our questions in that area, but I think nonetheless  
9 there's some particular aspects of it that, if nothing  
10 else, in fleshing out on the oral part of this record  
11 might be useful.

12 Let me first go to the issue of the NOx waiver, and  
13 I would direct you to your responses on page 16, and the  
14 page 16 I'm referring to is in PC Number 9, Public  
15 Comment No. 9. You were posed a question, and I will  
16 read it, and then I would like it if you could just

17 maybe read your answer into the record and we can talk  
18 about some particular parts of it. The question posed  
19 was: "Please comment on whether the United States  
20 Environmental Protection Agency (USEPA) should revoke  
21 the nitrogen oxides (NOx) waiver with respect to  
22 Illinois." May we have your answer to that question?

23 MS. BASSI: I'm Kathleen Bassi answering this  
24 question. The removal of the NOx waiver would have

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1 ramifications that are well beyond the scope of this  
2 proceeding. Therefore, the NOx waiver should not be  
3 revoked based solely on peaker plants.

4 As stated in the agency's testimony, current  
5 modeling shows that emissions from currently permitted  
6 and proposed peaker plants will not interfere with the  
7 area's ability to attain the ozone NAAQS, which stands  
8 for national ambient air quality standard. The decision  
9 of the-- on the NOx waiver should be made by USEPA in  
10 the context of its review of the attainment  
11 demonstration for the Chicago area.

12 To the extent that reducing emissions from peakers  
13 is deemed appropriate, these reductions can be  
14 accomplished through the imposition of control measures  
15 that are more appropriate to address this group of

16 sources rather than by revocation of the NOx waiver.

17 BOARD MEMBER FLEMAL: Thank you. In that first  
18 sentence of your response, you observe that there are  
19 ramifications beyond those in this proceeding. Could  
20 you give us just a flavor of what you're thinking about  
21 there in terms of the ramifications?

22 MS. BASSI: The NOx waiver does not limit the scope  
23 of control measures that would be required or reductions  
24 that would be required to just power plants. It would

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1 involve all sources of NOx.

2 BOARD MEMBER FLEMAL: And so its removal, should  
3 that occur, has effects in-- give us some examples of  
4 those sources that you're referring to again, just for  
5 the record.

6 MS. BASSI: Okay. Some examples would include  
7 industrial sources that in the Chicago area emit more  
8 than 25 tons per year of NOx, because the definition of  
9 major source for ozone precursor pollutants is 25 tons,  
10 so this would include-- this could include any number of  
11 types of sources so long as they would emit NOx.

12 BOARD MEMBER FLEMAL: Okay. In your second  
13 paragraph, the last sentence says, "The decision on the  
14 NOx waiver should be made by USEPA in the context of its

15 review of the attainment demonstration for the Chicago  
16 region." Is that advisory, that that's how it should be  
17 done, from your perspective, or that that's the way it  
18 will occur?

19 MS. BASSI: That's the way it will occur. The NOx  
20 waiver is issued, and it provides that USEPA may review  
21 the NOx waiver in the context of the attainment  
22 demonstrations at the appropriate time. There's nothing  
23 in the waiver that bars controls, but they will review  
24 the waiver-- they may review the waiver again during the

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1 review of the attainment demonstration.

2 BOARD MEMBER FLEMAL: We are facing attainment  
3 demonstration fairly shortly, are we not?

4 MS. BASSI: That's correct.

5 BOARD MEMBER FLEMAL: And are we therefore to read  
6 that we can anticipate that USEPA will in fact be  
7 reviewing the NOx waiver as part of that upcoming  
8 demonstration?

9 MS. BASSI: The waiver that was issued says that  
10 they may review it.

11 BOARD MEMBER FLEMAL: That they may. It's an  
12 opportunity for them; it's not mandatory that they so  
13 do.

14 MS. BASSI: That's correct.

15 BOARD MEMBER FLEMAL: Does the agency have any  
16 anticipation of whether they will be reviewing the NOx  
17 waiver in the context of a new demonstration?

18 MS. BASSI: I expect that they will review what we  
19 have to say. With the attainment demonstration, we have  
20 to submit air quality modeling. You saw some  
21 preliminary air quality modeling that Rob presented in  
22 the first of these-- this set of hearings, so they will  
23 review that air quality modeling. They will-- You know,  
24 NOx is of course the issue that they're looking at at

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1 this point in time, but the attainment demonstration  
2 involves far more than NOx. It also involves all the  
3 VOC regs that we've-- you've adopted over the years and  
4 conformity. It's far larger than just the regulations  
5 that we have adopted here, and-- in Illinois, and they  
6 will be looking at all of that.

7 BOARD MEMBER FLEMAL: Do you have any expectation  
8 that USEPA will be on their own volition revoking the  
9 NOx waiver?

10 MS. BASSI: I have no expectation one way or the  
11 other on that. I would anticipate that they-- They  
12 never forget it. It's always there. But I don't-- I

13 couldn't say whether they would revoke it or not revoke  
14 it.

15 BOARD MEMBER FLEMAL: When you talk to these folks,  
16 do they remind you that it's out there?

17 MS. BASSI: Periodically.

18 BOARD MEMBER FLEMAL: Thank you. In your last  
19 paragraph to the same response-- and again, for the  
20 record, I'm referring to page 16 of Public Comment 9--  
21 and I'll read it again just to keep us focused on the  
22 issue. "To the extent that reducing emissions from  
23 peakers is deemed appropriate, these reductions can be  
24 accomplished through the imposition of control measures

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1 that are more appropriate to address this group of  
2 sources rather than the revocation of the NOx waiver."  
3 What kind of reduction measures are you contemplating  
4 that are appropriate for these control measures?

5 MS. BASSI: I don't know that we have determined  
6 that anything is appropriate, anything in particular is  
7 appropriate. What we're trying to say here is that if  
8 the board decides or-- to recommend that there be  
9 control measures applied to this group of sources or  
10 this type of sources, that those control measures do not  
11 necessarily-- that they don't involve the NOx waiver.

12 There is no bar to control-- NOx control measures that  
13 is established by the NOx waiver, so if the board deems  
14 it appropriate to recommend that there be additional  
15 control measures applied to these sources of NOx, they  
16 can be done without revocation of the waiver.

17 BOARD MEMBER FLEMAL: Okay. I would like next to  
18 explore the nexus between the NOx SIP call and peaker  
19 power plants, but perhaps for the record, to keep the  
20 subject matter collectively together, are there-- I  
21 would certainly yield if anybody might have questions  
22 regarding the NOx waiver.

23 BOARD MEMBER KEZELIS: I have one question as a  
24 follow-up to Dr. Flemal's. I'll speak loudly. What

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1 kind of time frame are you anticipating with respect to  
2 this process, the attainment demonstration?

3 MS. BASSI: Our attainment demonstration is due by  
4 December 31, 2000, and we must hold a public hearing,  
5 which will be noticed fairly quickly in order for us to  
6 complete the hearing process and the follow-up comment  
7 process and, you know, gathering all the comments.

8 BOARD MEMBER KEZELIS: Thank you.

9 MR. RAO: I had one follow-up to Dr. Flemal's  
10 questions. When you talk about the other ramifications

11 of revoking a NOx waiver, you mentioned how it would  
12 affect other sources, and on page 17, the first  
13 paragraph, you know, you state that-- you know,  
14 regarding the implications for NOx emitters, you say it  
15 would have no effect on existing and currently permitted  
16 peakers as there would be no retroactive effect. Could  
17 you explain a little bit more as to, you know, the basis  
18 of that statement?

19 MS. BASSI: Sure. What you're referring to, I  
20 believe, is in sub-question A at the top of page 17 of  
21 Public Comment 9.

22 MR. RAO: Yes.

23 MS. BASSI: This particular comment goes  
24 specifically to the Chicago Legal Clinic's petition for

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1 revocation of the NOx waiver for New Source Review. My  
2 understanding is they-- is that this petition does not  
3 seek blanket revocation of the NOx waiver. It seeks  
4 revocation only for New Source Review. And if this were  
5 to occur, it's our interpretation that New Source Review  
6 would apply prospectively, not retroactively. But the  
7 NOx waiver covers more than New Source Review. This is  
8 just one element of the waiver.

9 MR. RAO: Okay. Do you believe that the NOx waiver

10 may be revoked on a partial basis?

11 MS. BASSI: The NOx waiver provides that where a  
12 state granted a waiver, control sources, that the waiver  
13 is removed with regard to those sources, so I guess my  
14 answer is USEPA has interpreted itself or has deemed  
15 that it is partially removed in certain cases.

16 MR. RAO: Thank you.

17 BOARD MEMBER FLEMAL: Let me move on, then, to sort  
18 of the second area I wanted to explore, which is again  
19 the nexus between what's going on in a closer related  
20 regulatory proceeding, the NOx emissions trading NOx SIP  
21 call rule and what we anticipate will be  
22 soon-to-be-filed additional regulatory proposals before  
23 the board that deal with yet other aspects of the NOx  
24 SIP call.

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1 I'm not quite sure how to best go at this, so let's  
2 try a couple of ways and see if we get the record  
3 fleshed in the process. Let me ask this question  
4 first: Does the agency ever have occasion to write a  
5 permit with a permit limitation that is larger than what  
6 you actually expect will be the emissions?

7 MR. ROMAINE: Certainly.

8 BOARD MEMBER FLEMAL: Okay.

9 MR. ROMAINE: We issue permits for potential  
10 emissions based on an application in which the applicant  
11 has put forth certain proposed operating parameters and  
12 emission rates. If those potential emissions comply  
13 with applicable regulations and in fact those potential  
14 emissions can be permitted, we issue a permit for those  
15 potential emissions.

16 Quite often we have a belief that actual emissions  
17 are much smaller than the permitted emissions, and a  
18 simple example of that, if you visited the Elwood  
19 facility, the Elwood facility is permitted for something  
20 on the order of 290 tons per year of NOx emissions from  
21 its four simple-cycle turbines. In the 1999 time frame,  
22 it only emitted something less than 70 tons per year of  
23 NOx, so that's about a quarter of its permitted  
24 emissions of NOx. In that particular year, obviously

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1 that depends on the particular meteorology, the  
2 temperature, how much demand there is for that facility,  
3 but we permit maximum emissions. We don't permit actual  
4 emissions.

5 BOARD MEMBER FLEMAL: Okay. I have two whys that  
6 follow in this. Why do you do this and why are  
7 sometimes the emissions actually less than the potential

8 emissions?

9 MR. ROMAINE: I think I'll do the second one. The  
10 emissions are less than the permit emissions to the  
11 extent that a facility does not operate to the full  
12 level of utilization projected in the application, so if  
13 a facility such as Elwood has come in and requested a  
14 permit that would allow it to operate for 1500 hours per  
15 year but it only operates somewhere in the range of 600  
16 hours per year due to the particular demand in that  
17 year, it will simply have less emissions.

18 In addition, people routinely apply for permit  
19 limitations that provide them some safety margin of  
20 compliance, depending on-- and that margin of compliance  
21 can be significant compared to what they're prepared to  
22 represent in the permit application. What they have is  
23 a guarantee for the manufacturer.

24 In terms of NOx emissions, it would appear that

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1 people are consistently giving us numbers and permits  
2 that they can comply with by at least a 10 to 20 percent  
3 safety margin, and that's something-- a consequence of  
4 the guarantee process where when the manufacturer  
5 commits to a company, that they're going to comply with  
6 a particular emission rate, they want to have some

7 margin of safety that can, you know, assure that the  
8 turbine doesn't perform exactly as it did at the  
9 previous installation; if there's slight differences in  
10 how it was installed or whatever, that they would still  
11 not be under obligation to correct the problem; in fact,  
12 their guarantee is still good.

13 In terms of the other aspect of it, I think the  
14 simple answer is we examine those potential emissions.  
15 If those potential emissions comply with applicable  
16 regulations, they're entitled to the permit. We are not  
17 in a position to dictate they have a smaller permit or a  
18 permit that allows lesser emissions unless applicable  
19 regulations or regulatory programs demand that that  
20 facility have lesser emissions.

21 BOARD MEMBER FLEMAL: In that context, is there  
22 anything in the current NOx SIP call that-- proposed  
23 regulations that is a driver for lesser emissions than  
24 maximum permitted?

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1 MS. BASSI: I'll answer-- I'm Kathleen Bassi. I'll  
2 answer that one. The NOx SIP call places a cap on the  
3 number of allowances that the State can issue. The NOx  
4 SIP call requires that each emitter of NOx that is  
5 subject to this program surrender an allowance for each

6 ton of NOx that's emitted during what they call the  
7 control period. The control period runs from May 1  
8 through September 30 of every year, except 2004, when it  
9 starts May 31. Therefore, the SIP call does present  
10 limitations on operation in terms of the requirement  
11 that each peaker, in this case, have an allowance for  
12 each ton that it emits.

13 MR. ROMAINE: Let me follow up with that with sort  
14 of a further point that comes up in a previous  
15 discussion. Because of the difference between permitted  
16 emissions and actual emissions, allocations under the  
17 NOx SIP call are also based on historical operation, so  
18 people do not obtain allowances after we have historical  
19 operating data based on what they have in the permits.  
20 They get the allowances based on the number of BTU's  
21 they've put into their combustion units. So at that  
22 point, the NOx SIP call ties back to actual levels of  
23 operation.

24 BOARD MEMBER FLEMAL: Do you actually get to the

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1 point where you rewrite the permit with a lower limit as  
2 a result of this tieback?

3 MR. ROMAINE: No.

4 BOARD MEMBER FLEMAL: It still stays as actual

5 emissions, although there is nonetheless some kind of  
6 control on the potential-- the actual emissions related  
7 to the NOx SIP call.

8 MR. ROMAINÉ: Simply, the point was that their  
9 allocations are based on what they've actually done.  
10 They still have a permit that allows them additional  
11 capacity. In fact, if there's a demand for the power,  
12 if there's an extremely hot year or Commonwealth  
13 Edison-- or Midwest Generation, I should say-- has  
14 additional outages of units that are unable to provide  
15 power, they can operate legitimately within the bounds  
16 provided by their permit.

17 BOARD MEMBER FLEMAL: Is the panel familiar with  
18 two exhibits which were received yesterday entitled  
19 Dorge Exhibit 2 and Dorge Exhibit 3? Have you folks had  
20 an opportunity to actually look at that?

21 MR. PHILLIPS: I don't think we have, Dr. Flemal.

22 BOARD MEMBER FLEMAL: I think maybe some of the  
23 questions that I have would be best answered if we get a  
24 copy of these before the agency. Miss Dorge, do you by

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1 any chance have another copy of these we could--

2 HEARING OFFICER JACKSON: Why don't we go off the  
3 record here for a second and we can track down some

4 copies.

5 BOARD MEMBER FLEMAL: Okay.

6 HEARING OFFICER JACKSON: Why don't we take about a  
7 ten-minute break here. We'll come back. Thank you.

8 (Brief recess taken.)

9 HEARING OFFICER JACKSON: All right. We'll go back  
10 on the record. Okay. I think we've received copies of  
11 the documents that we were looking for, Dorge Exhibits 2  
12 and 3, so, Dr. Flemal, if you would like to continue  
13 with your questioning.

14 BOARD MEMBER FLEMAL: Thank you. First off, let me  
15 put you at ease. I'm not intending to look at any  
16 particular line items or details in this chart, but I  
17 thought it would be a useful backdrop for us to continue  
18 to explore this question or questions related to NOx  
19 emissions from power plants.

20 Let's look collectively, if we can, at Dorge  
21 Exhibit 3. One finds there in the list of permits  
22 issued that were PSD, prevention of significant  
23 deterioration permits, a list of NOx tons emissions.  
24 Could you explain what those numbers are? Those are--

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1 You tell me what they are.

2 MR. ROMAINE: I believe what has been reported on

3           this is the total tons per year of NOx that the facility  
4           has been permitted to emit.  Following that is  
5           information on the PPM of emissions, which is a  
6           short-term limit on individual turbines.

7           BOARD MEMBER FLEMAL:  If I were to then obtain any  
8           one of these specific permits and look at it-- look in  
9           it, I would find this number as the number the agency  
10          has permitted that facility to admit NOx.

11          MR. ROMAINE:  I believe so, yes.

12          BOARD MEMBER FLEMAL:  And that would be the  
13          12-month running average?  Is that a correct way to look  
14          at it?

15          MR. ROMAINE:  It would be a 12-month running  
16          total.  I wouldn't be surprised-- So it would be simply  
17          determined January-- well, in December you go back to  
18          January through December; in January, in January through  
19          February, so you'd have a new determination every month.

20          BOARD MEMBER FLEMAL:  Do you know or do you have  
21          any way to estimate what portion of any one of these  
22          emissions totals would be ozone season as opposed to the  
23          other months of the year?  Perhaps we ought to note on  
24          the record what we mean by ozone season as well.

1           MR. ROMAINE:  Certainly assumptions can be made in

2 that regard. I think the simplest assumption is that  
3 the peaker plants, the simple-cycle units would simply  
4 operate in the ozone season. All their emissions would  
5 be ozone season emissions from May to September, the  
6 five-month full ozone season. Beyond that, they may be  
7 more concentrated in June, July and August.

8 In terms of the combined-cycle facilities, most of  
9 these facilities are in fact permitted for continuous  
10 operation, 12 months a year, 8,760 hours per year, so it  
11 would be simply a matter of using the appropriate  
12 arithmetic. Either five-twelfths of those emissions  
13 would be the ozone season emissions potentially, or if  
14 you just want to do June, July and August, it would be--  
15 three-twelfths of those totals would be the permitted  
16 emissions.

17 BOARD MEMBER FLEMAL: For the record, again  
18 referring to-- or still referring to Dorge Exhibit 3,  
19 are any of these combined-cycle, or are they  
20 single-cycle? We-- I again am not particularly  
21 interested in any one, but sort of a mix. What are we  
22 looking at here?

23 MR. ROMAINE: You're looking at a mix here. Some  
24 are combined-cycle, some are simple-cycle, and to mess

1           it up a little bit, some are in fact permitted to  
2           initially operate as simple-cycle, and the permit then  
3           allows conversion to a combined-cycle facility.

4           BOARD MEMBER FLEMAL:  Again, back on the NOx tons,  
5           in doing some rough math, it looks to me like that total  
6           of the facilities listed here, the total emissions  
7           permit is about 7,000 tons per year, give or take some.  
8           Would it be the agency's anticipation that these  
9           facilities will actually emit 7,000 tons of NOx?

10          MR. ROMAINE:  No, it would not.

11          BOARD MEMBER FLEMAL:  And again, can you explain  
12          why you would anticipate that the actual emissions would  
13          be something less than the 7,000?

14          MR. ROMAINE:  Well, as I said, we are permitting  
15          these facilities for their potential to emit.  For  
16          example, combined-cycle facilities, the assumption is  
17          made or the request for permitting is that they be  
18          allowed to operate continuously.  One of the questions  
19          that was raised about the combined-cycle facilities was  
20          whether they would in fact be base-load units, whether  
21          they would in fact operate flat out, whether they would  
22          be so-called cyclic units or load-following units-- I  
23          think that's the terminology that's being used-- that  
24          would come on at some point where there is an increased

1 demand above that for base-load plants but those plants  
2 do in fact operate simply in the summer or the winter  
3 but do not operate year-round at full load.

4 The exact operation of those plants will in fact  
5 depend on how the demand for electricity rose, how the  
6 seasonal variation of that demand rose or changes. All  
7 we can say is that certainly these facilities will not  
8 operate continuously at this point in time or the next  
9 couple of years after they're started. I don't believe  
10 there's demand for these levels of operation. Certainly  
11 coal and nuclear power plants can operate much less  
12 expensively to provide power if that's all that's needed  
13 at that point in time.

14 In terms of the peaking plants, again, peaking  
15 plants only operate when other cyclic power plants or  
16 base-loaded power plants can't provide power for the  
17 most part. To the extent that a combined-cycle facility  
18 can provide power, that could reduce the amount of  
19 operation of peaking plants then. So there is a great  
20 deal of uncertainty about exactly how much these  
21 individual plants would operate.

22 BOARD MEMBER FLEMAL: If we assume that the  
23 regulation-- regulatory proposal currently before the  
24 board in the NOx trading rule, NOx SIP call rule, does

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1       become law, what effect do you anticipate that would  
2       have on whether or not the-- or the amount of emissions  
3       that come from these facilities? What would be the  
4       consequence of that law being in place?

5               MR. ROMAINE: Under the NOx SIP call budget rule,  
6       the facilities would have to obtain allowances for those  
7       emissions. That would put a value on minimizing  
8       emissions beyond what there currently is. It would  
9       certainly act as another force encouraging facilities to  
10      minimize emissions and would certainly be another force  
11      to consider in the siting, when a facility began  
12      operation, so it'd be another market force that would  
13      tend to add an additional cost to operation.

14             BOARD MEMBER FLEMAL: There's been commented  
15      various times in the record that-- is the effect that  
16      peaker plants are somehow avoiding BACT-- B-A-C-T-- and  
17      LAER-- L-A-E-R-- by virtue of certain regulatory  
18      constructs that exist now. Do you see that the NOx  
19      trading rule in some effect gets to the same point in  
20      terms of imposing limitations on the ability of new  
21      facilities to emit without necessarily BACT or LAER  
22      testing present?

23             MR. ROMAINE: Could you please restate the  
24      question? I was-- You added that tail end about BACT or

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1 LAER.

2 BOARD MEMBER FLEMAL: I'll try. I had enough  
3 time-- difficulty getting to that point. I did see that  
4 Miss Bassi was about ready to leap in, and perhaps maybe  
5 she understood me better than I do myself and could  
6 answer that.

7 MS. BASSI: This is-- I'm not sure I am the right  
8 person to answer this. BACT and LAER are-- at least  
9 BACT is a technology-based limitation. What the SIP  
10 call or sub-part W that we have proposed before you in  
11 R01-9 does is limit the total number of emissions. It  
12 doesn't impose a technology-based control measure. It  
13 just limits emissions and leaves it to the companies to  
14 decide how they're going to operate or if they're going  
15 to limit control or whatever. So in terms of the level  
16 of emissions, perhaps it gets to a similar point. In  
17 terms of the control technology applied, perhaps it gets  
18 to a similar point just through practical application  
19 but not through regulatory requirement.

20 BOARD MEMBER FLEMAL: It seems to me from the chair  
21 that I sit in, an important thing that we do is limit  
22 the total amount of emissions because that is the  
23 environmentally appropriate thing to do. I mean, if  
24 it's the emissions that cause an environmental problem,

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1       our goal ought to be to cut down emissions.  Should I be  
2       bothered by whether that emissions control is done by  
3       imposition of something we call BACT or something we  
4       call LAER or something we call market forces as long as  
5       we get there?

6             MS. BASSI:  You're asking for our opinion?

7             BOARD MEMBER FLEMAL:  I'm asking for--

8             MS. BASSI:  The end point is the same.  If you view  
9       control measures as limiting emissions, then, yes, how  
10      you get there is-- theoretically doesn't matter.

11            BOARD MEMBER FLEMAL:  So my question was, are we  
12      getting to that ideal goal of environmental management  
13      of limiting emissions in ways through the NOx trading  
14      program that in effect are the same-- end up in the same  
15      way that if we were doing BACT and LAER we would also  
16      get to?

17            MR. ROMAINE:  I can answer that.  That certainly is  
18      not the case.

19            BOARD MEMBER FLEMAL:  Not the case.

20            MR. ROMAINE:  The NOx SIP call addresses one aspect  
21      of it.  BACT and LAER would in fact address a different  
22      dimension.  BACT and LAER would require a certain level  
23      of emissions control irregardless of the amount of  
24      emissions.  If that is in fact a policy objective, then

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1 that policy objective would be satisfied-- can only be  
2 satisfied through a BACT or LAER requirement. It can't  
3 be satisfied through a NOx budget crunch.

4 BOARD MEMBER MCFAWN: You don't think that  
5 companies would be interested in applying BACT or LAER  
6 at their equipment so that they can avoid having to  
7 purchase allowances?

8 MR. ROMAINÉ: I don't know enough about the actual  
9 cost of allowances as compared to the cost of BACT or  
10 LAER to know what is the economic decision a company  
11 will make in those circumstances.

12 BOARD MEMBER FLEMAL: Let me wrap up my part of  
13 this exploration simply by taking us over to Dorge  
14 Exhibit 2, which is a different subset of permits  
15 issued, and I would just ask the broad question whether  
16 any of the responses that you've had that have focused  
17 on Exhibit 2, Dorge Exhibit 2, would differ if we were  
18 focused instead on Dorge Exhibit 2.

19 MR. ROMAINÉ: My understanding is that all the  
20 facilities that are on Dorge Exhibit 2 are in fact  
21 simple-cycle units. We don't have any combined-cycle  
22 units present. Therefore, the comments with regard to  
23 simple-cycle units apply with regard to how you would  
24 assume what their actual emissions might be. That's it.

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1 BOARD MEMBER FLEMAL: That concludes, I guess, what  
2 I wanted to ask for the moment.

3 BOARD MEMBER KEZELIS: I have a very quick  
4 clarification question. Dorge Exhibits 2 and 3-- and  
5 I'm-- makes no difference to me who in the agency  
6 responds to this-- but they're not current, are they?  
7 Are there more permits that have issued that are not  
8 listed on Dorge Exhibits 2 and 3?

9 MS. ZINGLE: Yes.

10 BOARD MEMBER KEZELIS: Do you know how many,  
11 roughly?

12 MR. ROMAINE: No, because I haven't counted up how  
13 many are in Dorge Exhibits 2 and 3.

14 BOARD MEMBER KEZELIS: Okay.

15 MR. ROMAINE: I could--

16 BOARD MEMBER KEZELIS: Before you leave, could you  
17 tell us?

18 MR. ROMAINE: I think our goal was to provide that  
19 information in writing as opposed to comment at the last  
20 minute so you get the best possible information.

21 BOARD MEMBER KEZELIS: Good.

22 MR. ROMAINE: For example, just the other day we  
23 had discussions about Indeck-Libertyville. Indeck has

24 finally withdrawn that application since they've been

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1 turned down by the local community.

2 BOARD MEMBER KEZELIS: Great. I'll look for it in  
3 November. Thank you.

4 CHAIRMAN MANNING: When you prepare that document,  
5 would you include all of the information that's on these  
6 columns on Dorge Exhibit 1 and 2 so that we-- in terms  
7 of the time limits of those kinds of things? 2 and 3,  
8 is it?

9 HEARING OFFICER JACKSON: Uh-huh.

10 CHAIRMAN MANNING: Okay. In particular, I have a  
11 couple of questions about limitations on permits in  
12 terms of time. I guess my question is I don't  
13 understand how the process works. If you could walk me  
14 through that a little bit. When the application is  
15 filed, it's filed with a certain suggested limitation  
16 both in terms of NOx emissions and in terms of time  
17 limitation? Is that correct, or is there another sort  
18 of scenario in terms of how that works in terms of the  
19 permit limitations that are contained in the ultimate  
20 permit?

21 MR. ROMAINE: Okay. There is variation in the  
22 applications, and the purpose of an application is for

23 that applicant to demonstrate compliance. What we would  
24 like to see ideally in all applications is information

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1 on the short-term emission rates, exactly what they're  
2 going to guarantee the performance of the turbine in  
3 terms of pounds per hour of emissions and in terms of  
4 PPM emissions; then, knowing that information, an idea  
5 of level of utilization they would like to be permitted  
6 at either in terms of fuel consumption or in hours of  
7 operation.

8 We have a bias toward fuel consumption. It's the  
9 sort of thing that's it easier to keep track of a gas  
10 meter-- we all know what those are-- to see how much  
11 fuel's consumed. And then we'd like to see their  
12 request for annual emissions and a calculation or their  
13 explanation of how they've developed their estimate for  
14 annual emissions.

15 CHAIRMAN MANNING: You started that response by  
16 saying "we'd like to see."

17 MR. ROMAINE: Right.

18 CHAIRMAN MANNING: What are you required to-- What  
19 is the company required to give you?

20 MR. ROMAINE: The company is required to give us  
21 information on short-term emissions from the turbine.

22 The company is--

23 CHAIRMAN MANNING: What do you mean by that,  
24 short-term emissions from the turbine? Daily? Hourly?

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1 Weekly?

2 MR. ROMAINE: Hourly emissions.

3 CHAIRMAN MANNING: Okay.

4 MR. ROMAINE: And--

5 CHAIRMAN MANNING: So you'll have that information  
6 in every peaker plant application or every application  
7 for-- one of these applications will have that  
8 information.

9 MR. ROMAINE: I believe so, yes.

10 CHAIRMAN MANNING: Okay.

11 MR. ROMAINE: Beyond that, the forms do request  
12 information on hours of operation, but some people say  
13 that's just general information. We'd also like to have  
14 the permit limits established based on fuel  
15 consumption. When people do do that, then they provide  
16 us a separate explanation regarding fuel consumption to  
17 annual emissions. If an application does not provide  
18 that information, we would simply multiply their  
19 representations about hourly emissions times the maximum  
20 hours of operation that they've provided to come up with

21 the annual emissions that are represented by that  
22 application.

23 CHAIRMAN MANNING: So the annual emissions that are  
24 represented are considering just the hours of operation,

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1 or are they considering a 12-month year?

2 MR. ROMAINE: I guess I'd say it's the same. We're  
3 looking at hours of operation being how many hours per  
4 year they operate. We express that in terms of what's  
5 the maximum hours per day, maximum days per week,  
6 maximum weeks per year, or other representation of how  
7 many hours per year the facility would operate or the  
8 turbines would operate.

9 CHAIRMAN MANNING: So from your perspective, the  
10 number 249, if that's the permitted number, it's 249 NOx  
11 emissions, obviously, for whatever time frame the  
12 facility is permitted to be in operation.

13 MR. ROMAINE: 249 tons per year for any year that  
14 that facility operates.

15 CHAIRMAN MANNING: As restricted by the time of the  
16 permits.

17 MR. ROMAINE: By the time of the--

18 CHAIRMAN MANNING: As restricted by time in the  
19 permits itself.

20 MR. ROMAINE: If the permit also contains a  
21 restriction that you shall not operate more than so many  
22 hours per year, that would also be another restriction  
23 on that facility, another dimension of limitation on the  
24 facility. Again, that would apply as a running total of

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1 12 months of information, of data. If we say, for  
2 example, you shall not operate more than 1500 hours per  
3 year, that would be 1500 hours for each 12-month period  
4 of time. We do have a limitation in terms of fuel  
5 consumption, but again, on each 12-month period of time.

6 CHAIRMAN MANNING: In your responses on page 4, you  
7 talked about how you had to go to great lengths to  
8 convince the USEPA of the appropriateness of certain  
9 board rules that require only seasonal emissions  
10 limitations. Could you expand on that a little bit and  
11 for the record give us what those board rules are that  
12 you're talking about?

13 MS. BASSI: The first one that I recall that we  
14 had-- that we did this in was the-- it was the marine  
15 loading-- it was the marine vessel operations in the St.  
16 Louis area in the Metro East non-attainment area, so it  
17 appeared in part 219, and then we brought 218 to conform  
18 with this. This was the first seasonal rule that we had

19 proposed to USEPA, and we spent a deal of time talking  
20 to them about it before they were willing to accept it.  
21 Marine vessel loading. I think that's what we call it.

22 CHAIRMAN MANNING: And their concern is-- what was  
23 their concern?

24 MS. BASSI: The Clean Air Act is structured around

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1 annual limitations, so this-- and our reasoning was  
2 ozone is a seasonal problem, it's not an annual problem  
3 in this state, and therefore, seasonal controls should  
4 be all that are required to-- the purpose of the rule  
5 was to be one of the rules that helps us to attain the  
6 ozone standard and-- or to meet other similar  
7 requirements that were related to the ozone standard,  
8 and therefore, in-- since we were presenting it to USEPA  
9 in that form or for those purposes, then accepting a  
10 seasonal control program should be okay. I mean, they  
11 should do that. And that was earlier in the 90's, and  
12 since then, obviously, they've come around to also see  
13 that seasonal controls have some value.

14 CHAIRMAN MANNING: I guess the concern that's been  
15 expressed on the record which I'd like the agency to  
16 speak to, if you could, is the idea with these  
17 particular plants operating only in the high ozone

18 season, during the three months, perhaps June through  
19 the end of August, that there's a greater concern  
20 regarding environmental impact because all of the NOx  
21 being emitted presumably or potentially during those  
22 three months, causing then a greater impact on citizens  
23 than would be had we been considering them on an entire  
24 12-month year or 12-month basis.

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1 MS. BASSI: Can we have a moment?

2 CHAIRMAN MANNING: Go ahead.

3 (Discussion held off the record.)

4 MR. ROMAINE: I think the simple answer is that  
5 that is correct. The USEPA regulations do not apply to  
6 PSD program with an adjusted seasonal equivalent  
7 applicability threshold. It is simply an annual  
8 number. If the decision was made that we want to have a  
9 comparable program that does consider seasonal  
10 applicability, we are fortunate that some of the things  
11 we have done with marine vessel loading would provide us  
12 a basis to do that.

13 CHAIRMAN MANNING: Thank you. Elena, do you have a  
14 follow-up?

15 BOARD MEMBER KEZELIS: I do, in a slightly  
16 different area. Page 15 of the agency's response to the

17 questions we had submitted to you, the last paragraph on  
18 that page, there is a discussion concerning the  
19 expectation of the agency that there'll be greater  
20 amounts of carbon monoxide and volatile organic  
21 materials during low load operations, and the question I  
22 have is with respect to the last sentence on that page  
23 on that paragraph, if an application is conservatively  
24 developed. Are you referring to the application by the

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1 permittee?

2 MR. ROMAINÉ: Yes, permittee application.

3 BOARD MEMBER KEZELIS: So are there parameters that  
4 the agency could include to assure that the applications  
5 would all be conservatively developed, or is there a  
6 shortcoming in the application process that seems to  
7 permit some subjectivity rather than objective  
8 parameters, thus causing you to qualify your statement  
9 with the word "conservatively developed"?

10 MR. ROMAINÉ: I don't think it's a question of the  
11 review of the applications.

12 BOARD MEMBER KEZELIS: I'm not--

13 MR. ROMAINÉ: It's a question of the approach that  
14 a particular applicant has taken in the development  
15 application. It goes back to the larger point that

16 depending on the size of the facility-- people are  
17 trying to maximize the capability to operate-- they  
18 won't have a permit that allows them the most possible  
19 hours of operation. That's much easier to do for a  
20 smaller facility than it is for a larger facility.

21 So for a smaller facility, they might simply say,  
22 the most-- or the lowest I'll ever operate is at 50  
23 percent load; I'll take that emission rate at 50 percent  
24 load; I'll base my entire application based on emission

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1 rate of 50 percent load because I know that my emission  
2 rate of VOM and CO would be lower if I'm at a higher  
3 load; that certainly is an acceptable practice for us to  
4 develop some application that would be factually in  
5 compliance with the regulations and provides us an  
6 approach we can verify emissions; it would satisfy the  
7 standards for issuance of the permit.

8 A person that has a larger facility may not be able  
9 to do that without triggering major thresholds if he  
10 wanted to be permitted at the hours they want. In that  
11 circumstance, they come up with a more refined approach  
12 to preparing the application where they then estimate a  
13 certain percentage of the time we might be operating  
14 between 50 and 75 percent load at a certain emission

15 rate; we then estimate for the remainder of the time  
16 we'll be operating between 75 and 100 percent load at a  
17 lower emission rate; in those circumstances, we then  
18 develop a more complex permit that reflects that there  
19 could be two different modes of operation where we would  
20 expect there to be different emission rates being  
21 achieved. Then that's acceptable. Either approach  
22 shows compliance with applicable regulations and allows  
23 an applicant to demonstrate that their emissions will be  
24 below the relevant applicability thresholds.

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1 BOARD MEMBER KEZELIS: Do the applications-- does  
2 the material submitted include any requirement that  
3 there be calculations for 50 percent load, 75 percent  
4 load, and what the emissions will be for each of those  
5 objective load characteristics?

6 MR. ROMAINÉ: There is no requirement that that be  
7 done. That information is submitted by some applicants  
8 and not by others.

9 BOARD MEMBER KEZELIS: Is it information that you  
10 all would find helpful?

11 MR. ROMAINÉ: If we would find it helpful in a  
12 particular application, we would request that  
13 information. It is certainly information that we have

14 the authority to request if we need it as part of our  
15 review.

16 BOARD MEMBER KEZELIS: But you've not been  
17 requesting it?

18 MR. ROMAINE: If we don't need it, no.

19 BOARD MEMBER KEZELIS: Smaller operations as  
20 opposed to larger operations was another characteristic  
21 you mentioned in your response to a prior question of  
22 mine. What's your definition of smaller as opposed to  
23 larger in the context of that question?

24 MR. ROMAINE: The smallest peaker applications are

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1 single-turbine 45-megawatt units, very small. They can  
2 accept very conservative numbers. Intermediate size may  
3 be 300 megawatts; large facilities, Reliant-Aurora, 850  
4 megawatts; and then of course you have Elwood, which is  
5 a giant.

6 CHAIRMAN MANNING: That's not the Elwood we  
7 visited, though.

8 MR. ROMAINE: Actually, it is the Elwood you  
9 visited, because they have an application-- well, they  
10 have a permit that allows them to put in fourteen  
11 turbines, as Mr. Nesvig pointed out. They have built  
12 the four simple-cycle turbines. They have not commenced

13 construction on the ten combined-cycle turbines that  
14 they're authorized to install. They've also come back  
15 and currently have pending before us applications to  
16 install another five simple-cycle units, which would  
17 bring their capacity for simple-cycle generation up to  
18 something on the order of 1500 megawatts, which is a  
19 sizable facility.

20 BOARD MEMBER KEZELIS: Thank you, Mr. Romaine.

21 CHAIRMAN MANNING: Mr. Zak, we appreciate the  
22 responses to noise, and we don't have a lot of questions  
23 regarding noise. However, regarding the issue of  
24 low-impact noise-- that's sort of the hum-- by the way,

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1 we-- the board gets a lot of citizens enforcement  
2 actions in air conditioning areas, and they're some of  
3 our most voluminous cases, very difficult to deal with.  
4 But at any rate, my question is, the board's current  
5 regulations that we have in place, I think your response  
6 was that they are adequate to address all of the  
7 concerns that have been raised in this procedure.

8 MR. ZAK: Yes, Madam Chairman, I believe they are.  
9 The current regulations are I think stringent enough to  
10 provide adequate protection for the communities.  
11 They're-- Actually, Illinois has the most in-depth

12 method of measuring noise of any state in the union.  
13 Because of that in-depth look that we can take at noise  
14 emissions, whether they be, you might say, low impact or  
15 high impact, as the case may be, but with the low impact  
16 ones, the instrumentation now exists to really get a  
17 very clear picture of what we're dealing with.

18 And once in a while we do run into a situation  
19 where the numerical regulations may not be totally  
20 applicable to a very unusual situation, but in a case  
21 like that, the way I would handle that would be to take  
22 the measurements in a very sophisticated manner and  
23 assemble the information and then present it as a  
24 nuisance case under the nuisance regulation backed up by

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1 the numerical measurements that would establish why in  
2 that particular case we had a noise problem that was of  
3 concern and present it to the board for their decision  
4 on that kind of case.

5 CHAIRMAN MANNING: You're talking about your work  
6 with citizens, though. You're not talking about the  
7 State coming forward. We haven't seen a state  
8 enforcement action on noise-- I don't know that the  
9 board's ever seen a state enforcement action on noise.

10 MR. ZAK: Well, yes. We had I think the last one

11 in 1981.

12 CHAIRMAN MANNING: That was before me. I was here  
13 in Springfield doing something else at that time. My  
14 question about noise really was more toward our  
15 regulations and not toward the permitting process or  
16 lack thereof. I mean, clear from the record as well is  
17 that noise regulations are not taken into consideration  
18 in terms of the permitting process, the overall  
19 permitting process with the agency, and I think there's  
20 no dispute in the record that that is the current  
21 situation.

22 MR. ZAK: Yes, it is.

23 CHAIRMAN MANNING: Okay. Thank you.

24 HEARING OFFICER JACKSON: We're going to take a

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1 five-minute break right here. We'll come back and  
2 hopefully wrap things up pretty quickly.

3 (Brief recess taken.)

4 HEARING OFFICER JACKSON: Okay. We're back on the  
5 record now, and we're ready for some follow-up questions  
6 from the board members.

7 BOARD MEMBER KEZELIS: Thank you. I have a  
8 question that may best be directed to Mr. Kaleel, and if  
9 that's the case, if we could simply obtain a response

10 from the agency in writing upon his availability, and  
11 that is this: When we were at the Elwood facility at  
12 our site visit, we observed that Elwood had a monitoring  
13 panel at the point of generator. That monitoring panel  
14 appeared to indicate a continuous reading of emissions.  
15 Assuming that is the case, does the agency receive  
16 records of those continuous monitoring-- of that  
17 continuous monitoring data, and has it or would it be  
18 able to compare that data to the modeling data that Mr.  
19 Kaleel has testified about?

20 MR. ROMAINE: We do receive that data. That data  
21 is in fact reported to USEPA as part of the acid rain  
22 program. That data doesn't have any particular  
23 relationship to the modeling that Mr. Kaleel performed.  
24 That data simply indicates the emission concentration in

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1 the stack, the pound per hour emission rate that's  
2 coming out of the unit. All the modeling of Mr. Kaleel  
3 and the air quality planning group works with that pound  
4 per hour data then predict ambient concentrations in the  
5 atmosphere.

6 BOARD MEMBER KEZELIS: Does Mr. Kaleel use the  
7 actual pound per hour emissions data in the models that  
8 he testified about? I didn't think he did.

9 MS. BASSI: I think we need to answer this in  
10 writing.

11 MR. ROMAINE: Yeah. Actually, though, I believe--  
12 I know the answer to that, because this is an inventory  
13 question. We can check this to make sure. My  
14 understanding is at that point in time, Mr. Kaleel did  
15 not look at the actual emission data; he was working on  
16 the permit.

17 BOARD MEMBER KEZELIS: That's why I'm asking you to  
18 do this next step.

19 MR. ROMAINE: And certainly, when we are issuing  
20 permits, we base our evaluation on the maximum emission  
21 rates represented in the permit applicants. We do not  
22 make any consideration for what we expect them to be.  
23 If you want a permit at this hourly emission rate, we  
24 want to see modeling that shows that that is--

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1 BOARD MEMBER KEZELIS: I understand. And do you  
2 know whether that monitoring panel also captures  
3 start-up and shut-down emissions as a separate 15- to  
4 30-minute stream of data?

5 MR. ROMAINE: I believe it does. I would like to  
6 verify that.

7 BOARD MEMBER KEZELIS: Okay. I'd like information

8 about that, if it's available to the agency. And  
9 finally, if there is data available, I'd like to see the  
10 change in emissions if a facility such as Elwood has  
11 operated at lower load, 50 percent or 75 percent, and  
12 how different the emissions have been at that level of  
13 load as opposed to 100 percent.

14 MR. ROMAINÉ: We can try to obtain that data.

15 BOARD MEMBER KEZELIS: One more question, and that  
16 is, do you know whether each of the peaker plants that  
17 you've permitted so far have similar panels that capture  
18 similar data to what we saw at Elwood, something like  
19 that?

20 MR. ROMAINÉ: No, they do not. The peaker plants  
21 are subject to the USEPA's acid rain program. Under the  
22 acid rain program, facilities that meet a particular  
23 definition do not have to install continuous emission  
24 monitoring systems, so not all facilities have installed

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1 continuous emission monitoring systems. If a facility  
2 exceeded those thresholds, it would then have to go  
3 ahead and have installed a continuous emission  
4 monitoring system. Those thresholds are--

5 BOARD MEMBER KEZELIS: Thank you.

6 MR. ROMAINÉ: -- operation at more than 10 percent

7 capacity as a three-year average or operation at more  
8 than 20 percent capacity in a single year. That is sort  
9 of the-- what I would call a working definition of a  
10 peaker plant. It's a working definition because it  
11 simply relates to whether the USEPA believes that that  
12 level of operation warrants the effort to install a  
13 continuous emission monitoring system or not.

14 BOARD MEMBER KEZELIS: And capacity is defined as?

15 MR. ROMAINE: Well, 100 percent capacity would be  
16 operating at full load 8,760 hours per year. 8,760  
17 hours, which I just rattle off, but that's 24 hours a  
18 day times 7 days a week, 52 weeks a year.

19 BOARD MEMBER KEZELIS: So by definition, peakers  
20 are not expected to be full capacity entities for  
21 purposes of USEPA acid rain program. The permits that  
22 you issue typically will be for shorter time periods  
23 than 24-7 at 365.

24 MR. ROMAINE: That's correct.

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1 BOARD MEMBER KEZELIS: So Elwood is an anomaly in  
2 that it does have continuous emissions monitoring?

3 MR. ROMAINE: I think what you would probably like  
4 is us to add this to your list of information that we  
5 try--

6 BOARD MEMBER KEZELIS: Thank you very much, Mr.  
7 Romaine.

8 CHAIRMAN MANNING: Also, when we visited the Elwood  
9 facility, we noticed and I think we've heard testimony  
10 in the record of a number of the peaker plants that are  
11 being constructed are poised to in the future at some  
12 point perhaps become a combined-cycle facility. We  
13 asked you the question, 17, I think, on page 30, in  
14 terms of what other permitting requirements are going  
15 to-- to walk us through, basically, a permit that's  
16 permitted now for a peaker plant, when and if it ever  
17 becomes a combined-cycle facility. Obviously that would  
18 involve a process change, and I'm wondering whether the  
19 nature of the emissions as well as the amount of  
20 emissions would change too and if you could respond a  
21 little bit to that as well as walk us through what kinds  
22 of agency involvement there will be in that change, if  
23 it happens.

24 MR. ROMAINE: That's-- It said in the answer, we

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1 believe it would trigger the requirement for a federal  
2 prevention of significant deterioration permit. Given  
3 the continuous operation of combined-cycle units or the  
4 fact that people will request permits for continuous

5 operation, it appears that it would exceed the  
6 applicable thresholds to trigger PSD applicability.

7 Accordingly, before we would issue a permit that  
8 would authorize conversion of a simple-cycle facility to  
9 a combined-cycle facility, they would have to  
10 demonstrate that they had best available control  
11 technology for combined-cycle operation.

12 Combined-cycle plants are very amenable to use of  
13 add-on controls for NOx emissions. Simply, SCR is an  
14 available control technology. We would certainly expect  
15 that there be some addition on NOx control technology at  
16 that time. When I say addition of NOx control  
17 technology, the difference between a simple-cycle unit  
18 and a combined-cycle unit is in fact the waste heat  
19 boiler. The control technology that have been used for  
20 turbines in fact rely upon a box, and they fit very  
21 nicely into the boiler, so the boiler used for waste  
22 heat recovery provides sort of a necessary structure to  
23 put in a NOx control system.

24 Beyond that, they would be required to do further

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1 air quality analysis and modeling. They'd have to  
2 demonstrate compliance with PSD increments. We would  
3 have to go through public notice, and as a major

4 project, they would be sent through federal procedures  
5 that do provide for citizen appeal and review by the  
6 Environmental Appeals Board.

7 CHAIRMAN MANNING: We've also heard in the record  
8 the difference-- and I know you're not in the water  
9 division, so this may be for Mr. Nightingale. What is  
10 the agency's involvement in a combined-cycle in terms of  
11 the water? I just want to get this clear on the record.

12 MR. NIGHTINGALE: Well, the difference would be--  
13 as far as we would be concerned would be that the  
14 discharge would be subject to, in addition to the state  
15 regulations, the regulations under 40 CFR 423, so it  
16 would be considered a categorical industry, and we would  
17 also have to incorporate those regulations.

18 CHAIRMAN MANNING: And just to clarify on the  
19 record as well, in terms of any water use, the agency  
20 has no involvement or regulatory authority over the use  
21 or the drawing of any of the water for any of those  
22 plants.

23 MR. NIGHTINGALE: That is correct.

24 CHAIRMAN MANNING: Okay.

1 MS. LIU: Mr. Romaine, if add-on controls were  
2 placed on a peaker simple-cycle plant and that plant

3 were later expanded to a combined-cycle plant, how would  
4 those add-on controls be used or not used in the  
5 combined-cycle plant operation, or would they actually  
6 hinder operation?

7 MR. ROMAINÉ: If an add-on control device for NOx  
8 were installed on a simple-cycle unit, it would probably  
9 have to have some feature to address the temperature of  
10 the exhaust gases, perhaps some heat exchange or cooling  
11 system. Those features of a cooling system probably  
12 would no longer be necessary. I don't know for sure  
13 that the installation of a control system installed in a  
14 simple-cycle unit could be converted over to a  
15 combined-cycle operation.

16 MS. LIU: From an engineering and economic  
17 standpoint, is it possible that the peaker simple-cycle  
18 plants through their permit applications are avoiding  
19 the need for these add-on controls by limiting the hours  
20 of operation so that if the plant does expand and it is  
21 required to do add-on controls, those can just be placed  
22 in at that time?

23 MR. ROMAINÉ: I think that had two parts to the  
24 question. Certainly it's true that-- very obvious that

1 peaker plants prefer to be permitted as non-major

2 sources. In looking at the different facilities, I  
3 think some of them probably have to work very hard to  
4 come in as non-major sources. Others I think simply  
5 take an examination of where they're at and how they  
6 grow their applications to come in just for non-major  
7 sites, and I guess I'm not prepared to really speculate  
8 on the engineering and economic aspects of what they're  
9 trying to accomplish.

10 MS. LIU: When all is said and done, how would  
11 year-round operation of a combined-cycle plant with  
12 controls compare to a peaker operation that doesn't have  
13 controls, air emissions controls, I guess?

14 MR. ROMAINE: In what sense?

15 MS. LIU: When you look at your balance sheet at  
16 the end of the year, the tons that you've emitted per  
17 year of each pollutant for a combined-cycle plant versus  
18 a peaker plant, one that has controls since it's a major  
19 source and one not because it's a minor source, how  
20 would they differ?

21 MR. ROMAINE: I think it depends on assumptions  
22 that would be made about the actual operating levels of  
23 those facilities. I think certainly at this point in  
24 time, as I said, it's unlikely that a combined-cycle

1 unit would in fact operate year-round. Probably would  
2 be load-following or a simple-cycle. You would have to  
3 make assumptions about how much a combined cycle would  
4 actually be utilized at this point in time or might be  
5 ten years down the road when power consumption  
6 increases, as Mr. Silva said yesterday, and then you'd  
7 also have to make an assumption about how many hours per  
8 year a peaker plant would operate.

9 MS. LIU: Thank you.

10 MR. MCGILL: Good afternoon. In the agency's  
11 Public Comment 9, the board's question number 2, which  
12 is at the bottom of page 5, the board asked the  
13 question, please address whether any localized impacts--  
14 for example, potentially exposing local residents to  
15 greater amounts of air pollutants-- present a health  
16 concern with respect to air emissions from existing and  
17 proposed peaker plants sited or to be sited near  
18 residential areas or schools, and the agency's response  
19 talks about modeling, so this may be something for Mr.  
20 Kaleel.

21 There was some terminology in the agency's response  
22 that it would be helpful to get clarification on. The  
23 agency indicates in their response-- it said, "The  
24 agency has required the applicants for proposed peaker

1 plants, whether major or not, to address expected air  
2 quality impacts of expected emission sources. The  
3 required analyses are conservative (i.e., would tend to  
4 overstate expected impacts), and address impacts at  
5 locations where peak impacts are expected to occur, even  
6 as close as the source's fence lines."

7 If we could get some clarification of what those  
8 conservative aspects are of the modeling, exactly what  
9 makes it conservative, what are the features of the  
10 modeling. We talked somewhat about seasonal emissions,  
11 the fact that there may be an annual limit but most, if  
12 not all, of the emissions taking place in one season.  
13 Is that factored in? Is that one of the conservative  
14 elements of the modeling? And I don't know if anyone  
15 here is familiar enough with modeling to talk about the  
16 conservative aspects of the modeling.

17 MR. ROMAINE: In terms of the entire discussion of  
18 the conservative aspect of modeling, it is certainly  
19 much better handled by Mr. Kaleel. However, to that one  
20 point about what is being modeled, if we're looking at  
21 an hourly standard, like the hourly CO standard, we do  
22 hourly modeling based on the maximum hourly CO  
23 emissions. We do not use annual average emissions to  
24 compare to an hourly standard, so the emission rates we

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1 are looking at are the maximum emission rates for the  
2 particular time period for that particular air quality  
3 standard.

4 MR. MCGILL: And that is for all pollutants?

5 MR. ROMAINE: That's for the criteria pollutants  
6 that are modeled, particulate matter, SO2, NOx and  
7 carbon monoxide.

8 MR. MCGILL: Thank you. And then the last sentence  
9 of the agency's response to question number 2 reads,  
10 "The modeling has consistently demonstrated that the  
11 air quality impacts of the peakers are small, if not  
12 insignificant, and will not cause or contribute to  
13 violation of the national ambient air quality  
14 standards." In that response, it would be helpful to  
15 have some elaboration on the term "small, if not  
16 insignificant" in describing the air quality impacts.  
17 Perhaps that's Mr. Kaleel's summary of--

18 MR. ROMAINE: Since he's not here, I will volunteer  
19 him to answer that question.

20 MR. MCGILL: I'm sorry. You said you--

21 MR. ROMAINE: Mr. Kaleel will answer that.

22 CHAIRMAN MANNING: He was volunteering Mr. Kaleel,  
23 I think.

24 MR. MCGILL: I thought you were volunteering

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1       yourself. And along the same lines we talked about, in  
2       that sentence it says, "consistently demonstrated that  
3       the air quality impacts of the peakers are small, if not  
4       insignificant." By air quality impacts, are we talking  
5       about impacts in neighborhoods adjacent to peaker plants  
6       that are siting near residential areas or near schools,  
7       or are we talking more generally about air impacts in  
8       terms of meeting-- or not causing or contributing to a  
9       violation of NAAQS?

10       MR. ROMAINÉ: We're talking generally in terms of  
11       the entire body of applications for which we have  
12       modeling. We're talking very specifically in terms of  
13       looking at those applications, wherever the maximum  
14       impacts are, that they have been small, if not  
15       insignificant.

16       MR. MCGILL: If you'd just for the record-- when  
17       we're talking about determining compliance with NAAQS,  
18       where is that determined? Where are the-- Are there  
19       predesignated monitoring stations throughout the Chicago  
20       non-attainment area, for example? Where is that-- Where  
21       would that be demonstrated, the actual data?

22       MR. ROMAINÉ: The simplest answer is everywhere.  
23       The purpose of modeling is to identify the point of  
24       maximum impact and make sure that that point of maximum

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1 impact complies with the ambient air quality standard.  
2 That's why the point was made that sometimes the maximum  
3 impact is the fence line. In terms of a facility, you  
4 can't address its impacts on its own property, but as  
5 soon as the emissions go over the property line, it has  
6 to be in strict compliance with the air quality  
7 standard.

8 MR. MCGILL: So if that maximum impact or peak  
9 impact were to be a neighborhood adjacent to a peaker  
10 plant, presumably the agency would require or-- that  
11 that not-- that that maximum impact not exceed NAAQS for  
12 all the criteria of pollutants?

13 MR. ROMAINE: That's correct. Like I said, I have  
14 to qualify, but obviously the Chicago area is designated  
15 a non-attainment area for ozone. The discussion of  
16 ozone is different than a discussion for a-- these  
17 pollutants in the dispersion model.

18 MR. MCGILL: Thank you.

19 MR. RAO: A couple of questions regarding your  
20 responses to the questions. My first question concerns  
21 the start-up and shut-down emissions. In your response  
22 to I think question 1-d, page 5, you mentioned that any  
23 concerns regarding start-up and shut-down emissions can  
24 be addressed to PSD and non-attainment NSR if those

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1 programs are applicable to establish appropriate  
2 provisions to minimize emissions as part of BACT or LAER  
3 determination. I wanted to know if the agency has  
4 addressed start-up and shut-down emissions as part of  
5 your BACT determinations for an incumbent peaker plant.

6 MR. ROMAINE: We have provisions that do require  
7 different facilities to take appropriate measures to  
8 minimize emissions during start-up and shut-down. We do  
9 not have specific numerical limitations on the emissions  
10 during start-up and shut-down.

11 MR. RAO: Are you aware of any other state, like  
12 California, requiring numerical limitations during  
13 start-up and shut-down?

14 MR. ROMAINE: That is something that we  
15 periodically discuss with other states, and there is a  
16 range of opinion on whether it's appropriate to  
17 establish this limitation or not. Certainly some states  
18 have gone down that path.

19 MR. RAO: Do the peaker plant-- operators of peaker  
20 plants, when they propose or file the application, do  
21 they give you information regarding start-up and  
22 shut-down emissions and duration of the start-up and  
23 shut-down process?

24

MR. ROMAINE: That's quite often something that is

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1 not initially provided that we do have to request.

2 MR. RAO: So you do get information regarding, you  
3 know, how long it takes for a plant to start up and what  
4 the emissions levels would be?

5 MR. ROMAINE: We get information on the duration of  
6 start-up if that's readily available. We get various  
7 estimates of emissions during start-up.

8 MR. RAO: On page 15 of your response, I think the  
9 response to question 6, in the first paragraph you  
10 referred to operating permit applications. I think this  
11 is the first time I have seen any reference made to  
12 operating permits for peaker plants. Could you for the  
13 record explain a little bit about the operating permit  
14 process, what you look for and, you know, what kind of  
15 information is required?

16 MR. ROMAINE: Well, Illinois does have a two-stage  
17 permitting program for new emission units. The first  
18 stage is to get a construction permit, and that  
19 construction permit provides the authorization to go  
20 ahead and construct and does establish what I would call  
21 the specifications, the requirements that the facility  
22 has to meet.

23           The purpose of the operating permit, then, is to  
24           verify once the facility has been built that it's

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1           complying with those specifications. As part of that  
2           process as well, there may be further enhancements, the  
3           nature of the record-keeping, the reporting or certain  
4           programmatic requirements for the facility. Peaker  
5           plants would in fact be considered major sources for  
6           purposes of the operating permit. They would for the  
7           most part be Title V sources subject to the Clean Air  
8           Act permit program. As such, we would have public  
9           notice of opportunity for hearing before issuing an  
10          operating permit for a peaker plant.

11          MR. RAO: Do they have to make any demonstrations  
12          to show that whatever that-- you know, operational  
13          requirements that they obtained on their initial  
14          construction permits, that they do meet those, you know,  
15          assertions or information that they file with you with  
16          the construction application?

17          MR. ROMAINE: They certainly have to submit a  
18          compliance certification stating that they're in  
19          compliance with all applicable requirements. That would  
20          include any limitations under the rule, any conditions  
21          in the permit. They do not have to certify compliance

22 to all the details in the construction permit.

23 To the extent that there are changes in the  
24 application, such as differences in plot layout, we do

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1 not consider those important for the most part. If we  
2 did, we'd put limitations on the permit holder subject  
3 to those requirements, and then they would have to  
4 demonstrate compliance with it as a permit condition.

5 MR. RAO: And one last question. Actually, it's  
6 more of a clarification concerning your response on the  
7 XONON technology for NOx control. I think your response  
8 is on page 28 of Public Comment Number 9, I think. In  
9 your response, you mentioned that this technology has  
10 not yet been developed for larger turbines. Do you have  
11 any information as to, you know, what capacity turbines  
12 this technology is currently available?

13 MR. ROMAINE: I believe the demonstration, it's  
14 always referred to that the Kawasaki turbine are the  
15 size of approximately 1.5 megawatts, 1 1/2 megawatts, so  
16 that being--

17 MR. RAO: Fairly small.

18 MR. ROMAINE: -- a hundredth the size of the Elwood  
19 facility.

20 MR. RAO: Thank you.

21 MR. ROMAINE: I guess I would comment, we will be  
22 overjoyed when that technology is developed for large  
23 turbines, because that is a very promising technology.

24 BOARD MEMBER MCFAWN: Mr. Romaine, I just wanted to

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1 ask you a few more questions. Earlier I asked you some  
2 questions about BACT and LAER, and you gave me a very  
3 interesting response as to why they would not  
4 voluntarily install this, and I've been thinking some  
5 more about it, and I wonder if you could enlighten me a  
6 little bit more about BACT and LAER and what it might  
7 mean in Illinois if we were to suggest to the Governor  
8 that we should consider imposing BACT and LAER  
9 technology-driven requirements on these types of power  
10 plants, the peakers, the combined-cycles, what that  
11 would mean in Illinois as far as air quality goes,  
12 benefits to the environment and the people of Illinois  
13 and possibly also the ramifications to the industry.

14 CHAIRMAN MANNING: Did you mean combined-cycle or  
15 single-cycle?

16 BOARD MEMBER MCFAWN: I thought I said peakers and  
17 combined-cycle.

18 MR. ROMAINE: I think the answer to combined-cycle  
19 is pretty straightforward. At this point, the new

20 combined-cycle facilities are major sources. They are  
21 subject to federal prevention of significant  
22 deterioration program. BACT is being treated as a  
23 federal requirement.

24 BOARD MEMBER MCFAWN: How about for the

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1 non-attainment areas? Because I think your answer in  
2 the-- your prepared answers to our questions address the  
3 NSR program as well as the PSD program in the context of  
4 BACT and LAER.

5 MR. ROMAINÉ: Could you clarify further, Ms.  
6 McFawn?

7 BOARD MEMBER MCFAWN: Well, I can't seem to find it  
8 right now, but if you wouldn't mind addressing as to  
9 what happened also in the non-attainment areas.

10 MR. ROMAINÉ: I guess at this point the entire  
11 state is an attainment area for NOx, so in terms of NOx,  
12 PSD applies state-wide. Combined-cycle plants  
13 state-wide are subject to the PSD program. That would  
14 not change with the NOx waiver no matter what happens  
15 with that. If the NOx waiver were revoked, that would  
16 add an additional requirement on top of the PSD, as NOx  
17 would also then be treated as an ozone precursor for  
18 purpose of non-attainment New Source Review.

19 BOARD MEMBER MCFAWN: Okay. Thank you.

20 MR. ROMAINE: It's just that, you know, NOx can  
21 have dual citizenship. As a pollutant itself, it's an  
22 attainment pollutant. As a precursor, it would be  
23 treated as a non-attainment pollutant.

24 In terms of simple-cycle turbines, there is

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1 certainly a difference in what different models of  
2 turbines can achieve, and if there were a requirement in  
3 place for BACT for simple-cycle turbines, people  
4 proposing projects in Illinois would have to get the  
5 best turbines for their particular niche. It would  
6 simply put pressure on certain manufacturers of turbines  
7 to improve the combustion techniques they have for those  
8 turbines to compete with the leaders in the field.

9 I think a more interesting question is what the  
10 implications would be for the difference between frame  
11 turbine and aeroderivative turbines. Frame turbines are  
12 generally larger. The frame turbines are certainly a  
13 leap ahead in NOx control, I would say, than the  
14 aeroderivative turbines, and if there are particular  
15 benefits for aeroderivative turbines, we have to  
16 identify them if we're going to continue to have peaker  
17 plants using aeroderivative turbines.

18           To the extent that BACT was applied, then certainly  
19           the emissions of the facility would be less. Pretty  
20           straightforward. And to the extent those emissions have  
21           impact either locally or regionally would contribute to  
22           lower emissions in that regard. I'll leave it at that.

23           BOARD MEMBER MCFAWN: Thank you. Oh, I had one  
24           other question. You mentioned earlier that you have

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1           polled or talked to your fellow states about numerical  
2           limits for start-ups and shut-downs and you find a mixed  
3           bag on that. Has the agency ever considered imposing  
4           such limitations?

5           MR. ROMAINE: No, we haven't. As we stated in our  
6           response, we do not see that the levels of emissions  
7           during start-up are such to warrant those sorts of  
8           limitations. We get into detailed provisions for  
9           start-ups when we address things like sulfuric acid  
10          plants, which have long periods of start-up and last a  
11          day or so, then it's a complex chemical operation that  
12          needs to be set into operation. These units start up  
13          very quickly. They start up in a very consistent  
14          fashion. The goal of our program is to make sure that  
15          the computer is properly programmed to come up with a  
16          start-up that minimizes emissions.

17 BOARD MEMBER MCFAWN: Thank you again.

18 HEARING OFFICER JACKSON: Are there any more  
19 questions? Okay. Thank you very much. Do any of the  
20 agency witnesses have anything else they want to add or  
21 supplement at this time?

22 MR. PHILLIPS: No, I don't think so.

23 HEARING OFFICER JACKSON: Okay. I just wanted to  
24 give you an opportunity.

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1 CHAIRMAN MANNING: Thank you very much.

2 HEARING OFFICER JACKSON: Thank you. I will ask  
3 again, then, if there are any other persons here who  
4 wish to make a presentation to the board today. Does  
5 not look like it.

6 Let me just conclude by reminding you that written  
7 public comments may be filed with the board. You may  
8 file a written public comment even if you have made an  
9 oral presentation on the record. Those written public  
10 comments will be accepted until November 6, and at this  
11 point the board will then begin its deliberations and  
12 hopefully make its recommendations by the last board  
13 meeting this year.

14 That's all I have. Thank you all very much. We've  
15 received a lot of good information in these proceedings,

16 and we appreciate your patience and your attention.

17 Thank you. We're adjourned.

18 (Whereupon the proceedings were  
19 adjourned on October 6, 2000, at  
20 12:35 p.m.)  
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1 STATE OF ILLINOIS )  
 ) SS  
2 COUNTY OF ST. CLAIR)

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5 I, KAREN BRISTOW, a Notary Public and  
6 Certified Shorthand Reporter in and for the County of  
7 St. Clair, State of Illinois, DO HEREBY CERTIFY that I  
8 was present at the William G. Stratton Building, 401  
9 South Spring Street, Springfield, Illinois, on October  
10 6, 2000, and did record the aforesaid proceedings; that  
11 same was taken down in shorthand by me and afterwards  
12 transcribed upon the typewriter, and that the above and  
13 foregoing is a true and correct transcript of said  
14 proceedings.

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IN WITNESS WHEREOF I have hereunto set  
my hand and affixed my Notarial Seal this 9th day of  
October, 2000.

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Notary Public--CSR

#084-003688