1	BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS
2	OF THE STATE OF IDDINOTS
3	IN THE MATTER OF:)
4	NATURAL GAS-FIRED, PEAK-LOAD) R01-10 ELECTRIC POWER GENERATING)
5	FACILITIES (PEAKER PLANTS.)
6	
7	VOLUME IV
8	
9	
10	The following is a transcript of
11	proceedings from the hearing in the above-entitled
12	matter, taken stenographically by TERRY A. STRONER,
13	CSR before AMY JACKSON, Hearing Officer at 1215
14	Houbolt in Joliet, Illinois on the 14th day of
15	September, A.D., 2000, scheduled to commence at 3:00
16	o'clock p.m., commencing at 3:10 o'clock p.m.
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APPEARANCES: 2 ILLINOIS POLLUTION CONTROL BOARD, 100 West Randolph Street Chicago, Illinois 60601 3 (312) 814-3629 4 BY: MS. AMY JACKSON, HEARING OFFICER 5 ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT: 6 Ms. Claire Manning Mr. G. Tanner Girard 8 Mr. Nicholas Melas Ms. Elena Kezelis 9 Dr. Ronald Flemal Ms. Marili McFawn 10 Mr. Samuel Lawton, Jr. Mr. Anand Rao 11 12 MEMBERS OF THE ILLINOIS ENVIRONMENTAL AGENCY AS WELL 13 AS OTHER INTERESTED ENTITIES AND AUDIENCE MEMBERS WERE PRESENT AT THE HEARING, BUT NOT LISTED ON THIS 14 APPEARANCE PAGE. 15 16 17 18 19 20 21 22 23

- 1 HEARING OFFICER JACKSON: Good afternoon. On
- 2 behalf of the Illinois Pollution Control Board, let
- 3 me welcome you to this public hearing that the Board
- 4 is holding in order to examine the potential
- 5 environmental impact of natural gas-fired peak-load
- 6 electrical power generating facilities, commonly
- 7 referred to as peaker plants.
- 8 My name is Amy Jackson. I am the attorney
- 9 assistant to Board Member, Elena Kezelis and of the
- 10 request of Board Chairman, Claire Manning, I am
- 11 serving as the hearing officer for these
- 12 proceedings.
- We are very pleased today to have the
- 14 entire Board present for this hearing. Let me take
- 15 a moment to introduce the Board members to you.
- To my immediate left is Board Chairman,
- 17 Claire Manning.
- 18 MS. MANNING: Good afternoon.
- 19 HEARING OFFICER JACKSON: Dr. Tanner Girard.
- 20 MR. GIRARD: Good afternoon.
- 21 HEARING OFFICER JACKSON: Marili McFawn.
- MS. McFAWN: Hello.
- 23 HEARING OFFICER JACKSON: And Samuel Lawton,

- 1 MS. KEZELIS: Hello.
- 2 HEARING OFFICER JACKSON: Dr. Ronald Flemal.
- 3 DR. FLEMAL: Hello.
- 4 HEARING OFFICER JACKSON: Nicholas Melas.
- 5 MR. MELAS: Good afternoon.
- 6 HEARING OFFICER JACKSON: And then Anand Rao,
- 7 who is head of the Board's technical unit, is also
- 8 joining the Board at this head table.
- 9 MR. RAO: Hello.
- 10 HEARING OFFICER JACKSON: Before I continue
- 11 with some procedural matters, Chairman Manning has a
- 12 few opening remarks that she would like to make. So
- 13 I would turn the microphone over to her. Chairman
- 14 Manning.
- MS. MANNING: Good afternoon everyone. On
- 16 behalf of the Illinois Pollution Control Board, I,
- 17 too, would like to welcome you to these public
- 18 proceedings that we're holding to examine the
- 19 potential environmental impacts of the peaker
- 20 plants.
- 21 For those of you who are unaware of the
- 22 Pollution Control Board, allow me just a short

- 23 explanation.
- We are an independent seven-member board

- 1 created pursuant to the Illinois Environmental
- 2 Protection Act. Generally, we've been created for
- 3 the purpose of promulgating all of the state's
- 4 environmental regulations and also deciding
- 5 environmental cases.
- 6 Each of the seven members that you see
- 7 here today has an extensive background in either law
- 8 or science or technical backgrounds and backgrounds
- 9 in government as well.
- 10 We have a staff of 40 people, many of whom
- 11 also have degrees in law or science. For more
- 12 information about the Board generally, we have a
- 13 very friendly -- user-friendly website found at
- 14 www.ipcb.state.il.us. I invite you to look at that
- 15 website. The very proceedings that you will hear
- 16 today with us will be transcribed and put on the
- 17 website within about five days of this particular
- 18 proceeding.
- 19 The hearing we are conducting today is
- 20 known as an inquiry hearing. The purpose of an
- 21 inquiry hearing is for us to gather sufficient

- 22 information about a particular subject -- in this
- 23 case, of course, peaker plants -- so that we can
- 24 determine whether further state environmental

- 1 regulation or legislation is necessary to adequately
- 2 protect the environment for the citizens of the
- 3 state of Illinois.
- 4 Governor Ryan specifically requested that
- 5 we hold these inquiry hearings to address five
- 6 specific issues and the five specific issues the
- 7 governor entrusted us to look at and examine for him
- 8 and for the Illinois state legislature are the
- 9 following:
- 10 Number one, do peaker plants need to be
- 11 regulated more strictly than Illinois current air
- 12 quality statutes and regulations provide?
- 13 Number two, do peaker plants pose a unique
- 14 threat or a greater threat than other types of state
- 15 regulated facilities with respect to air pollution,
- 16 noise pollution, or groundwater and surface water
- 17 pollution?
- 18 Number three, should new or expanding
- 19 peaker plants be subject to citing requirements
- 20 beyond applicable local zoning requirements?

- Number four, if the Board determines that
 peaker plants should be more strictly regulated or
 restricted, should additional regulations or
- 24 restrictions apply to currently permitted facilities

- 1 or only to new facilities and expansions?
- 2 And lastly, number five, how do other
- 3 states regulate or restrict peaker plants?
- 4 We can assure you that we will do the very
- 5 best job we can in providing answers to these very
- 6 important questions.
- 7 At the conclusion of this process, we will
- 8 issue what we call a written informational order.
- 9 The order will analyze all the information presented
- 10 in light of the issue areas outlined by the governor
- 11 and those presented to us at the hearing.
- 12 Very importantly, as Governor Ryan
- 13 requested, the order will also set forth the Board's
- 14 recommendations to the Governor and to the Illinois
- 15 General Assembly on whether further state
- 16 environmental regulation or legislation is necessary
- 17 to adequately protect the environment for the
- 18 citizens of the state of Illinois.
- 19 Many of you I notice in the audience have

- 20 been with us at our prior proceedings. You know
- 21 kind of the drill. Our hearing officer right here,
- 22 Amy Jackson, has done a very fine job, I believe,
- 23 already in conducting a fair opportunity for
- 24 everyone to be heard.

- 1 And at this point, I'm going to turn the
- 2 hearing over to the very capable hands of Hearing
- 3 Officer Jackson so that we can assure you that
- 4 anyone that wants to speak to the Board today has an
- 5 opportunity to do so. Thank you.
- 6 HEARING OFFICER JACKSON: Thank you, Chairman
- 7 Manning.
- 8 Before I continue with my prepared
- 9 remarks, I do want to acknowledge and welcome
- 10 members of the Illinois Environmental Protection
- 11 Agency to today's hearing and also I understand we
- 12 have a representative from Senator Larry Walsh's
- 13 office and I want to welcome you as well.
- One other thing I want to mention, we do
- 15 have a couple video cameras going. If any of the
- 16 witnesses or presenters testifying today do not feel
- 17 comfortable having their presentation videotaped,
- 18 please let me know in advance and we will turn the

- 19 videotapes off during the presentation.
- 20 For those of you who have been following
- 21 this process, you are aware that we have already
- 22 conducted two days of hearings in downtown Chicago
- 23 and one day of hearings in Naperville wherein
- 24 Naperville received a variety of comments from area

- 1 legislatures, elected officials and citizens who are
- 2 concerned about the peaker issue.
- 3 To assist you in keeping track of this
- 4 process, we are putting all information related to
- 5 the peaker proceedings on our website. All prefiled
- 6 testimony, public comments, hearing transcripts,
- 7 Board opinions and orders, and hearing officer
- 8 orders are and will be available on the Board's
- 9 website and Chairman Manning gave you that address
- 10 earlier.
- 11 Hard copies of any documents filed with
- 12 the Board may also be obtained by contacting the
- 13 Board's clerk's office in Chicago.
- 14 The Board's clerk may be reached at area
- 15 code 312-814-3620.
- In order for the Board to gather the
- 17 information it needs to respond to the Governor's

- 18 questions just set forth by Chairman Manning, the
- 19 Board has, in addition to the three previous days of
- 20 hearings, scheduled two additional hearings in the
- 21 collar counties surrounding Chicago. One such
- 22 hearing is being held today in Joliet. The second
- 23 such hearing will be held next week on Thursday,
- 24 September 21st in Lake County at the College of Lake

- 1 County in Grayslake.
- While there is no requirement for those
- 3 wishing to speak at either today's or next week's
- 4 hearing, you are encouraged to contact me in advance
- 5 and as a result, we have about eight names on a list
- of people who have pre-registered to speak today.
- 7 That list is available at the table by the entrance
- 8 and we will proceed in the order that those names
- 9 are listed.
- 10 If you are on the list to speak today,
- 11 please keep track of where we are in the proceeding
- 12 and be prepared to step forward when it's your turn.
- 13 There is also a sign-in sheet located at
- 14 the table by the entrance for those persons who have
- 15 just come today and do want to address the Board,
- 16 but did not pre-register to speak. You will also be

- 17 given an opportunity to address the Board. You will
- 18 just need to wait until we get through our list of
- 19 eight persons who have pre-registered.
- When your name is called, please step
- 21 forward and bring with you any documents that you
- 22 have that you would like to file with the Board in
- 23 this matter.
- 24 We will introduce those documents into the

- 1 record by handing them to the court reporter and
- 2 having her mark them as an exhibit. Once you've
- 3 made your statement to the Board, any of the Board
- 4 members or Anand Rao of the Board's technical unit
- 5 may ask you questions regarding your presentation.
- 6 You should not infer any preconceived
- 7 conclusions or opinions on the part of the Board by
- 8 the types or number of questions they might ask.
- 9 The Board members will only ask questions
- in an attempt to build a complete and concise record
- 11 for it to refer to in its deliberations in this
- 12 matter.
- 13 The Board has made no conclusions at this
- 14 time and will not begin its deliberations until all
- 15 testimony is received and the record is closed.

- 16 Because the purpose of these inquiry
- 17 hearings is to provide the Board with a forum for
- 18 receiving as much relevant information as possible
- 19 regarding the peaker plant issues, only the board
- 20 members and the Board's technical unit will be
- 21 actually questioning the speakers.
- This is an information gathering process
- 23 as opposed to a debate on the pros and cons of
- 24 peaker plants. Therefore, no cross-examination or

- 1 cross-questioning of the witnesses will be
- 2 permitted.
- 3 Having said that, let me assure you that
- 4 the Board is interested in what you have to say. If
- 5 any statements are made today or have been made at
- 6 previous hearings that you feel need to be expanded
- 7 upon, clarified or even questioned, we invite you to
- 8 do so in one of two ways:
- 9 First, you may appear before us on the
- 10 record either today or at some later hearing or you
- 11 may submit your comments or questions to the Board
- 12 in the form of a written comment.
- The Board will be accepting written public
- 14 comments until November 6th of this year. The

- 15 public comment process is an easy one and is
- 16 explained on a public information sheet that is
- 17 available on the table by the entrance.
- 18 As you can see, we do have a court
- 19 reporter present today. She will be transcribing
- 20 everything that is said. In order to keep the
- 21 record clear and easily understandable, I must ask
- 22 that only one person speak at a time and when you're
- 23 speaking, please do your best to keep your voice
- loud and speak slowly. It's very difficult for the

- 1 court reporter to take down presentations when the
- 2 presenter is speaking quickly. If you are reading
- 3 from a prepared statement, please be aware of this
- 4 and watch the speed of your voice.
- 5 We have requested an expedited transcript
- 6 of this proceeding. That means the transcript will
- 7 be available within three to five business days and
- 8 will be on our website within that time as well.
- 9 One other thing I want to mention is that
- 10 we do have a notice list for this proceeding. Those
- 11 persons on the notice list will receive copies of
- 12 all Board opinions and orders and hearing officer
- 13 orders. There is no obligation for those on the

- 14 notice list to serve anyone else on the notice list.
- 15 If you wish to file any document in this matter, you
- 16 need only file it with the Board's clerk. If you
- 17 are not part of the notice list at this time, but
- 18 would like to be added, please contact the following
- 19 person, Kim Schroedk. She is in our Springfield
- 20 office. Her telephone number is area code
- 21 217-782-2633 or you may e-mail her at Schroedk,
- 22 S-c-h-r-o-e-d-k, @ipcb.state.il.us.
- 23 As I stated earlier, we have another
- 24 hearing next week, next Thursday, in Grayslake and

- 1 then our final two days of hearings will be on
- 2 October 5th and 6th in Springfield.
- Before we get started, I do want to also
- 4 note for the record that earlier this morning the
- 5 Board members and some members of the Board staff
- 6 toured a peaker facility in Elwood, Illinois, just
- 7 south of Joliet. That facility is known as the
- 8 Elwood Energy Plant and it is owned jointly by
- 9 Dominion and People's Energy.
- 10 Let me assure you that this tour was
- 11 conducted at the Board's own expense and the Board
- 12 members did not conduct any deliberations or hold

- 13 any discussions between themselves during this tour.
- 14 It was simply an informative process for the Board
- 15 members to visit and see an actual peaker plant.
- At this point, we're prepared to start
- 17 with our presenters for today. The first presenter
- 18 on the list is Dr. Thomas Overbye. He is with the
- 19 Department of Electrical and Computer Engineering at
- 20 the University of Illinois at Urbana-Champaign and I
- 21 believe Dr. Overbye will be addressing the topic of
- 22 need for the electrical generated capacity in the
- 23 state of Illinois. Dr. Overbye?
- DR. OVERBYE: As was mentioned, I'm an

- 1 associate professor at the University of Illinois.
- 2 Hopefully, we'll have a good football team this
- 3 year, but in addition to that, we've got quite a few
- 4 very highly ranked academic departments. I'm with
- 5 one of those departments, the Department of
- 6 Electrical and Computer Engineering. We are
- 7 consistently ranked as one of the top electrical
- 8 engineering departments in the country.
- 9 My area of specialization is power
- 10 systems. So this is right up my alley. I've been
- 11 at the university now for nine years working in the

- 12 power system area. I teach the senior level power
- 13 system analysis class. It's a class I'm teaching
- 14 this semester. I've worked quite a bit in this
- 15 area. I've worked for a utility in Wisconsin, have
- 16 published a number of papers in this area. Also,
- 17 last, year I was one of the members of the
- 18 Department of Energy. The Secretary of Energy
- 19 appointed a team to investigate some of the power
- 20 outages from last year including the ones we have
- 21 here in Illinois. I was one of the team members on
- 22 that.
- 23 Also, I have developed a power system
- 24 software tool that's used to simulate power systems

- 1 that's used by quite a few different entities such
- 2 as the Illinois Commerce Commission, the U.S.
- 3 Federal Energy Regulatory Commission, Commonwealth
- 4 Edison, Illinois Power, Wisconsin Electric and about
- 5 160 others. So it's quite well-known and well-used
- 6 hopefully.
- 7 What I wanted to do today is just address
- 8 the issue of need for peakers and to do that, I just
- 9 need to take a couple of seconds --a couple of
- 10 minutes and explain how a power grid operates.

- 11 Peakers, of course, are there to supply
- 12 electric power. In an electric power system, to get
- 13 the electric -- to get electricity to the wall
- 14 outlets, there's four major components.
- We have the generators and with
- 16 generators, you have to have enough to meet the
- 17 load, total electric demand on your system, plus you
- 18 always have losses and you also have to have
- 19 reserves. So we need that much generation.
- 20 The problem is the generators are not
- 21 located where the load is so you need an electrical
- 22 grid to move the power from the generators to the
- 23 load. The grid, we break into two components. One
- 24 is a transmission system. These are the high

- 1 voltage and the big power lines that you see.
- 2 Usually, they're connected in a grid. That means
- 3 there's a lot of different feeds into each point in
- 4 the system and they operate at relatively high
- 5 voltages, 100,000 volts and up.
- 6 The second part is the distribution
- 7 system. This is the lower voltage portion of the
- 8 grid. That's the wires that you see in your
- 9 neighborhood. In a lot of places, they're buried

- 10 under ground.
- 11 The distribution system is the source of
- 12 practically all of the outages that we experience.
- 13 When the lights go out, 95 percent of the time it is
- 14 a problem in the distribution system, the local
- 15 wires. Peakers aren't going to affect that at all.
- The last part is the load and they consume
- 17 electricity and the problem you run into on an
- 18 electrical system is the load is constantly
- 19 changing; low during the nighttime hours, high
- 20 during the day, low in the spring and fall, high in
- 21 the summer here in Illinois.
- 22 To explain real quickly how these pieces
- 23 fit together, let me show you a simulation that I've
- 24 developed using this program that I talked about

- 1 earlier known as Power World Simulator.
- What I'm showing here is a very -- an
- 3 overview of a very simple diagram. The round
- 4 devices here are the generators producing power
- 5 expressed in an MW, which stands for megawatts, a
- 6 million watts. The arrows show how the power moves
- 7 through the system. The loads here on the bottom
- 8 are represented by arrows. That's where the power

- 9 is going to. Now, in a real system, of course,
- 10 you've got millions of different loads. In the
- 11 simulation, I just represent them in aggregates. So
- 12 50 megawatts might represent the load of 20-, 30,000
- 13 different people.
- Okay. While we have the generators, then
- 15 the lines here, the green lights are showing the
- 16 high voltage transmission system, that's stepped
- down through the transformers to a lower voltage
- 18 that is then distributed.
- 19 Okay. If there's a break anywhere in the
- 20 distribution system, if I open one of these red
- 21 boxes here, if that happens, those customers would
- 22 see their lights go off and they call up the power
- 23 company. The grid itself is still fine. There's
- 24 still plenty of generation. So that would be a very

- 1 local outage and it's the source of most outages in
- 2 the system.
- 3 The circles here represent the percentage
- 4 loading of each one of the transmission system
- 5 elements. It's a pie chart. As it gets more
- 6 heavily loaded, that pie would fill in.
- 7 Okay. Now, the way that grid -- the

- 8 transmission grid is designed is if you lose one
- 9 line, the power instantaneously redistributes on the
- 10 system. So if I opened up the transmission line on
- 11 top, perhaps it was struck by lighting, immediately
- 12 the power flow in the system redistributes, takes
- 13 place very fast, you would never even notice it. At
- 14 most, you might see a little blink in your lights,
- 15 put it back in and it goes back. The size and speed
- of the arrows is proportional to the amount of power
- 17 flowing on a line.
- Now, what can happen is if I open this
- 19 line up, the power redistributes and we're close
- 20 here to overloading that line. What we can do is we
- 21 can't directly control the amount of power flowing
- 22 on a line. It's not like a gas system or a water
- 23 system where you've got a valve. Rather, we can
- 24 only indirectly control it by changing the output of

- 1 the generators and here if I increase this
- 2 generator, I can decrease the loading on that line.
- If that generator were not there, if I
- 4 click this breaker, we would have a line overload
- 5 and that would be a problem. So in this small
- 6 system, the way to keep the system operating is

- 7 either you build a new transmission line here or you
- 8 build a generator. So in power systems, you're
- 9 always trading off generation location versus
- 10 transmission. You can either build more
- 11 transmission or locate generators at particular
- 12 locations.
- Okay. I'll come back to this in a little
- 14 bit to show you the Illinois grid. Okay. So as I
- 15 mentioned, the peaker plants have no impact on
- 16 distribution system reliability. They're connected
- 17 at the high voltage level. The distribution system
- 18 is lower voltage. That's the source of most of your
- 19 outages. So peakers will not impact the number of
- 20 outages that we have.
- In the outages we investigated last summer
- 22 in Illinois, it was not a problem of the
- 23 transmission system. It was not a problem of not
- 24 having enough generation. It was all very low

- 1 voltage -- well, relatively low voltage distribution
- 2 problems. So having more peakers would not have
- 3 helped that. And usually, they won't
- 4 help -- they'll never help distribution problems.
- 5 Okay. So peaker plants, as I indicated in

- 6 this small demonstration, do have an impact on
- 7 transmission system flows. The transmission system
- 8 is used to move the power from the plant to the
- 9 load. It's quite a marvel. It crisscrosses the
- 10 country at very high voltage. The whole eastern
- 11 part of North America is one big electrical circuit
- 12 and that allows the utilities to buy and sell power
- 13 within that. Power moves quite fast. You could be
- 14 -- we could be generating some of our electricity in
- 15 Tennessee. It takes milliseconds to get up here.
- 16 You'd never know the difference.
- We in the power area are pretty proud of
- 18 this. The National Academy of Engineering voted
- 19 electrification as the most important engineering
- 20 technology of the 20th century. So we are very
- 21 proud of that. We beat out airplanes, safe and
- 22 abundant water, electronics and everything else.
- 23 So the electric grid, starting with the
- 24 humble wall outlet, is -- was voted by the National

- 1 Academy of Engineering as the top technology of the
- 2 last century. So it's -- I think it's quite a
- 3 marvel.
- 4 You can't see that, but that's the

- 5 transmission grid in our part of the world. The
- 6 point of this slide is just to show you it's all
- 7 interconnected. It's a big mess. But it's a well
- 8 designed mess.
- 9 Okay. You've probably heard this before.
- 10 This shaded region, including practically all of
- 11 Illinois, eastern Wisconsin, part of Missouri, part
- of the UP, is know as MAIN. That's one of the
- 13 reliability regions in the country. I'll be talking
- 14 about MAIN later on. That's the region I'm talking
- 15 about. Okay. If I zoom into the Chicago or
- 16 northern Illinois area, this shows you a little bit
- 17 more of the details of how the grid looks in our
- 18 portion of the country.
- 19 Now, as I mentioned earlier, strategically
- 20 placed generation can avoid the need for new
- 21 transmission. So in power system design, you're
- 22 constantly trading off generation versus
- 23 transmission.
- 24 The load we have traditionally thought of

- as being something that the utilities don't control,
- 2 customers are in control of the outlet. So if you
- 3 want to turn on your air conditioner, turn on your

- 4 hair dryer, what have you, you can do that. The
- 5 utility has to supply the power. So the load is
- 6 something that hasn't been controlled. The grid has
- 7 to supply that power.
- 8 So locating generation close to the load
- 9 can result in decreased need for new transmission or
- 10 alternatively, you can use transmission to bring
- 11 power in from more distant locations, but you really
- 12 need to make detailed studies to figure out what the
- 13 capacity of the grid is.
- 14 Something that most people don't realize
- is that there's a very large market for power.
- 16 Power generated in Illinois can easily be sold to
- 17 Wisconsin, Indiana, down to Tennessee, basically
- 18 anywhere in the eastern part of the country and
- 19 that's not unusual at all nor is it unusual for us
- 20 to get power from elsewhere.
- 21 The transmission system in this part of
- 22 the country does have a major bottleneck. That's a
- 23 lineup in northwest Wisconsin. It's known as the
- 24 Eau Claire Arpin line. It limits a lot of the time

- 1 how much power we, as Wisconsin, Illinois, can
- 2 import from Minnesota and further north into

- 3 Manitoba. So that is a bottleneck. There's a lot
- 4 of power available there. Particularly, when we're
- 5 having a hot summer down here and they've got cool
- 6 weather up there, we can bring in a lot of power if
- 7 we had a new line there or alternatively, we have to
- 8 generate it more locally.
- 9 Before I get to this, let me show you the
- 10 power grid in this part of the country and show what
- 11 the flow of power on that grid is. So with this
- 12 simulation what I'm going to do is take that map
- 13 earlier and make it come to life with animation.
- 14 So what I'm showing here is a map of the
- 15 transmission grid except I'm only showing the high
- 16 voltage lines. There's lines at all different
- 17 voltage levels. The highest voltage level is a line
- 18 that comes in from Indiana that's at 765,000 volts.
- 19 Most of the high voltage grid in northern Illinois
- 20 and central Illinois is 345KV or thousand volts or
- 21 138. The arrows show you how power is flowing in
- 22 this grid and if I zoom out and go down a little,
- 23 what you see in Illinois is a predominant flow of
- 24 power into the Chicago area. It's kind of amazing.

- 2 the Clinton Nuclear Power Plant right here. If you
- 3 look at how power is flowing out of that plant, even
- 4 though it's very close to us at the University of
- 5 Illinois, a lot of it is heading north into the
- 6 Chicago area. A lot of the power generated in the
- 7 Chicago area, a good percentage, is actually
- 8 generated south of Chicago in central Illinois.
- 9 Here's a big plant by Peoria. There's a
- 10 big plant south of -- I guess southeast of
- 11 Springfield where the power flow is predominately to
- 12 the north here, but what a utility engineer would do
- is they would look at this system and here, if we
- 14 look at the northern Illinois area, no surprise is
- 15 that most of the powering -- a good chunk of it is
- 16 heading into downtown Chicago. That's the purpose
- 17 for the transmission system, to take power from
- 18 outlying areas and to bring it into the heavy load
- 19 areas. And the power engineers know this system
- 20 very well and they do studies looking at things like
- 21 what would happen if we opened up a particular line?
- 22 And let me just quick do a demo and then I'll move
- 23 on.
- We're here by Joliet. There's the Joliet

- 1 plant, which some of you may have seen coming in.
- 2 In this case, it's producing a lot of power. Here's
- 3 a line coming into it. If I click on that circuit
- 4 breaker, I open up that line. For example, if it
- 5 got hit by lightning, power redistributes
- 6 instantaneously through the grid. It takes the
- 7 computer a couple of seconds to calculate that, but
- 8 the actual grid itself would respond instantaneously
- 9 and you can see that causes a change in loading
- 10 throughout the system.
- 11 So the transmission grid is used to supply
- 12 power to the system from the generators that may be
- 13 located quite distant from the load to the load.
- Now, what I wanted to do on this slide is
- 15 show the impact that an overload on a particular
- 16 line could have on the power markets.
- 17 In June of 1998, we had a price spike here
- 18 in the midwest. The price of electricity on the
- 19 spot market went from a typical value of two or
- 20 three cents a kilowatt hour up to \$7.50 a kilowatt
- 21 hour. If you're a utility selling power at ten
- 22 cents and it costs you \$7.50 cents to buy it, you
- 23 lose money fast and that's what happened to some of
- 24 our utilities in the state.

1 The reason for this price spike, there

- 2 were a number of reasons, but one of the causes was
- 3 there was an overloaded transmission line in
- 4 northwest Wisconsin and there was an overloaded
- 5 transformer in southeast Ohio. What happened is
- 6 when this line in northwest Wisconsin overloaded,
- 7 any of the shaded regions here could no longer
- 8 supply electricity to Illinois.
- 9 So one little line wiped out the entire
- 10 west for a market that we could get energy from.
- 11 One transformer in Ohio wiped out the entire east.
- 12 So during this time period, there was a need for
- 13 more generation, but anywhere -- that extra
- 14 generation could have been located anywhere in this
- 15 white region.
- The point of this slide is that power
- 17 markets can be quite large. You're not talking
- 18 about a market for a particular city or even a large
- 19 area like Chicago. It could be much larger.
- 20 Locating generation in central Illinois could
- 21 have -- would definitely have helped the problems
- 22 that you saw in northern Illinois or generation in
- 23 Ohio would have helped as well. So it's a very --
- 24 power markets are very large. Okay. So that's

- 1 transmission system.
- In the last part of my presentation, I
- 3 just wanted to talk about the need for generation
- 4 and this gets to the heart of the peaker issue. How
- 5 much generation are we going to need in the future?
- 6 Well, that's hard to estimate. It's even harder to
- 7 estimate how much generation we're going to need
- 8 tomorrow, maybe not tomorrow, but next week because
- 9 electric load is very weather-dependant. Okay. So
- 10 you never know how much load you're going to have
- 11 because you can't predict the weather.
- Now, what we do in designing a power
- 13 system is we look at -- we say, well, what is going
- 14 to be the worst type of condition we're going to
- 15 experience? On a typical -- in a typical year --
- 16 that's -- in Illinois, it's on the hottest day that
- 17 you would expect in the summer and then you look at
- 18 how much demand you would get on that day, look at
- 19 trends and try to figure out how you're -- how the
- 20 load's going to grow. The MAIN region does this.
- 21 They provide annual load forecast. Actually, as you
- 22 heard from MAIN, they don't do that. They compile
- 23 if from the member utilities and then they send it
- 24 in.

1 What I did is I plotted out how this value

- 2 is changing. Ninety-eight and '99 are actual data.
- 3 The actual demand in MAIN, it was -- last summer, it
- 4 was quite hot. It got up almost to 52,000
- 5 megawatts. Two thousand and beyond is what they
- 6 estimated based in April. I don't think it was this
- 7 high because we had a bit cooler of a summer.
- 8 The point here is the slope -- this curve
- 9 tells us how much generation we need to meet the new
- 10 demand. The slope of the curve is about 1,000
- 11 megawatts a year. So how much new generation do we
- 12 need in the Wisconsin, Illinois, Missouri region?
- 13 If it were just to meet the new load, you would need
- 14 about 1,000 megawatts a year. That's how the load
- demand has been going up over time and that's from
- 16 MAIN's data which is provided by the utilities.
- Now, for Commonwealth Edison, I did the
- 18 same thing except I used more actual data and I'll
- 19 plot this out here in a second. That's how ComEd's
- 20 load has been changing over time. This is actual
- 21 data. I think this year -- I'm not sure what it was,
- 22 but I think was between 19- and 20,000 megawatts.
- 23 So if I added that on, the last point would be
- 24 something like that. Their increase in load is

- 1 about 338 megawatts per year. So I said on the
- 2 bottom let's round up 350 megawatts average growth
- 3 and demand.
- 4 So if you look over time, in '99, we had a
- 5 very hot summer so the demand went up quite a bit.
- 6 If you just look at '98 and '99 data, you'd think,
- 7 wow, it's really gone up fast, but prior to 1999,
- 8 their last peak was set in 1995.
- 9 So I think Commonwealth Edison said that
- 10 their load growth was 1.5 percent, which is about
- 11 350 megawatts per year. So that's how much new
- 12 generation is needed to meet their increase in load.
- 13 Real briefly, I wanted to get -- talk
- 14 about this idea of capacity margins. When you're
- 15 planning a power system, you have to plan for the
- 16 unexpected. To do that, we always have a reserve or
- 17 we like to have a reserve. That's known as the
- 18 capacity margin. It's just the -- one equation,
- 19 I've got in here. Being a professor of engineering,
- 20 I like equations. I tried not to make it look like
- 21 an equation. It's just the net capacity resources
- 22 minus your internal demand divided by your capacity
- 23 resources. Capacity resources is basically how much
- 24 generation you have in a region, but it can also

1 include imports of power that are guaranteed from

- 2 other regions.
- 3 The net internal demand is how much power
- 4 people are using or are planning, how much we
- 5 estimate they're going to use, except it's reduced
- 6 by the fact that some load has contracted with their
- 7 utility that at the utility's discretion, they can
- 8 turn them off. This is known as interruptible
- 9 demand. So in calculating your capacity margin, you
- 10 take that into account. You subtract it off.
- MAIN has said they want between 17 and 20
- 12 percent for capacity margin. Last year, they
- 13 forecasted at 13 percent. This year, they
- 14 forecasted it at 18 percent. So we're getting to
- 15 the point where we'd like to be.
- Just real briefly, the purpose for the
- 17 capacity margin is to provide you with insurance
- 18 because you never know whether you're going to have
- 19 a very hot summer. If it's a hot summer, the
- 20 capacity margin gives you extra generation to meet
- 21 the higher demand. Also, sometimes generators fail.
- 22 The generator goes out of service, we have to make
- 23 it up and that's where you want to have extra
- 24 generation available and that's what the capacity

- 1 margin provides you.
- Okay. I did some quick math based upon
- 3 what MAIN had on their website and they predicted
- 4 generation resources for 2000 of almost 56,000
- 5 megawatts. I calculated a reserve margin of 15.5
- 6 percent. I saw in the testimony from MAIN they said
- 7 18 percent. So I wouldn't dispute their number.
- 8 Let's say that by 2003, we wanted to get a
- 9 reserve margin in MAIN of 20 percent. That would
- 10 require us to get up to 62,000 megawatts of
- 11 additional resources -- or 62,000 total, that means
- we have to add in MAIN's 6,000 new megawatts of
- 13 generation.
- 14 What MAIN reported as being proposed for
- 15 new generation is about 14,000. So I think that
- 16 we're getting the new generation, we're getting
- 17 quite a bit more proposed than is needed to meet the
- 18 minimum requirements, the 17 to 20 percent capacity
- 19 margins.
- 20 So in conclusion, I think there's
- 21 certainly a need for new generation in the MAIN
- 22 area. However, I think this need is relatively
- 23 modest. I would not view where we're at as being a

- 1 adequate and I think we have a modest need.
- 2 When we -- when plants come in and want a
- 3 site, you do have to consider the impact on the
- 4 transmission system and this is something that has
- 5 to be done on a case-by-case basis. The fact that
- 6 we have new merchant plants siting has been good for
- 7 engineers who do power systems studies because
- 8 there's a lot more work to and so...
- 9 In siting, you have to consider whether
- 10 the transmission system can carry power from
- 11 distant -- from the distant generation to the load
- 12 centers and that could be the case, but if you put
- 13 up too much generation too far away from the loads
- 14 without new -- without new transmission, you can
- 15 overload the grid. So that's my presentation.
- 16 HEARING OFFICER JACKSON: Mr. Overbye will take
- 17 questions from the board members.
- 18 MS. MANNING: First of all, thank you for
- 19 coming, professor. That was a very interesting and
- 20 informative presentation.
- 21 You mentioned at the outset that you
- 22 worked with the Illinois Commerce Commission. Would

- 23 you explain a little bit your interface with ICC?
- DR. OVERBYE: What I said is that the software

- 1 I developed, the Power World Simulation software,
- 2 has been purchased by the Illinois Commerce
- 3 Commission. So a couple of years ago, we did
- 4 training for them and I believe some of their
- 5 engineers still use it. So that's been the
- 6 interface. I don't -- I haven't done any studies
- 7 for them, but they do use the software.
- 8 MS. KEZELIS: I have a question. Can we turn
- 9 back to the 1998 price spikes.
- 10 DR. OVERBYE: The slide on it?
- MS. KEZELIS: Yes, please.
- 12 Is the white area roughly equivalent to
- 13 MAIN or no?
- DR. OVERBYE: The northern part of it is MAIN.
- 15 This is MAIN right there. So that portion of it is
- 16 MAIN. So new generation is pretty much anywhere in
- 17 MAIN. The constraint there was on the boundary
- 18 between MAIN and this region over here.
- 19 MS. KEZELIS: And that was attributable to an
- 20 incident in Wisconsin and one in Ohio?
- 21 Have the utilities responsible for those

- 22 transmission lines taken any steps to help assure
- 23 similar recurrences will not occur that you're aware
- 24 of?

- 1 DR. OVERBYE: I can't speak about Ohio. The
- 2 main -- the one in Wisconsin is a well-known problem
- 3 and, you know, building a new line is not easy. The
- 4 solution to this problem is to build a new line.
- 5 There is a line that's proposed to go from -- I
- 6 believe it's up here down to the other side of this
- 7 and would solve that constraint problem, but that
- 8 involves convincing people in northern Wisconsin to
- 9 build a line to help supply electric needs in
- 10 eastern Wisconsin and Chicago. Growing up in
- 11 Wisconsin, I know that they don't always like to
- 12 build lines to meet the needs of Chicago.
- MS. McFAWN: So was that the bottleneck you
- 14 described and that was the one that went down?
- DR. OVERBYE: This is a very common bottleneck.
- 16 It didn't go down. What happens is when the line
- 17 gets loaded to its maximum ability, we can't bring
- 18 in any more generation from this region up here. So
- 19 let's say there's a lot of generation available in
- 20 Minnesota, we want to buy it in Illinois. If that

- 21 line is overloaded, we can't. Minnesota could say,
- 22 we've got a lot of generation, it's cheap, you need
- 23 it, here, we'll sell it to you. The Illinois
- 24 utilities could say, great, we want to buy it.

- 1 Somebody would step in and say sorry, the system is
- 2 loaded to the max and that would be -- that line
- 3 causes the problem.
- 4 MS. McFAWN: What was the name?
- 5 DR. OVERBYE: Of the line?
- 6 MS. McFAWN: Yeah.
- 7 DR. OVERBYE: It's Eau Claire Arpin. It's a
- 8 345KV --345,000 kilovolt transmission line. It's
- 9 very well-known. It's certainly well-known in
- 10 Wisconsin because there are proposals to build new
- 11 lines. That new line can avoid that bottleneck.
- 12 HEARING OFFICER JACKSON: Could you spell that
- 13 line for us, please, for the court reporter?
- DR. OVERBYE: Gosh, Eau Clair, E-a-u,
- 15 C-l-a-i-r-e is Eau Claire and Arpin is easier. It's
- 16 A-r-p-i-n.
- 17 HEARING OFFICER JACKSON: Thank you.
- DR. OVERBYE: Eau Claire -- those are the names
- 19 of electrical substations. The line is by the city

- 20 of Eau Claire.
- 21 MS. MANNING: You referred to MAIN in your
- 22 presentation as reliability region. Would you
- 23 explain that exactly?
- DR. OVERBYE: Right. I didn't bring in the

- 1 map, but in the United States there's a -- well,
- 2 actually it's in North America. There's a group
- 3 called the North American Electric Reliability
- 4 Council. It stands for NAERC. NAERC is charged
- 5 with ensuring that the North America electric grid
- 6 is operating reliably. NAERC is divided into ten
- 7 regions. MAIN is one of those regions. MAIN stands
- 8 for Mid America Interconnected Network and they're
- 9 headquartered here in -- well, in Lombard, Illinois.
- MS. MANNING: We heard from them earlier.
- DR. OVERBYE: Okay. So they're one of ten
- 12 regions.
- 13 MR. MELAS: Earlier, in your testimony, you
- 14 mentioned that when you were talking about the power
- 15 grid, we need power -- it could be imported from
- 16 Tennessee.
- DR. OVERBYE: Right.
- 18 MR. MELAS: And obviously it can go the other

- 19 way too.
- 20 What is the incremental charge that has to
- 21 be -- economic charge that has to be paid as you go
- 22 from one system to another? So if we had to go from
- 23 here to Tennessee, it would go across, I don't know
- 24 how many dozens of utilities? Doesn't each one of

- 1 those utilities add a cost to the -- for
- 2 transmitting?
- 3 DR. OVERBYE: That's exactly right. On this
- 4 diagram, how it's set up right now is that here's
- 5 the utility in Tennessee. It's TVA.
- 6 MR. MELAS: Okay.
- 7 DR. OVERBYE: And they cover the Tennessee
- 8 Valley, which is most of Tennessee. Let's say it
- 9 was northern Illinois, the little ovals, which I
- 10 know are hard to see, are different utility areas
- 11 and the lines show who's tied to who. If
- 12 Commonwealth Edison wanted to sell to Tennessee, I
- 13 believe they could send that power through Illinois
- 14 Power and then they have a direct connection to TVA.
- 15 So it would only be one step. The problem with that
- 16 is that the electrons do not know anything about
- 17 this map.

- This map is showing ownership of
- 19 transmission lines. Electrons take the path of
- 20 least resistance and a diagram that I often show,
- 21 but I didn't bring this time, is that that power
- 22 transfer would spread through a large chunk of the
- 23 system.
- 24 Surprisingly, if Illinois sells power --

- 1 northern Illinois sells power to Tennessee, a good
- 2 chunk of it is down here in northern Georgia.
- 3 Another chunk of it is over here in the Entergy
- 4 region. A third of that power actually comes into
- 5 TVA from the south. This is what's known as loop
- 6 flow. Power loops around throughout the entire
- 7 grid.
- 8 The problem with the way the setup right
- 9 now is that the only person who gets compensated
- 10 would be Illinois Power or perhaps there might be
- 11 one other, but other utilities would be impacted by
- 12 that transfer.
- 13 MR. MELAS: Using another example, maybe not
- 14 quite as simple, from northern Illinois, say, out of
- 15 MAIN out to the east somewhere, Pennsylvania, for
- 16 example?

- DR. OVERBYE: Are you asking how much -- the
- 18 utilities put a charge --
- 19 MR. MELAS: Is it economically feasible to do
- 20 that?
- 21 DR. OVERBYE: Yes, it is. It would be --
- 22 probably a ballpark figure would be an increment of
- 23 ten or 20 percent on the power. So if it cost \$20
- 24 here in northern Illinois, Tennessee might pay 22 or

- 1 23. Illinois Power would get the difference, the
- 2 extra. All these numbers are proximate. The
- 3 utilities have to provide this transport and it's --
- 4 they have their rates available online. I don't
- 5 know what they are exactly. I think ten percent is
- 6 a ballpark figure, but, yes, it is economically
- 7 feasible.
- 8 MR. MELAS: So the bottom line question I'm
- 9 asking, is it economically feasible for power to be
- 10 generated in Illinois and transported hundreds or
- 11 maybe even thousands of miles away?
- DR. OVERBYE: Oh, sure, sure. That's very
- 13 common. It's very common to move power long
- 14 distances. On the West Coast, there's a lot of
- 15 power from the Pacific Northwest that flows down to

- 16 southern California. So that's very common and it
- is economically feasible.
- 18 MR. RAO: I have a question. Regarding the
- 19 numbers here presented about proposed new
- 20 generation, are these numbers, you know, referred to
- 21 base load or are they referred to peak load in the
- 22 region?
- DR. OVERBYE: Okay. The numbers that I gave
- 24 you for proposed generation are -- I got those off

- 1 of the MAIN website. I know there are lots of
- 2 different numbers floating around. I don't know if
- 3 you -- if your board publishes numbers or who in
- 4 Illinois -- is it the Environmental Protection
- 5 Agency? I know somebody has -- they do permits for
- 6 new generation.
- 7 AUDIENCE MEMBERS: IEPA.
- 8 MS. KEZELIS: IEPA.
- 9 DR. OVERBYE: Okay. I know that I looked at
- 10 theirs one time. It was much higher than this
- 11 number, but that's new generation. It could be
- 12 peakers or it could be combined cycle plants. For
- 13 example, in Champaign County, there's a proposal to
- 14 build a 500 megawatt combined cycle plant. That

- 15 would be included in that number. Whether it's a
- 16 peaker or a combined cycle, it's generation that's
- 17 available to meet the maximum demand. We don't
- 18 really need a lot of generation when the demand is
- 19 low. So you just worry about having enough to meet
- 20 the maximum.
- 21 MR. RAO: Since we are trying to gather
- 22 information regarding peaker plants, which generally
- 23 serve during the peak-load command, do you have any
- 24 information or comments as to the need for peakers

- 1 plants that serve the grid during the peek-load
- 2 demand?
- 3 DR. OVERBYE: As opposed to total new
- 4 generation?
- 5 MR. RAO: Yeah.
- 6 DR. OVERBYE: No. I really don't differentiate
- 7 it that way. I haven't looked at whether we have
- 8 enough mid-load capacity. My guess is in Illinois,
- 9 we probably do because Commonwealth Edison has such
- 10 a good size nuclear fleet. I don't remember what
- 11 the number was, but I thought it was on the order of
- 12 10,000 megawatts of nuclear power plant that those
- 13 plants are usually online all the time, so they

- 14 provide a good base. The load -- the electric load
- 15 goes up and down in cycles. I think we're fine on
- 16 the base and on the mid-point. It's the max that's
- 17 the concern.
- 18 If a plant is a peaker or a combined
- 19 cycle, they can both meet the maximum, but I can't
- 20 tell you whether of that 6,000 I mentioned, how much
- 21 must be peaker and how much must be combined cycle.
- 22 Combined cycle is cheaper to operate, but much more
- 23 expensive to build.
- MR. RAO: Thank you.

- 1 MS. KEZELIS: So that our record is clear, a
- 2 transformer takes the high voltage of electricity
- 3 and transforms it down to the lower voltage of
- 4 electricity?
- DR. OVERBYE: Right. A transformer changes the
- 6 voltage level. Electric power can flow either way
- 7 in a transformer. Usually, it flows from the higher
- 8 level to the lower level, but it doesn't have to.
- 9 For example, on a generator, a lot of times you
- 10 generate at a low voltage, step it up through a
- 11 transformer, and make it very high. So a
- 12 transformer just changes the voltage level.

- MS. KEZELIS: Thank you.
- 14 MS. MANNING: Could you speak to what areas of
- 15 the state there might be an increased need for
- 16 electricity than others? Do you actually look at
- 17 the need -- the energy need in Illinois?
- DR. OVERBYE: What I would say is that requires
- 19 a detailed simulation of the electrical system and
- 20 I haven't done that for the -- for much of the state
- 21 at all. So if somebody came to me and said, does
- 22 this area of the state need more generation, it
- 23 would take studies to do that. So I can't say in
- 24 general without looking at -- I wouldn't want to

- 1 speak off the top of my head to say, you know,
- 2 whether or not a new plant is needed in location X
- 3 other than to say it needs studies.
- 4 The general comment is it's always best to
- 5 locate generation -- best is the wrong word. From
- 6 an electrical point of view, you minimize
- 7 transmission flow by locating generation right by
- 8 the load. So if you could get a generator to flow
- 9 in Lake Michigan, that would be good, right by the
- 10 loop.
- 11 MS. MANNING: In addition to the obvious need

- 12 of increased energy resources because of people
- 13 growth, is there also an increased need for
- 14 electrical generation as a result of new technology?
- DR. OVERBYE: Oh, whether -- there's certainly
- 16 a change in the amount of kilowatts used per person
- 17 as a result of new technology. I don't know those
- 18 numbers off the top of my head. I don't know -- and
- 19 in fact, I wouldn't know if the new -- the increase
- 20 in electric demand, whether it's up outstripping the
- 21 growth in population or not. I don't know. I know
- 22 that for MAIN, what MAIN is predicting is for the
- 23 MAIN region of growth of about 1,000 megawatts per
- 24 year. Whether that's because of new people or

- 1 immigration in the area, I don't know.
- MS. McFAWN: I have a couple questions.
- 3 DR. OVERBYE: Okay.
- 4 MS. McFAWN: I'm trying to phrase them right.
- 5 Going back to the load area and the location of
- 6 generation, it seems like we're talking in a really
- 7 large scale here and yet everything is focused on
- 8 Chicago.
- 9 Does it make a difference if we put a
- 10 peaker south of Chicago north of Chicago or west of

- 11 Chicago? Does that make a difference on your
- 12 transmission and the need to build transmission?
- DR. OVERBYE: The location where you locate a
- 14 peaker does make a difference.
- MS. McFAWN: In that small of a scale?
- DR. OVERBYE: It depends on the transmission
- 17 system capacity. So yes, it would make a
- 18 difference, whether it's on the west side or the
- 19 south side or the north side or in Champaign County.
- 20 You have to do the studies to look at,
- 21 one, are there existing problems or do we think
- 22 there will be problems with overloading the
- 23 transmission system? If there are, let's say I, as
- 24 a power planner, would look at the grid a few years

- 1 in the future, I'd anticipate how the load would
- 2 increase and then I would say, oh, there's going to
- 3 be an overload on this transmission line. Usually,
- 4 it's not with everything in service, but you need to
- 5 study your grid not only with everything in service,
- 6 but also with each individual device out because you
- 7 never know when you might lose a line.
- 8 So I would do that study and if I see
- 9 there's an overload, as a utility planner, you would

- 10 either say I need to locate some generation on the
- 11 right side of that problem or I need to build new
- 12 transmission or you need to decrease loads somehow.
- 13 MS. McFAWN: But the load is controlled by the
- 14 customer or the consumer, right?
- DR. OVERBYE: Right. If you talk to the
- 16 economists, which we talk to the economists a lot,
- 17 they like the idea of providing cost feedback to the
- 18 customers because when your electric rates go
- 19 sky-high in realtime then you'll naturally conserve.
- 20 That wouldn't be something that would make sense for
- 21 residential consumers. Nobody wants to have to look
- 22 at is electricity too expensive now, so I can't
- 23 watch the football game.
- 24 But as an industry, you might -- you know,

- 1 if you're a large industry, you might be able to
- 2 shut down some things when the price of electricity
- 3 gets too high. In return, you would get much lower
- 4 rates most of the time.
- 5 So that's one idea that we in the power
- 6 area have talked about quite a bit is this providing
- 7 more feedback to the consumers of electricity to
- 8 help them make economic decisions. It costs a

- 9 utility much more to generate on a hot summer day to
- 10 buy the power because there's -- more people are
- 11 wanting it.
- 12 So if that information could be passed on,
- 13 the economists think that's good. I don't know if
- 14 you followed what happened -- what has happened in
- 15 California, but in California, they are passing it
- 16 on to consumers and they are in a state of riot
- 17 almost because people in San Diego saw their power
- 18 bills last summer triple because electricity prices
- 19 just went sky-high because California has a shortage
- 20 of generation.
- 21 MS. McFAWN: Back to the transmission lines.
- DR. OVERBYE: Uh-huh.
- MS. McFAWN: You mentioned in your conclusion
- 24 that you have considered the impact on the

- 1 transmission lines. I guess that means in locating
- 2 generation?
- 3 DR. OVERBYE: You would certainly -- you would
- 4 certainly -- you certainly need to consider when
- 5 you -- if a peaker plant comes into an area and
- 6 wants to build, they have to do the studies or
- 7 the -- have the utility do them -- do the studies

- 8 for them saying this will not cause more problems on
- 9 the grid. So there has to be capacity to take the
- 10 power from that plant and ship it into the grid.
- MS. McFAWN: So it's the owner of the
- 12 transmission lines that studies that impact?
- DR. OVERBYE: Well, I don't know the details,
- 14 but I believe it's the merchant plant owner that
- 15 would pay for the studies. So when a plant comes
- 16 into the town of Sidney in Champaign County and
- 17 wants to locate 500 megawatts of generation
- 18 there, that's going to change the power flow in
- 19 Champaign County. They would have to make sure that
- 20 that doesn't cause any overloads and I'm sure
- 21 they've done that.
- 22 So that's -- when you're siting a
- 23 generator, you have to make sure it doesn't cause
- 24 any new overloads.

- Okay. What the utility would like is to
- 2 site generation where it will not -- where it will
- 3 help eliminate overloads so they don't have to build
- 4 new transmissions.
- 5 In the past, what the utility did is
- 6 they -- when they needed new generators, they

- 7 figured out the best place to build it with the best
- 8 being whatever they thought was the cost function
- 9 they wanted to minimize. It might have been
- 10 locating a plant and generator in a very dense urban
- 11 area and paying the social consequences. Usually,
- 12 it wasn't. Usually, it was locating further away
- 13 and building transmission to move the power from the
- 14 plant to the load pockets.
- MS. McFAWN: Thank you.
- DR. FLEMAL: Down here. I want to first join
- in the earlier comments and extend my appreciation
- 18 as well for your joining us today. I found this
- 19 really enormously impressing and informative.
- 20 Could you, for the record, tell us whether
- 21 you are here in representation of any group or
- 22 organization?
- DR. OVERBYE: I'm here -- I was invited by
- 24 the --

- 1 MS. ZINGLE: The Lake County Conservation
- 2 Alliance.
- 3 DR. OVERBYE: -- Lake County Conservation
- 4 Alliance and they provided me a stipend for being
- 5 here.

- 6 DR. FLEMAL: The academic institution has
- 7 told -- is so often a great source of information
- 8 for the kind of decisions that we often have to make
- 9 and this has been a good time for us to get the
- 10 academic people to share that expertise with us. So
- 11 if we could send a kind word back to your dean as
- 12 well or wherever it helps you in the normal
- 13 things --
- DR. OVERBYE: That would be great. I mean, I
- 15 knew about these hearings and I thought, you know,
- 16 we've got a great power program at the University of
- 17 Illinois and we know a lot about the grid. I don't
- 18 know much about air pollution, so I didn't talk to
- 19 anything about that. So I thought I'd come and give
- 20 you a presentation to tell you about what I know
- 21 about the grid and that's hopefully germane to this
- 22 issue.
- DR. FLEMAL: Thank you. We appreciate that.
- MS. MANNING: Your maps that you showed us

- 1 would have included all sources of generation of
- 2 power in the state and the rest of the country,
- 3 whether they be fossil plants or nuclear plants or
- 4 whatever, correct?

- DR. OVERBYE: Uh-huh, right.
- 6 MS. MANNING: And if there is an alternative
- 7 source of energy generated, it also would still have
- 8 to get on the grid. It would have to go through the
- 9 same grid network and power source and things like
- 10 that, right?
- DR. OVERBYE: Right. In the power flow studies
- 12 that we do, the studies of how the power flows in
- 13 the electric grid, we do not differentiate whether
- 14 it's nuclear, hydro, gas, turbine, coal. From the
- 15 electric grid point of view, it's pushing power into
- 16 the system.
- 17 So when I look at a power system study
- 18 like the one I did here, and on this, I got this
- 19 case from the Federal Energy Regulatory Commission
- 20 because they investigated this, they used the
- 21 software I developed to do that investigation. So I
- 22 worked with their engineer and we came up with these
- 23 visualizations for doing that, but often, I don't
- 24 know what type of generator it is and it doesn't

- 1 matter from my point of view in studying power flow.
- 2 MS. MANNING: Thank you.
- 3 MS. McFAWN: So now you were saying on an

- 4 economic side that it's not that important for the
- 5 economics to go to the residential consumer, but
- 6 then when you talked about California, it's making a
- 7 huge impact.
- 8 DR. OVERBYE: Right. What I meant was that you
- 9 would not want to provide -- this is my personal
- 10 opinion. I don't think residential customers want
- 11 to get realtime feedback on electric prices. What's
- 12 happening is in electric markets, the price of
- 13 electricity on the spot market is being posted now
- 14 every five minutes in some market. Like, in the
- 15 east, they do that.
- Just imagine if you're bill changed
- 17 every -- how much it cost you to use electricity
- 18 that changed every five minutes. I would not want
- 19 to see that personally, but that's what the
- 20 utilities are dealing with, spot market variations.
- 21 Usually, it's quite low. Sometimes the price of
- 22 electricity is zero. It's free. Use as much as you
- 23 want. It's even gone negative where somebody pays
- 24 you to use it.

- 1 Now, usually when it's negative is when
- 2 you don't want to use it, but sometimes it goes very

- 3 high and that's the risk that you run if you buy
- 4 electricity on the spot market. I don't think
- 5 that -- a lot of that volatility, I don't think
- 6 should be passed on to consumers. It's nice to have
- 7 as a consumer to know that it cost however many
- 8 cents a kilowatt per hour, that's what I like. I'd
- 9 like that personally, but I think some businesses,
- 10 large industries, if you say to them, okay,
- 11 electricity prices vary quite a bit and you have
- 12 some ability to curtail your loads at certain times,
- 13 they would like to see that realtime pricing because
- 14 most of the time, it will be much lower than they
- 15 can get it elsewhere.
- Some industrial users can go for days
- 17 without using electricity and then they use a whole
- 18 bunch. Those are the best type of loads to have
- 19 from a utility point of view because when it gets
- 20 hot, you say to them, turn off and they'll say fine.
- 21 Well, I would say assume they'd say fine because in
- 22 return, they're getting electricity at a very low
- 23 price during the rest of the year.
- MS. McFAWN: Thank you.

2 Okay. Thank you, Dr. Overbye. DR. OVERBYE: Thank you. 3 4 HEARING OFFICER JACKSON: We will go off the 5 record for a few minutes while we get situated back 6 around. If you want to take a short five-minute 7 break, we'll come back with the next one. 8 (Whereupon, after a short 9 break was had, the 10 following proceedings 11 were held accordingly.) HEARING OFFICER JACKSON: We will go back on 12 13 the record now and before we start with Mr. Jirik's 14 presentation, I do want to note that Dr. Overbye 15 provided a hard copy of his PowerPoint presentation 16 to the Board entitled, "Need for New Peaker 17 Generation in Illinois." Dr. Overbye, would you like to introduce 18 that into the record as an exhibit? 19 20 DR. OVERBYE: Yes. HEARING OFFICER JACKSON: Okay. Thank you. We 21 22 will mark that then as Overbye Exhibit 1. Okay? 23

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1	(Document marked as
2	Overbye Exhibit No. 1
3	for identification, 9/14/00.)
4	HEARING OFFICER JACKSON: Thank you.
5	Mr. Jirik, whenever you're ready.
6	MR. JIRIK: Thank you.
7	Good afternoon. My name is Alan Jirik. I
8	am the Director of Environmental Affairs for Corn
9	Products International, Inc.
10	Corn Products operates a corn wet milling
11	plant in Bedford Park, Cook County, Illinois. Corn
12	Products understands that while these hearings
13	concern simple cycle turbine units designed to
14	operate during periods of peak electrical demand,
15	questions have been raised during the public
16	hearings regarding combined cycle units.
17	Our testimony is being presented to help
18	to more clearly characterize the differences between
19	peakers, which are the subject of today's hearings,
20	and industrial cogeneration units, which to the best
21	of our understanding, are not the subject of these
22	hearings or the Governor's request.
23	Industrial cogeneration plants differ from
24	peakers in many ways. Cogens generate steam and

- 1 electricity and both of these energy products are
- 2 put to productive use in adjacent industrial process
- 3 units. Consisting of a turbine -- combustion
- 4 turbine and heat recovery boiler and sited at an
- 5 industrial facility, industrial cogeneration units
- 6 are considered more energy efficient than simple
- 7 cycle peaker units. This is because the heat
- 8 energy, which is not used by a simple cycle unit, is
- 9 converted to steam and put to productive use by the
- 10 industrial processes that are tied into the
- 11 cogeneration unit. This translates into an
- 12 additional environmental benefit, as a cogen
- 13 eliminates the need for additional fuel combustion
- 14 that would otherwise be required to create steam for
- 15 the industrial process. This eliminates a source of
- 16 air pollution.
- 17 Industrial cogeneration units are
- 18 typically base loaded as industrial processes demand
- 19 a relatively constant supply of steam and
- 20 electricity. This constant demand essentially
- 21 precludes peak-only operation. Higher utilization
- 22 of an industrial cogen also results in a more
- 23 cost-effective capital investment.
- I would like to speak now about a specific

1 project at Corn Products. Corn Products currently

- 2 uses coal and natural gas-fired boilers to supply
- 3 steam to its industrial operations. In a joint
- 4 venture with Alliant Energy, we plan to shut down
- 5 the coal boilers and replace them with combined
- 6 cycle natural gas-fired cogeneration units. These
- 7 units will provide steam and electricity to the
- 8 manufacturing operations and by virtue of their
- 9 capacity, also provide electricity to the grid. We
- 10 expect to maximize our sales to the grid during
- 11 times of peak pricing, which usually occurs during
- 12 periods of peak demand.
- 13 However, these industrial cogen units
- 14 differ from the peakers that are the subject of
- 15 today's hearing. The cogen units we plan to
- 16 construct will be base loaded to supply the
- 17 manufacturing operations relatively constant and
- 18 substantial steam demand. Steam demand is
- 19 relatively constant as we run the manufacturing
- 20 operation every day of the year. The units are
- 21 anticipated to supply electricity to the grid
- 22 year-round, although the amount may vary subject to
- 23 demand and raw material costs.
- 24 Besides the energy efficient

- 1 considerations already discussed, industrial
- 2 cogeneration units provide additional environmental
- 3 benefits. The Corn Products' project will install
- 4 clean burning modern technology, which will reduce
- 5 air pollution. When compared to our current power
- 6 generating activities, we anticipate approximately a
- 7 90 percent reduction in air emissions, which
- 8 constitutes a reduction of several thousand tons per
- 9 year. This reduction will be significant for both
- 10 local and regional air quality.
- 11 The new cogen will also eliminate coal
- 12 ash. Eliminating coal ash reduces solid waste
- 13 generated at the plant site by over 95 percent or by
- 14 six million pounds per month. This also eliminates
- 15 truck hauling traffic and the consumption of
- 16 valuable landfill space. Finally, over a half a
- 17 million pounds of substances reported under TRI SARA
- 18 313 Form R will be eliminated.
- 19 With regards to concerns over siting, our
- 20 project is located at the extreme rear of our
- 21 property, deep within an existing industrial zone
- 22 and well within an industrial land use. Nearby
- 23 neighboring land uses include a car crushing
- 24 operation, an asphalt plant and the MWRD sludge

- 1 drying beds.
- 2 With regards to cooling water consumption,
- 3 our plant currently takes water from the Sanitary
- 4 and Ship Canal. The water is used for non-contact
- 5 cooling purposes for the corn wet milling operation
- 6 and then returned to the canal. In a clever and
- 7 environmentally friendly approach, we plan to use
- 8 the existing cooling water flow to supply cooling
- 9 water to the new cogeneration operation. We
- 10 accomplish this by routing an additional loop from
- 11 our existing cooling water line to serve the cooling
- 12 needs of the cogen. After servicing the cogen, the
- 13 water will return to our existing line and be
- 14 discharged the same as it is today. Thus, the
- 15 project will not increase our current water
- 16 withdrawal and will not result in any new water
- 17 discharges, any new intake or outfall structures, or
- 18 cause any other disruptions to water bodies, water
- 19 tables, groundwater, aquifers or burden the
- 20 community drinking water supply.
- 21 We might expect similar environmentally
- 22 beneficial cogeneration projects in the coming years
- 23 as other industrial facilities replace their aging
- 24 infrastructure.

- 1 Previous commentaries have raised the
- 2 issue of aircraft safety. We would note that the
- 3 pilots using Midway Airport have been flying over
- 4 our 250-foot tall boiler stacks for over 50 years
- 5 and we have not heard of any difficulties and we
- 6 have not heard of any complaints.
- 7 To the contrary, we understand that the
- 8 boiler stacks once served as an important
- 9 navigational tool for the early pilots using Midway
- 10 Airport. It has been reported that Charles
- 11 Lindbergh utilized our stacks to help him find
- 12 Midway when he was employed in the service of
- 13 airmail transport.
- 14 Combined cycle industrial cogeneration
- 15 projects benefit both industry and the environment.
- 16 If we are correct in our understanding that cogen
- 17 units are not the subject of the Governor's order,
- 18 it would indeed be unfortunate to inadvertently
- 19 entangle these highly beneficial projects within the
- 20 peaker proceedings.
- In either case, we ask that the Board
- 22 carefully and clearly craft any recommendations it
- 23 may make to avoid unintended impacts on industrial

- 1 This concludes my prepared remarks. I
- 2 would like to thank the Board for this opportunity
- 3 to speak today. I will now entertain any questions
- 4 that you may have.
- 5 HEARING OFFICER JACKSON: Thank you, Mr. Jirik.
- 6 Any questions?
- 7 MS. KEZELIS: Just for the record, what is the
- 8 nature of the material you manufacture at your
- 9 facility? What is it that you make?
- 10 MR. JIRIK: Our primary product is sweetener
- 11 for soda pop.
- 12 MS. KEZELIS: Thank you.
- MR. JIRIK: But we also make starches. The
- 14 materials that come from corn wet milling are
- 15 approximately 60 percent of the things you buy in
- 16 the grocery store.
- 17 MS. KEZELIS: Thank you very much.
- 18 MR. MELAS: One quick question. On the second
- 19 paragraph, full paragraph on your second page,
- 20 there's a sentence, when compared to our current
- 21 power generating activities, do you generate power
- 22 to produce steam that is actually used in the

- 23 processing of the corn or do you use it to
- 24 manufacture or to generate your own electricity?

- 1 MR. JIRIK: We currently use cogen. We have
- 2 the boilers, as I mentioned, steam for the
- 3 processing. We also have the ability to generate
- 4 electricity. It's sized to meet the plant's needs
- 5 so we are not selling out to the grid at this time.
- 6 MR. MELAS: Do you buy a portion of your
- 7 electricity from ComEd, I presume?
- 8 MR. JIRIK: Yes. I'm told that depending on
- 9 the time of day, there are times --
- 10 MR. MELAS: Oh, okay.
- 11 MR. JIRIK: -- where it is very positive to
- 12 generate. There are times you cannot buy the fuel
- 13 to make -- to run the unit to make the electricity.
- 14 So depending on the time of day, we may be
- 15 self-sufficient, we may be purchasing.
- MR. MELAS: But primarily, the steam is
- 17 necessary for your actual process of manufacturing
- 18 the product out of the raw corn?
- 19 MR. JIRIK: A very large quantity of steam,
- 20 yes.
- 21 MR. MELAS: Thank you.

- MS. MANNING: Later on in that paragraph,
- 23 Mr. Jirik, you indicate the units are anticipated to
- 24 supply electricity to the grid year-round.

- 1 Do you anticipate actually selling
- 2 electricity on the grid?
- 3 MR. JIRIK: Yes.
- 4 MS. MANNING: Thank you.
- DR. FLEMAL: Do you know how common that is at
- 6 present? How many facilities are cogens that are
- 7 actually participants in the grid supply as well?
- 8 MR. JIRIK: I do not, but just in dealings with
- 9 chamber, it seems that there are indications that
- 10 this may be something that one would see more in the
- 11 future. By way of an example, when you build these
- 12 particular units, it would be foolish to size it
- 13 exactly to meet your steam needs. If you throw a
- 14 turbine blade, you're plant goes down because you
- 15 don't have enough steam. So typically, you would
- 16 build sufficient backups so if you have an overhaul,
- 17 if you have maintenance, if you have a malfunction,
- 18 turbine blades would fail, that you would have some
- 19 additional ability to put those units online while
- 20 you're doing your repair.

- 21 So it provides an interesting opportunity.
- 22 The redundancy necessary to provide the steam supply
- 23 to the plant gives you an ability when the electric
- 24 demand is there to produce additional electricity

- 1 and that could then beneficially serve too.
- 2 MR. GIRARD: I have a question. Did you say
- 3 that you currently supply electricity to the grid?
- 4 MR. JIRIK: No.
- 5 MR. GIRARD: No?
- 6 MR. JIRIK: No.
- 7 MR. GIRARD: You put the new units online. How
- 8 much electricity would you be supplying to the grid,
- 9 say an average figure, megawatts?
- 10 MR. JIRIK: The engineering is not final. The
- 11 size of the units we're talking about is 600 to
- 12 maybe 900 megawatts. Of that, a large portion could
- 13 go to the grid.
- MR. GIRARD: Okay.
- 15 HEARING OFFICER JACKSON: Anyone else?
- 16 MR. RAO: I have a question over here. I think
- in the first paragraph on page two, you mention that
- 18 you may maximize your sales of power to the grid
- 19 during peak demand. So normally, do the units -- do

- 20 they operate on full loads or are you generally
- 21 going to operate it at a lower level and increase
- 22 the capacity during peak hours for that? How are
- 23 you planning to operate your units?
- MR. JIRIK: Well, understanding that this is

- 1 somewhat theoretical because we're still working on
- 2 the engineering and we're working on the permitting,
- 3 the units will be able to provide the base load
- 4 steam to the plant, but the way they will be sized
- 5 and because of their redundancy, they will also have
- 6 the ability to put considerable electricity, you
- 7 know, 600 megawatts out to the grid. We don't need
- 8 anywhere near that much electricity. We're not a
- 9 huge electric post. We're a very huge steam post.
- 10 But for example, if the price was very positive, I
- 11 would speculate, as businesspeople, seeing that we
- 12 have, you know, additional turbines, duct firing,
- 13 those things available, redundant equipment to
- 14 supply the steam demand, it would be foolish not to
- 15 turn that on and put that additional out to the
- 16 grid. So you have an assemblance of ability to
- 17 supply during peak time because the need for
- 18 redundancy to serve industrial operation. Is

- 19 that -- I don't know if that's answering your
- 20 question.
- 21 MR. RAO: Actually, I was focusing more on how
- 22 you will operate your plant during normal demand and
- 23 peak demand. Will you conserve or, you know, not
- 24 operate at your maximum capacity during normal

- 1 conditions and sell electricity only during peak
- 2 demand or --
- 3 MR. JIRIK: Our corn wet milling requires steam
- 4 and some electricity every hour of the day. We run
- 5 it around the clock all year. So there is a minimum
- 6 base load below which we cannot go to supply the
- 7 industrial processing facilities that we have and
- 8 they're a pretty substantial steam post. So there's
- 9 some all year long presence of base loading. From
- 10 there, it depends on the economics and what is going
- on in the grid of where you will be on that in terms
- 12 of what you would do in the other direction.
- 13 MR. RAO: Have you gone through the permitting
- 14 process for these replacement units?
- MR. JIRIK: We are just commencing the
- 16 permitting process as we speak.
- 17 MR. RAO: And do you envision these plants to

- 18 be permitted as base load plants or will there be
- 19 limitations on the number of hours that you can
- 20 operate or -- I was just trying to distinguish how,
- 21 you know, how different they are from peaker
- 22 facilities.
- 23 MR. JIRIK: No. These would have to have the
- 24 ability to operate at any time. As the current coal

- 1 boilers, natural gas boilers are permitted to supply
- 2 energy and steam to the plant. So they would be
- 3 more characteristic of a base loaded unit, but
- 4 you've got some upside ability to turn them off when
- 5 there's opportunities on the grid.
- 6 MR. RAO: Thank you.
- 7 MR. JIRIK: I do believe also, and this is
- 8 subject to the final business plan, that there could
- 9 be a continuous stream going to grid. That was my
- 10 testimony earlier. The quantity of that, however,
- 11 would be expected to vary depending on price,
- 12 natural gas pricing, that type of thing.
- 13 MR. RAO: Thanks.
- MS. McFAWN: So are you saying that when
- 15 electricity off the grid is cheaper, you might turn
- 16 off your units and buy electricity versus running

- 17 the cogen?
- 18 MR. JIRIK: If you had the absolute worst case
- 19 where the natural gas cost more than the price of
- 20 electricity, we would retain some natural gas-fired
- 21 boilers and in all likelihood, we would do it then
- 22 because it's costing you more to produce it than
- 23 it's worth on the grid. We're not required to -- I
- 24 don't I think the EPA has --

- 1 MS. McFAWN: No, I said I thought you would
- 2 turn them off.
- 3 MR. JIRIK: Yes.
- 4 MS. McFAWN: How many units are you
- 5 anticipating putting in?
- 6 MR. JIRIK: Three turbines with three heat
- 7 recovery boilers, each equipped with duct firing and
- 8 four additional backup, one natural gas boiler just
- 9 so we have all the contingencies covered to get us
- 10 the steam we need to run our plant regardless of
- 11 pricing or whatever else is going on in the world at
- 12 large.
- MS. McFAWN: Thank you.
- 14 HEARING OFFICER JACKSON: Anyone else? Okay.
- 15 Mr. Jirik, you did provide a copy of your testimony

- to the board members and also to the court reporter.

 Would you like to enter this into the record?
- 19 HEARING OFFICER JACKSON: Okay. We will mark

MR. JIRIK: Yes, I would.

- 20 this then as Corn Products Exhibit 1. Thank you
- 21 very much.
- 22 MR. JIRIK: Thank you.

23

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L.A. REPORTING (312) 419-9292

(Document marked as

- 2 Corn Products Exhibit No. 1
- for identification, 9/14/00.)
- 4 HEARING OFFICER JACKSON: I am told that Carol
- 5 Stark did make it. She is next on our list of
- 6 presenters. So if you would like to step forward,
- 7 Ms. Stark, whenever you're ready.
- 8 MS. STARK: Ms. Jackson and Illinois Pollution
- 9 Control Board members --
- 10 HEARING OFFICER JACKSON: Please speak into the
- 11 microphone, if you would.
- 12 MS. STARK: My name is Carol Stark. I am one
- 13 of the directors of CARE in Lockport, Citizens
- 14 Against Ruining the Environment. Our group has been

- 15 in existence for almost six years. We are a local
- 16 grassroots environmental group who have become very
- 17 concerned with the supposed clean-up at the closed
- 18 Texaco Refinery in Lockport.
- 19 Our focus has recently been redirected and
- 20 now includes the proposed peaker plant, which is
- 21 planned for a ten-acre parcel at the Texaco site.
- 22 Because we have a unique situation in Lockport, I
- 23 feel some history on this site is in order.
- The Texaco Refinery was built in 1911

- 1 along the banks of the I & M Canal. When the
- 2 facility closed in 1981, many people that had worked
- 3 there felt used and abandoned. To make matters
- 4 worse, Texaco left the site as is. The tanks
- 5 remained there to rust and decay and become an
- 6 eyesore to the community. This went on for nearly
- 7 15 years until CARE decided to focus on the
- 8 deplorable condition of the plant and started
- 9 researching and asking questions. We discovered
- 10 that Texaco was in an interim status and were
- 11 appealing a Part B Postclosure Permit because of
- 12 objections they had to groundwater classification.
- 13 One of the parcels that Texaco has been

- 14 speedily remediating is where Rolls Royce Power
- 15 Ventures, now calling themselves Lockport Power
- 16 Generating Limited Liability Corporation, intends to
- 17 build this peaker plant. This parcel, as well as
- 18 the rest of the site, is a RCRA site, which is
- 19 similar to Superfund in many ways.
- The entire area, originally 580 acres, was
- 21 once in a flood plain. I believe it is still part
- 22 of the enterprise zone. We were told the six creeks
- 23 running in, around and through the refinery were
- 24 redirected by Texaco. We also have information that

- 1 states the aquifers located on this site are joined
- 2 together. This is the first of our concerns. The
- 3 fact that the aquifers, our water supply, could be
- 4 affected by this peaker using thousands of gallons a
- 5 day is not a comforting thought.
- 6 Number two, the NOX and VOM emissions
- 7 during the hottest days of the year, mixed with
- 8 light, will create ground level ozone. Because we
- 9 are in a non-attainment area and already surrounded
- 10 by some of the major polluters in the state, to be
- 11 faced with yet another questionable facility is
- 12 unacceptable.

- Three, the siting of these plants is being
- 14 handled by local municipalities who are ill-equipped
- 15 to take on the technical aspects associated with
- 16 these facilities. They don't even know what type of
- 17 questions to ask and it appears that in order to
- 18 save face they are approving siting based on
- 19 information supplied by the peaker representatives
- 20 alone.
- 21 Because most of the towns and villages
- 22 that have been approached have no funding available
- 23 to investigate this issue fully, they are making
- 24 decisions based on limited or erroneous information

- 1 that is one-sided.
- 2 Four, virtually no rules or regulations
- 3 exist because these plants are so new. IEPA will
- 4 have little or no control and I've been told once
- 5 the hearing is closed, if any modifications to the
- 6 permit are wanted, the power company can make those
- 7 modifications without reopening the hearing to the
- 8 public.
- 9 Five, these peakers are basically turnkey
- 10 heat operations and involve only a handful of jobs.
- 11 The fact that these turbines are portable and no

- 12 buildings are on-site, hence, no property tax, makes
- 13 them even less enticing.
- 14 Six, I recently was informed that the
- turbines are encased in hydrogen and that hydrogen
- 16 tanks are stored on-site.
- 17 Three weeks ago, there was an explosion at
- 18 a St. Louis peaker due to a leak. If all peakers
- 19 have hydrogen stored, how safe will they be?
- 20 Seven, this plant is within a stone's
- 21 throw of residences and within 1,000 feet of an
- 22 elementary school. No one seems to have taken those
- 23 children's health into consideration, especially
- 24 those with asthma or other respiratory conditions.

- 1 Eight, these power companies are not
- 2 forthcoming with information. One of our councilmen
- 3 asked to see and hear one of these facilities in
- 4 operation. He was told Rolls Royce has none up and
- 5 running in this country. The councilmen then asked
- 6 about other countries and requested a videotape.
- 7 He's still waiting. That was approximately three
- 8 months ago.
- 9 Nine, we just looked through some of the
- 10 permit information this week and found out the plant

- 11 in Lockport will emit 55 parts per million NOX,
- 12 which will make it the dirtiest power generation
- 13 peaker in the state of Illinois.
- 14 You would think that our legislators and
- 15 community leaders would have learned their lesson
- 16 from the 1995 Wood & Tire Incinerator battles.
- 17 Those companies also called themselves power
- 18 generating facilities and claimed they were offering
- 19 economic development, jobs and tax revenue.
- 20 But the wolf in sheep's clothing
- 21 was soon exposed by the citizens and grassroots
- 22 organizations who devoted their own time and sweat
- 23 equity into proving that they were not what they
- 24 pretended to be.

- 1 CARE would respectfully request that a
- 2 moratorium of not less than ten months be called and
- 3 that USEPA get involved by providing guidelines
- 4 specifically formulated for the siting process.
- 5 Actual testing should be done when the
- 6 temperature is between 90 to 100 degrees, not the
- 7 current optimum temperature of 50 to 60.
- 8 Modeling is not accurate or reliable since
- 9 no plants are currently in operation. Perhaps a

- 10 pilot program in a remote area for a period of one
- 11 year should be considered before any of these
- 12 facilities go online. Alternatives to natural gas
- 13 should not only be investigated, but any wind or
- 14 solar facilities within a 100- to 200-mile radius
- 15 should be toured by these municipalities that are so
- 16 quick to approve anyone that approaches them with
- 17 the promise of a job and revenue as the dangling
- 18 carrot. Desperation does not breed clear thinkers.
- 19 Thank you.
- 20 HEARING OFFICER JACKSON: Thank you,
- 21 Ms. Stark.
- 22 DR. FLEMAL: Could you describe for us the
- 23 local review process that did go on in the Lockport
- 24 siting?

- 1 MS. STARK: The plan commission had a hearing.
- 2 There was a discrepancy as to how that was handled
- 3 also. They had originally put signs up near the
- 4 facility and the day they were supposed to have the
- 5 hearing, the signs came down. Then later that
- 6 night, the signs were put back up again.
- 7 So we think that what they were originally
- 8 thinking was that this was going to be a done deal

- 9 and they were pre-determined and they had signs put
- 10 up and then they realized, oh, we better not do that
- 11 because we've got to make it look like this is
- 12 something that we're just hearing tonight.
- DR. FLEMAL: So the developer -- the proponent
- 14 of the peaker plant originally came to the planning
- 15 board?
- 16 MS. STARK: I don't --
- 17 DR. FLEMAL: That's the municipal --
- 18 MS. STARK: We were never told. We think that
- 19 Texaco and Rolls Royce were working together behind
- 20 the scenes and they perhaps approached our mayor.
- 21 The mayor seems to have a long outstanding
- 22 relationship with Texaco so...
- DR. FLEMAL: I'm just trying to get some sense
- 24 of what kind of local review was available? What

- 1 sort of steps occurred?
- MS. STARK: It was very limited.
- 3 DR. FLEMAL: You're obviously critical of the
- 4 kind of local input and whether or not even the
- 5 locals are in a position to make the kind of
- 6 decision you would like to see made.
- 7 MS. STARK: Yeah, because there are no

- 8 engineers or geologists or hydrogeologists that were
- 9 involved and that's what you really have to have
- 10 with this type of location. I mean, the site is
- 11 very unique. The aquifers and geology on the site
- 12 are such that you need experts and there is no
- 13 expert in our city and certainly not on our city
- 14 council.
- Dr. FLEMAL: It did go to the city council
- 16 after coming through the planning commission?
- 17 MS. STARK: Right.
- DR. FLEMAL: Did the planning commission make a
- 19 recommendation to the city council?
- 20 MS. STARK: They recommended that they go
- 21 forward because their job, as they stated, was
- 22 strictly to let the council know if they wanted this
- 23 as an economic --
- DR. FLEMAL: And the city council then, I

- 1 assume, also supported the --
- MS. STARK: Right. Because they're desperate
- 3 for jobs and this is a blue color community and
- 4 that area has always been an industrial area since
- 5 1911 and I'm not saying it shouldn't remain that
- 6 way. Personally, I feel that it should be put back

- 7 to the way it was and I understand that restoration
- 8 of wetland areas is possible now. The technical
- 9 expertise exists so perhaps they should put it back
- 10 the way it was and then maybe we wouldn't have as
- 11 many floods.
- DR. FLEMAL: Allowing for your belief that
- 13 that -- there is a threshold upon which the locals
- 14 may not be able to bring to bare the necessary
- 15 technical expertise, I take it you would still
- 16 believe, however, that there should be some local
- 17 sign-off of some sort? There should be a local
- 18 review and a local approval or should that be
- 19 entirely in the hands of --
- 20 MS. STARK: I think there should be a local
- 21 review and a local approval, but they need to hire
- 22 experts or they need to have experts provided. You
- 23 cannot make this type of decision, especially in the
- 24 area where this facility is going to be put.

- 1 There's residences around there. There's a school
- 2 within 1,000 feet. I mean, none of that is taken
- 3 into consideration. The fact that we're in a
- 4 non-attainment area and we shouldn't even allow
- 5 another polluting facility in there has not been

- 6 taken into consideration.
- 7 MS. MANNING: How long has the school been
- 8 there?
- 9 MS. STARK: I would say at least 20 years.
- 10 MS. MANNING: So even when Texaco was
- 11 operating, the school was there?
- MS. STARK: Yeah, but Texaco hasn't been
- 13 operating since '81. I mean, it's been closed since
- 14 1981.
- MR. GIRARD: I'd like to follow up on the
- 16 citizen involvement in this process mostly coming
- 17 long after Board Member Flemal's questions, but were
- 18 the citizens allowed to address the city council
- 19 before they made their decision on approving the
- 20 permit?
- 21 MS. STARK: Yes, they were. We tried to get
- 22 the word out to as many people as we could and
- 23 there was a good turn out, but most of the people
- 24 that were there live right next to the Texaco plant

- 1 and they are blue color people and I think they
- 2 perceive this as a situation where the writing was
- 3 already on the wall and there's nothing they can do.
- 4 I think that there are alternatives so we do not

- 5 intend to stop fighting because I believe that
- 6 alternatives do exist and that they should be looked
- 7 at.
- 8 MR. GIRARD: Thank you.
- 9 MS. KEZELIS: Ms. Stark, do you know what the
- 10 source of your public water supply is in Lockport?
- MS. STARK: We do --
- MS. KEZELIS: Is it the aquifer?
- 13 MS. STARK: Yeah. We do have -- and then there
- 14 are some people that are on wells, but yes, it's the
- 15 aquifer. We have never tied into Lake Michigan
- 16 water.
- 17 MS. KEZELIS: Thank you.
- 18 MR. MELAS: You mentioned about the school
- 19 being 1,000 feet away. First, you said this is an
- 20 industrial zone and it was industrial and is the
- 21 school in an industrial zone or is it in the -- is
- 22 the -- really what I'm asking is the residential
- 23 zone so close to the industrial zone?
- MS. STARK: Yes, it is. That's the way it's

- 1 always been. I mean, 90 years ago, no one thought
- 2 anything of putting an industrial zone in the middle
- 3 of a town. Back then, we all know there weren't

- 4 that many residences. There were always people on
- 5 the west side that lived directly next to the
- 6 facility.
- 7 MR. MELAS: The Texaco facility?
- 8 MS. STARK: Right. But the school is up on a
- 9 hill and it's kind of up on a ridge. It's still a
- 10 residential area. I mean, there's residences all
- 11 around the school, but it's a little bit up on a
- 12 ridge from the facility.
- 13 MR. MELAS: Is it an elementary school?
- MS. STARK: It is an elementary school.
- MS. McFAWN: Kind of along the similar question
- 16 about the process, the hearing process, you
- 17 mentioned the air permits. Are those under review
- 18 or have they been issued by the Agency?
- 19 MS. STARK: The constriction permit is the only
- 20 one I'm aware of that was issued.
- 21 MS. McFAWN: It was issued? And did they hold
- 22 public hearings? "They" meaning the Illinois EPA.
- MS. STARK: We called for one and we're -- got
- 24 a public hearing scheduled on the peaker for October

- 1 11th. We asked the IEPA.
- 2 Ms. McFAWN: All right. And that is on the

- 3 construction permit, is it?
- 4 MS. STARK: Yes.
- 5 MS. McFAWN: Okay. And you mentioned that you
- 6 had reviewed their permits?
- 7 MS. STARK: We just started skimming through
- 8 it.
- 9 MS. McFAWN: Their permit application?
- 10 MS. STARK: Correct.
- 11 MS. McFAWN: And it is the air permit
- 12 application?
- MS. STARK: I don't think so. I think it was
- 14 just for the construction permit.
- MS. McFAWN: Oh, okay, for the -- but it was
- 16 through the Bureau of Air?
- 17 MS. STARK: I'm not sure. I know that it's in
- 18 the repository in the Lockport library and we were
- 19 looking through a lot of other Texaco material and
- 20 we just happened upon that and started looking
- 21 through it.
- 22 MS. McFAWN: Okay. Thank you. Just so I can
- 23 try to understand the location as well, you said
- 24 it's on the Texaco Refinery property?

- MS. McFAWN: And that's a ten-acre site?
- 3 MS. STARK: Correct.
- 4 MS. McFAWN: So it's a subset of that property?
- 5 MS. STARK: They're cleaning it up and
- 6 remediating in parcels. So this particular parcel
- 7 is the one that they're focusing on right now
- 8 because they want to build there. So that's how
- 9 they're going to be remediating. They're going to
- 10 do it parcel by parcel.
- MS. McFAWN: Okay.
- MS. STARK: And I believe it's divided up into
- 13 13 parcels.
- 14 MS. McFAWN: I see. Are they doing cleanup, do
- 15 you know, if you know, under RCRA or under some --
- MS. STARK: It is under RCRA. And the reason
- 17 it is is because there's an owner. Normally
- 18 Superfund is when there is no owner available or a
- 19 company has gone bankrupt then they usually go under
- 20 Superfund.
- 21 MS. McFAWN: Thank you.
- MS. STARK: Uh-huh.
- MS. MANNING: Just to clarify for the purposes
- 24 of the record, you were talking about a hearing

- 1 process and you were, I think, being critical of the
- 2 idea that an amendment could be made to the permit
- 3 after the hearing without public notice.
- 4 You were referring to the IEPA
- 5 permitting -- the hearing on permits, right?
- 6 MS. STARK: Right.
- 7 MS. MANNING: Just so I know what hearing
- 8 process you're talking about.
- 9 MS. STARK: Uh-huh.
- 10 HEARING OFFICER JACKSON: Anyone else? Thank
- 11 you, Ms. Stark.
- 12 MS. MANNING: Thank you.
- MS. STARK: And this is for the record.
- 14 HEARING OFFICER JACKSON: Oh, you'd like to
- 15 introduce your statement?
- 16 MS. STARK: Yes.
- 17 HEARING OFFICER JACKSON: Okay.
- 18 MS. STARK: And I also have a newspaper article
- 19 about the explosion that I discussed.
- 20 HEARING OFFICER JACKSON: Okay. We will
- 21 introduce your statement as Stark Exhibit 1 and then
- 22 the newspaper article as Stark Exhibit 2 and if you
- 23 would, just hand those to the court reporter.

- 1 (Documents marked as
- 2 Stark Exhibit Nos. 1-2
- for identification, 9/14/00.)
- 4 HEARING OFFICER JACKSON: Thank you very much.
- 5 Mark Sargis is our next speaker. I'm not
- 6 sure that he's here yet. Okay. Why don't we move
- 7 on then, Susan Zingle.
- 8 MS. ZINGLE: Good afternoon. I can't tell you
- 9 how much I appreciate your patience in going through
- 10 all these hearings. I've just found this whole
- 11 process fascinating.
- 12 Protecting the environment and economic
- 13 development are frequently seen as at odds with one
- 14 another. There is always a trade-off given in terms
- of what you get in terms of air and environmental
- 16 quality and what you get in terms of taxes, jobs and
- 17 other benefits.
- 18 With the peakers, we know fairly well what
- 19 we have to tolerate from air emissions, noise and
- 20 water usage. There are ramifications of this to
- 21 economic development beyond the immediate
- 22 environmental harm.
- 23 As we discussed briefly last week, the
- 24 proposed NOX trading program lost, I believe, 30,000

1 tons of NOX to electric generating units and already

- 2 10,000 of that is being taken by the peaker plants.
- 3 Similarly, the overall NOX budget in the
- 4 SIP plan will be significantly reduced from current
- 5 levels. Existing businesses will have to find ways
- 6 to reduce NOX or curtail their operation at their
- 7 own expense, expense that is increased by the
- 8 additional reductions necessary to accommodate entry
- 9 of the peakers into this mix.
- 10 A third element that needs to be
- 11 considered are the prevention of significant
- 12 deterioration permits and Chris Romaine or Kathy
- 13 Bassi could do a far better job than I can, but each
- 14 new polluter erodes at increments that are available
- 15 for future development. At some point, new permits
- 16 will be denied.
- 17 The cumulative effect of 55 and counting
- 18 electrical generating plants has the potential to
- 19 curtail or a least make more difficult future
- 20 business development. It has ramifications beyond
- 21 the village making the zoning decision to admit the
- 22 plan. Regional economic development is not a local
- 23 issue.
- 24 And you can see it happening. I didn't

- 1 have time to get this prepared, but in today's
- 2 Chicago Tribune, Chicago and the EPA are working on
- 3 clean air law trade-offs. They want to bring more
- 4 development into Chicago, which is a good thing, but
- 5 they can't do it without their air laws, but we
- 6 don't want to breathe dirty air either. So the
- 7 peakers are not helping the situation at all.
- 8 By having identified the difficulties,
- 9 what benefits do we get from a peaker plant? Well,
- 10 not jobs. Most of the peakers could be turned on
- 11 and off from a remote location and the plants
- 12 require only seasonal maintenance jobs when they're
- 13 operating. There are, of course, construction jobs
- 14 created by the building of the plant, but I don't
- 15 know that these are any more or of any longer
- 16 duration than construction jobs for any facility.
- 17 Property taxes are usually sited as a
- 18 benefit, but as frequently, the turbines are
- 19 considered personal property, the property taxes are
- 20 minimal as turbines are the bulk of the value.
- 21 For the Carlton plant in Zion, fully
- 22 loaded property taxes would be about \$2.8 million a
- 23 year. Carlton is actually anticipating paying only
- 24 about 200,000 a year.

- 1 Attached to my testimony that I will
- 2 submit is a letter from the Lake County State's
- 3 Attorney's Office to the County Chief Assessor
- 4 describing how the decisions are made on a
- 5 case-by-case basis.
- 6 The power companies have recognized this
- 7 disadvantage and are now beginning to increase their
- 8 attractiveness through offering special agreements.
- 9 Indeck offered Libertyville payments of
- 10 \$400,000 a year to a conservation fund designed to
- 11 pay for repairs to the water system in the city.
- 12 Zion has not yet released the details, but the mayor
- 13 acknowledges negotiating what he calls a host
- 14 agreement that may include building a \$19.5 million
- 15 water treatment plant for the city.
- According to the paper, a plant proposed
- 17 for Elgin will pay as much as \$500,000 to \$1 million
- 18 over several years. Not all the towns get the same
- 19 proposal or ask for the same thing. However, Summit
- 20 is permitting a peaker plant in a TIF district. Go
- 21 figure.
- 22 Although this negotiation process has some
- 23 advantages, I think it needs oversight. Now, it is
- 24 almost a bribe. The companies couldn't even offer

- 1 this money up front without prodding.
- 2 Since most plants need some zoning
- 3 approval or variance, it begins to smack contract
- 4 zoning. As the villages get smarter, I believe
- 5 bidding wars will emerge and also the power
- 6 companies would begin extortion.
- 7 Furthermore, recouping some of the lost
- 8 property taxes is a good thing, this is not a
- 9 perfect mechanism. Payments to the city don't
- 10 necessarily address all the lost taxes and the
- 11 schools, the libraries, the park districts, the
- 12 townships and the counties get left out of the
- 13 equation. This is a payment to the city for their
- 14 use.
- Neighboring communities who feel the
- 16 effects get no benefits at all. I'm not really
- 17 suggesting we reopen the personal property issue
- 18 because it goes far beyond the scope of peakers, and
- 19 I don't want to go there, but I am suggesting that
- 20 whatever siting program may ultimately be adopted
- 21 includes some provision for host agreements that
- 22 affect all affected taxing bodies. So the peakers
- 23 don't get a free ride on the taxes, but the city
- 24 doesn't get to grab the loot and shortchange the

- 1 schools and the libraries that would benefit from
- 2 the manufacturing plant that could possibly go in
- 3 the same site.
- 4 Other issues confronting the financial
- 5 side of peakers include the never ending quest by
- 6 the industry for additional advantages. Hiding
- 7 behind the claims of need for electrical generating
- 8 capacity benefits economic development and threats
- 9 of competition from other states, House Bill 1268
- 10 and counterpart Senate Bill 50 were proposed in '99
- 11 and both are pleased to say are now residing in
- 12 committee, but I've been told that there are plans
- 13 to resurrect these in the fall season and I would
- 14 like to make people aware of what they do.
- 15 HEARING OFFICER JACKSON: Ms. Zingle, could you
- 16 slow down just a bit?
- MS. ZINGLE: Oh, I'm sorry.
- 18 HEARING OFFICER JACKSON: Thank you.
- 19 MS. ZINGLE: The bills originally were a
- 20 somewhat innocuous attempt to exempt automatic
- 21 vending machines from the use tax, the service tax,
- 22 the service occupation tax and the retailers'
- 23 occupation tax.

- 1 the Senate, they were amended to exempt from these
- 2 taxes production-related tangible personal property
- 3 certified by the purchaser to be essential to and be
- 4 used in the process of production of electricity by
- 5 an eligible facility owned by an exempt wholesale
- 6 generator.
- 7 So not only do the power companies not
- 8 provide jobs and not pay significant property taxes,
- 9 they were looking to avoid the sales and use taxes
- 10 on the turbines when they purchase them. The
- 11 promotional material that was circulating with this
- 12 bill showed that it's not a small consideration.
- The taxes total 6.25 percent of the
- 14 purchase price of the turbines. Of that, five
- 15 percent is kept by the state and 1.25 percent is
- 16 given back to the local governments.
- 17 Additionally, home rule communities can
- 18 add their own tax on to that and for some its as
- 19 much as an additional 1.25 percent. If the state
- 20 tax gets removed, so does the local tax and the cost
- 21 to both the state and local governments is
- 22 substantial.

- 23 Their justification for their proposal
- 24 estimated the cost. It assumed that by the year

- 1 2010, five additional combustion turbine facilities,
- 2 peakers, and four combined cycle facilities would be
- 3 constructed. So they were estimating nine
- 4 production facilities. The lost taxes from that
- 5 scenario for the state were over \$100 million and
- 6 the add on the home rule communities was not
- 7 included. Multiplied by the 55 plants, this was a
- 8 very expensive proposition. I do say again, it is
- 9 right now in committee and I promise you I am going
- 10 to work to make sure it doesn't come back.
- 11 On other fronts, yesterday, the city of
- 12 Elgin heard a presentation from Ameren to build a
- 13 400 megawatt facility within the city. It is
- 14 located approximately one-half mile from the
- 15 proposed ABB facility in Bartlett.
- 16 Last week, you heard from Bev DeJovine of
- 17 Bartlett CARE describe how her group is exhausted
- 18 and in debt and now she is faced with a second plant
- 19 whose emissions will drift over her town, not Elgin.
- 20 If one is a problem, two is worse. What mechanism
- 21 is there to bring all these towns to the table

- 22 together?
- 23 Similarly, in Zion, varying with weather,
- 24 he is talking to the Chamber of Commerce or to us,

- 1 the mayor alternatively supports or opposes Kinder
- 2 Morgan's proposal to build a combined facility --
- 3 combined cycle facility in Zion and he may have
- 4 left, the gentleman from Corn Products, that he was
- 5 just beginning the permitting process.
- 6 So last week, we talked about 55
- 7 applications. But now, 56, 57 and 58 are in the
- 8 works. How do we get this under control?
- 9 And frankly, just conversationally, I did
- 10 attend the planning commission hearing for the
- 11 Lockport plant that Ms. Stark was talking about.
- 12 They had to -- first of all, the land was
- 13 unincorporated. So at that hearing, they were
- 14 making a decision to annex, to rezone, and to do a
- 15 special use permit for the peaker plant. They were
- 16 very gracious. They let me speak. They let
- 17 citizens speak. I told them to wait because the
- 18 Governor was looking at this whole issue. I told
- 19 them they did not yet have their application filed
- 20 with the IEPA so there was no detail really on what

- 21 they would permit. The council was concerned. They
- 22 asked some of the right questions. One of the
- 23 members had been on the internet. They had a copy
- 24 about the air facts brochure that was on the IEPA

- 1 website. There's some newspaper articles about all
- 2 the hoopla in other cities. This is the plant that
- 3 does not emit ozone was the answer they got to the
- 4 question about air policy. We couldn't persuade
- 5 them to slow down and wait for the air hearing. So
- 6 now they're granting the facility. They're granting
- 7 the special use permit. Even if they go to the IEPA
- 8 air hearing, they can't take it back and maybe they
- 9 wouldn't have any way, but they did, in fact, make a
- 10 decision with no accurate information whatsoever as
- 11 well intentioned, as nice as they were. So with
- 12 that, I'll open with questions.
- 13 MR. LAWTON: Can you hear me? I know you
- 14 attended the hearing in Naperville. I wondered if
- 15 you had given any thought to what seemed to be the
- 16 principle area of one of them was the proliferation
- of peakers and -- did you hear the last part?
- 18 MS. ZINGLE: Yes.
- 19 MR. LAWTON: Whether you have given any thought

- 20 to what kind of mechanism might be employed either
- 21 on the state level or county level to meet that
- 22 concern and I think we at least understand? I know
- 23 in your capacity as a member of the zoning board,
- 24 this is obviously something you've given thought to.

- 1 If you have, you can share that with us.
- 2 MS. ZINGLE: Yes. And we will be making a
- 3 formal recommendation before the conclusion of these
- 4 hearings. The best model I think that I can find so
- 5 far is Public Act 90-217. That was done for
- 6 incinerators and it requires -- the host community
- 7 still makes the decision, but it requires them to
- 8 have a hearing or a series, if necessary, that would
- 9 involve the community, neighboring communities
- 10 within a mile and a half, the company that's looking
- 11 to site the plant and it allows cross-examination.
- 12 It starts to spell out the standards under which the
- 13 decision will be made so you can't have a sham
- 14 hearing, we'll just have the hearing and vote to do
- 15 it anyway regardless of the effects, which would
- 16 give the neighboring communities the right to sue
- 17 if, in fact, a decision is not made appropriately.
- 18 It still needs local control, but, in fact, if I

- 19 understand it right, but that starts the
- 20 participation of other groups. I would like to see
- 21 that hearing take place at about the same time as
- 22 the IEPA air hearing because there's information in
- 23 those permits that is invaluable to the city.
- The point of maximum impact is where does

- 1 the plume actually touch the ground? How high are
- 2 the stacks? How high is the building? How many
- 3 hours are they going to run? How many parts per
- 4 million of NOX is this going to emit? The people
- 5 need to know and neither one should be making the
- 6 decision independently of the other.
- 7 I know Chris Romaine finds out stuff at
- 8 the public hearings that he has no way of knowing.
- 9 The power companies have sometimes applied for a 500
- 10 megawatt air permit. This whole village has a 1500
- 11 megawatt plant. All that stuff needs to come out in
- 12 one common forum. And I think if, in fact, they go
- 13 forward with water regulations and any of
- 14 Mr. Zak's suggestions for noise, that all ought to
- 15 be done at the same time with the experts from the
- 16 appropriate agencies there to guide the
- 17 conversation.

- 18 MR. LAWTON: Thank you.
- 19 MS. ZINGLE: How do you get that done? I don't
- 20 know.
- 21 MS. MANNING: Ms. Zingle, I'd like to also
- 22 offer our appreciation for your appearing at these
- 23 hearings and giving us very informed and very
- 24 thoughtful testimony in each of them.

- 1 You mentioned, though, that -- I thought
- 2 you said that 90-217 was a law that you thought
- 3 applied to the incinerators and hearings.
- 4 MS. ZINGLE: Yes.
- 5 MS. MANNING: Could you maybe be referring to
- 6 Senate Bill 172, which is a hearing process for
- 7 landfills and incinerators as well as pollution
- 8 control facilities or is there a separate
- 9 incinerator --
- 10 MS. ZINGLE: There's a separate incinerator
- 11 one. That starts at -- that brings in the
- 12 surrounding communities. I didn't bring it with,
- 13 but I can get you a copy of it. It was -- itself
- 14 was drawn from SB 172. So it's heavy on groundwater
- 15 concerns, which for the peakers, pollution of the
- 16 groundwater really isn't an issue. Use of the

- 17 groundwater is, but runoff and pollution is not. So
- 18 it can't be used exactly as the --
- 19 MS. MANNING: The Board, as you know, sits in
- 20 review of 172 plan hearings, which we don't call
- 21 landfill hearings anymore. We call them pollution
- 22 control siting hearings. They are applicable to
- 23 landfills, the building of new landfills, and the
- 24 extension of a landfill or incinerators as well

- 1 because it's a pollution control facility and they
- 2 have a local hearing and after that local hearing,
- 3 any participants in the hearing can bring an appeal
- 4 to the Board.
- 5 MS. ZINGLE: And I like that. I am impressed
- 6 with how this Board works. You ask good questions.
- 7 You're interested. You're paying attention. You
- 8 don't seem to be skewed one way or another.
- 9 I'm a little concerned sometimes about
- 10 taking the control away from the local community.
- 11 It's their community. They're going to have to live
- 12 with it, but they have to have good information.
- 13 They have to have a means of interpreting it.
- 14 I've learned about air permits in this
- 15 last year more than I ever wanted to know and I know

- 16 just enough now to be really dangerous and get
- 17 myself in all kinds of trouble. You can't -- a
- 18 layperson really can't do a meaningful job on it.
- 19 They can only do one or two.
- 20 DR. FLEMAL: We've heard from various people
- 21 small bits of the role of taxing structure and a
- 22 reaction to the presence of units like peaker power
- 23 plants. I want you to appreciate my appreciation
- 24 for you having taken us a little further down that

- 1 road and will confess that I'm very much down on the
- 2 learning curve on this and I need to understand a
- 3 good deal more about it. So if I could just focus a
- 4 question maybe even in anticipation of a response
- 5 that you might want to make at a later time as
- 6 opposed to now.
- 7 First off, are you planning to make any
- 8 suggestions or have you entered the possibility of
- 9 making any suggestions for modifications of the tax
- 10 structure as an aspect of peaker plant overview?
- 11 MS. ZINGLE: I wasn't going to only because it
- 12 affects so much other than peaker plants and to get
- 13 into that just -- we've got an environmental
- 14 attorney and a municipal attorney working with us.

- 15 We don't have people familiar with the tax laws. So
- 16 I was intending to go more towards the host
- 17 agreement and some provisions in the schools and
- 18 libraries and other taxing bodies. I am open to
- 19 suggestions. If somebody knows a better way to get
- 20 that done, I'm happy to recommend and follow up and
- 21 support it.
- DR. FLEMAL: Since you don't have anything on
- 23 the books to tell us next week, and let's just try
- 24 looking at a couple of these or helping me along

- 1 with a couple of these questions, we've heard both
- 2 the prospective that it's good to have peaker power
- 3 plants because it helps your tax base and I
- 4 understand there's even a couple of communities who
- 5 are on record as having approved peaker power plants
- 6 and that's one of the major reasons why they agreed
- 7 to act as hosts. We hear other perspectives -- and
- 8 I think it's a perspective that would be that one
- 9 that you share that that's a bit of a specter, there
- 10 isn't really much to be gained for local taxes.
- 11 Can you -- would that be the sort of
- 12 bounds, can you expand on that? Do I have the right
- 13 perspective to begin with? Is that --

- 14 MS. ZINGLE: Yes. I think you probably still
- 15 think I'm more negative towards peaker plants than I
- 16 actually am, but given what's been in the newspapers
- 17 and the extremes that citizens go to to get
- 18 attention, I can see where that perception comes
- 19 from. Depending on the economic base of the city.
- 20 Libertyville is a very affluent community. Upper
- 21 and middle class well-established community, good
- 22 industrial base, good tax base. The peaker doesn't
- 23 hold any attraction for them and they have
- 24 citizens -- most of the people who testified at

- 1 Libertyville were themselves engineers and Ph.D.s,
- 2 so they weren't -- and that's where I meet
- 3 Dr. Overbye, by the way. He was hired by the people
- 4 fighting the plant in Libertyville and I thought he
- 5 did a very good job.
- In Zion, the unemployment rate is
- 7 enormous. It is largely blue collar. There is an
- 8 attitude that ComEd left us, we're broke, and if you
- 9 don't replace that tax money, we're desperate and
- 10 even getting people to come out to meetings, let
- 11 alone people don't have computers at home, getting
- 12 them on the Internet, getting messages out to get

- 13 them involved is just 100 times more difficult and
- 14 Carol had the same thing in Lockport, people did
- 15 come to the meetings and then they just sat there.
- 16 They wouldn't speak. It's not -- you get into
- 17 environmental justice issues and economic justice
- 18 issues very quickly. They go -- the power plants
- 19 will go where they can go regardless of the benefit
- 20 to the community.
- 21 Zion really does not need a peaker plant
- 22 on its Wadsworth Court. It's not going to get
- 23 enough back to justify the loss of property values.
- 24 What's it going to do to adjacent communities? They

- 1 need something better, but there's nothing better
- 2 coming along and I suspect they're going to take it.
- 3 DR. FLEMAL: Well, taking you even back a step
- 4 forward, what is taxable in a typical peaker power
- 5 plant and what is not? What constitutes the tax
- 6 base focus?
- 7 MS. ZINGLE: I am not an expert. They
- 8 generally pour, I believe, a concrete foundation to
- 9 put the turbs on. I believe that is taxable. There
- 10 may be -- in the case of the Zion plant, there's an
- 11 oil storage tank, a water storage tank, a building

- 12 which would house some control panels and supplies
- 13 and equipment and so forth, a shed, more than a
- 14 shed, but less than a building, all of that is
- 15 taxable.
- 16 So there is some increase to the assessed
- 17 evaluation of the property, just not what you would
- 18 get, of course, pound for pound, pollution for
- 19 pollution. If that were a manufacturing facility,
- 20 it would be making something. You would have jobs,
- 21 and building, a lot of benefits.
- DR. FLEMAL: What of the facility is not
- 23 taxable?
- MS. ZINGLE: The turbines --

- 1 DR. FLEMAL: The turbines.
- 2 MS. ZINGLE: -- are generally not taxable. I'm
- 3 not sure, but attached to the turbines is generally
- 4 a muffler unit that leads into the exhaust stack and
- 5 I don't know that that muffler unit is taxable or
- 6 not since it's as mobile or not as the turbine, I
- 7 suspect it is not taxable. I'm not the person to
- 8 ask those questions.
- 9 DR. FLEMAL: That sort of helps me along a bit
- 10 on understanding this, but if there is more that you

- 11 think is appropriate to bring to our attention
- 12 regarding how the current tax structures interplay
- 13 here, that, I think, might be useful information for
- 14 us or anybody else who wishes to address that topic.
- 15 MS. INGLE: Thank you.
- MS. MANNING: Ms. Zingle, were you at all
- 17 encouraged by the testimony from Alan Jirik from
- 18 Corn Products --
- 19 MS. ZINGLE: Yes.
- 20 MS. MANNING: -- International that they're
- 21 actually taking away one of their coal fired boilers
- 22 and attempting to generate -- actually, they're
- 23 going to be generating electricity not only for
- 24 their process in using the steam generating it

- 1 allegedly lowering their NOX in doing so?
- 2 So are you encouraged -- would you
- 3 encourage more businesses to do that?
- 4 MS. ZINGLE: Yes. And I've been -- there's
- 5 newspaper clippings on that and I've been following
- 6 that to some extent, but you can see there is no
- 7 citizens group fighting this plant. They're not
- 8 marching out with signs. They're not storming
- 9 village hall. It's fine. The site is in an

- 10 industrial area. It reduces NOX. It has a benefit
- 11 for manufacturing. It's a good thing. I was
- 12 surprised, though, he was obviously concerned that
- 13 out of all this, we're going to come up with these
- 14 draconian regulations on this cycle plant. This
- 15 combined cycle plant uses steam. It's one of the 28
- 16 sections of the ordinance. He's already more
- 17 strictly regulated than the peakers are and yet he
- 18 is doing more good. I object to that. I don't want
- 19 his regulations loosened. I'd like to bring the
- 20 peakers up to that level.
- 21 MR. MELAS: I have just a question. Help me
- 22 understand the functioning of these peaker plants.
- 23 One of the things you have mentioned is groundwater
- 24 pollution. They would actually return water -- I

- 1 don't know where they -- from what I've heard, I
- 2 don't know that they actually put water back into
- 3 the ground. Is this spilled water?
- 4 MS. ZINGLE: They don't. I'm sorry for the
- 5 misunderstanding. We were talking about Senate Bill
- 6 172, which governs the landfills and that bill has a
- 7 great concern for groundwater because of the huge
- 8 amount of the landfills that pollute the

- 9 groundwater.
- 10 MR. MELAS: Correct.
- 11 MS. ZINGLE: That really doesn't apply to
- 12 peakers. So that whole emphasis in that bill has no
- 13 significant bearing on peakers.
- MR. MELAS: Thank you.
- MS. McFAWN: I had a question about the
- 16 proceedings, I believe, up in Libertyville.
- 17 MS. ZINGLE: Yes.
- 18 MS. McFAWN: In the past, you talked about the
- 19 lack of expertise that the local zoning commission
- 20 might have. Did -- were any fees assessed for the
- 21 zoning application up in Libertyville by the
- 22 commission?
- 23 MS. ZINGLE: I don't know. I know that Indeck
- 24 was required to pay the village costs for the

- 1 consulting of the attorneys that they hired to run
- 2 the proceedings and at last count in the paper, that
- 3 was at \$342,000. In addition, Indeck had their own
- 4 attorneys and consultants all doing the same work,
- 5 as did the opponents.
- 6 So in total, it was close to -- I'd
- 7 suspect a million dollars spent on that peaker plant

- 8 siting. It can't be that extravagant everywhere.
- 9 We have to get this down to some kind of process.
- 10 MS. McFAWN: You have been attending other
- 11 public hearings having to do with zoning and siting.
- 12 Any other communities, did they collect fees that
- 13 you might know of from the applicant?
- 14 MS. ZINGLE: I don't know. I don't know.
- 15 MS. McFAWN: Thank you.
- 16 MS. MANNING: Just for purposes of the record,
- 17 I'm not sure we have in the record what the
- 18 status -- the current status of the Libertyville
- 19 Indeck site is.
- 20 Could you explain that for purpose of the
- 21 record to your knowledge?
- MS. ZINGLE: The plan commission on July 26th,
- 23 I believe it was, voted six to one against
- 24 recommending the siting of the plant. They

- 1 submitted their report to the village board about
- 2 two weeks ago and the village board is due to vote
- 3 September 26th. They are not taking any additional
- 4 testimony. They will have deliberations among
- 5 themselves and take the vote at that time and their
- 6 air permit -- their first air permit expired in

- 7 February of this year. They reapplied, went through
- 8 a public hearing air permit, and that permit has not
- 9 yet been issued.
- 10 MS. MANNING: Thank you.
- 11 HEARING OFFICER JACKSON: Anything else for
- 12 Ms. Zingle? Thank you very much.
- I would note for the record discussing the
- 14 Libertyville plant, our hearing next week is in Lake
- 15 County and we do have speakers currently planned
- 16 from the city of Libertyville, representatives from
- 17 Lake County, and I was also contacted this week by
- 18 Gerald Erjavec from Indeck and he may also be
- 19 attending that hearing as well.
- 20 So I say that just for your own knowledge
- 21 if you are interested in attending that hearing and
- 22 possibly hearing more about the Libertyville
- 23 situation.
- We missed Mark Sargis before, has he

- 1 joined us? No?
- 2 Okay. Keith Harley is our next listed
- 3 speaker with the Chicago Legal Clinic.
- 4 MR. HARLEY: For the record, I am Keith Harley
- 5 of the Chicago Legal Clinic. I wanted to start off

- 6 by picking up on something Sue Zingle said, which is
- 7 thank you for the time that you're taking to look at
- 8 this issue. I know you had to come from all over
- 9 the state in order to attend these different
- 10 meetings. I know that this is a duty that has
- 11 imposed you in addition to all of your ordinary
- 12 responsibilities as the Pollution Control Board and
- 13 I am very grateful for the level of detail and
- 14 attention that you all are personally paying to this
- 15 issue.
- 16 I'm testifying today on behalf of ten
- 17 organizations and I'm going to read off those
- 18 organizations so you get a sense of the difference
- 19 in scale and purpose of these organizations. Four
- 20 of them are regional organizations; the American
- 21 Lung Association of Metropolitan Chicago, Citizens
- 22 for a Better Environment, the Illinois Environmental
- 23 Council and Illinois Citizen Action. Four of them
- 24 are Lake County organizations; the Lake County

- 1 Autobon Society, the Lake County Conservation
- 2 Alliance, the Liberty Prairie Crossing and the
- 3 Prairie Crossing Homeowners Association. One of
- 4 them is CARE, a Will County group, Citizens Against

- 5 Ruining the Environment and one is an Aurora-based
- 6 group that straddles Kane and DuPage Counties,
- 7 Citizens Against Power Plants in Residential Areas.
- 8 And what I'm going to be testifying about
- 9 today is what could possibly bring together groups,
- 10 large, well-organized membership organizations like
- 11 the Lung Association, umbrella organizations like
- 12 Illinois Environmental Council, right down to very
- 13 small grassroots groups like CARE.
- 14 The thing that brings them together, and
- 15 what I would like to testify about today, is the
- 16 issue of NOX and the way in which peaker plants
- 17 contribute -- will contribute, will become permanent
- 18 forever contributors of NOX in this area.
- 19 Peaker plants are new sources of NOX, an
- 20 ozone precursor. The Chicago metropolitan area is
- 21 a non-attainment area for ozone. Generally, a new
- 22 source of NOX in this type of ozone non-attainment
- 23 area would be regarded as a major source if it had
- 24 the potential to emit up to 25 tons per year of NOX.

- 1 Twenty-five tons per year.
- 2 And generally, as a major source, a 25
- 3 tons per year NOX source would be subject to the

- 4 most stringent pollution control measures called
- 5 LAER, Lowest Achievable Emission Rates, and also
- 6 very importantly would be required to acquire NOX
- 7 offsets in a ratio of 1.3 to one.
- 8 Under this Clean Air Act system, called
- 9 New Source Review, peaker plants would be required
- 10 to meet the most stringent pollution control
- 11 measures.
- 12 In addition, the peakers would actually be
- 13 helping to reduce NOX because they would be required
- 14 to acquire offsets in the ratio of 1.3 to one as a
- 15 precondition of acquiring a permit of 25 tons per
- 16 year, but these protections are not in place. These
- 17 protections are not in place because of the decision
- 18 that was made by the state of Illinois in the
- 19 mid-1990s.
- In the mid-1990s, Illinois petitioned
- 21 USEPA to be relieved of the New Source Review and
- 22 other requirements for NOX. The basis for Illinois'
- 23 petition was some preliminary information suggesting
- 24 that when it came to ozone formation, there was good

- 1 NOX and bad NOX.
- 2 Preliminary information suggesting that

- 3 some NOX emissions actually had a protective local
- 4 effect when it came to NOX -- came to ozone
- 5 formation.
- 6 Based on this preliminary data, USEPA
- 7 granted the NOX waiver on a conditional basis and
- 8 over the objections of many environmental groups and
- 9 some eastern states which actually sued USEPA for
- 10 its decision. The granting of the NOX waiver, which
- 11 is kind of a context issue for the whole peaker
- 12 plant debate that we're having now, was conditional
- 13 because new research that was pending at that time
- 14 could discredit the good NOX/bad NOX theory.
- So because of the NOX waiver, a peaker
- 16 plant is not regarded as a major source unless it
- 17 has the potential to emit 250 tons per year of NOX,
- 18 a factor of ten times. No longer are we dealing
- 19 with the 25-ton per year standard for a major
- 20 source, we're dealing with the 250-ton per year
- 21 standard for a major source of NOX. And if it's not
- 22 a major source, there is no LAER requirement, no
- 23 lowest achievable emission rate requirement. There
- 24 is no offset requirement.

- 2 being permitted as less than 250-ton per year
- 3 sources. Many just so. The Aurora facility that
- 4 CAPPRA possesses has a potential to emit in its
- 5 permit of 247.5 tons per year. The Lockport
- 6 facility has a potential to emit 245 tons per year.
- 7 All of them are coming in just under the major
- 8 source trigger.
- 9 The irony in all of this is that the good
- 10 NOX/bad NOX theory that underscored Illinois'
- 11 petition to be relieved of the new source
- 12 requirements has been discredited. It hasn't been
- 13 discredited by the environmentalists. It was
- 14 discredited by the USEPA appointed Ozone Transport
- 15 Assessment Group.
- In 1997, the Ozone Transport Assessment
- 17 Group completed a comprehensive study demonstrating
- 18 that all NOX reductions are good reductions, locally
- 19 and regionally. USEPA responded to the OTAG study
- 20 by imposing NOX SIP call through which NOX would be
- 21 curtailed through strict budgets in many states,
- 22 including Illinois.
- 23 Unfortunately, no one has gone back and
- 24 reconsidered the Illinois NOX waiver. In the

- 1 meantime, this NOX waiver is functioning to create a
- 2 loophole which is enabling the proliferation of
- 3 peaker plants. These new NOX sources, in turn, are
- 4 and will continue to create havoc with Illinois'
- 5 efforts to meet tightening NOX standards.
- 6 Illinois could act today to end this
- 7 loophole. Illinois could voluntarily request
- 8 USEPA to rescind the NOX waiver for New Source
- 9 Review. In the decision in which USEPA granted the
- 10 NOX waiver in the first place, there is language
- 11 suggesting that it could even be rescinded for
- 12 specific sources. It does not make sense for
- 13 Illinois officials to claim they are powerless to
- 14 act when they have the power to change this simply
- 15 by ending a NOX waiver that shouldn't even be there
- 16 anymore.
- 17 Simply, the NOX waiver is bad science that
- 18 is creating an artificial incentive for peaker
- 19 plants to locate in Illinois.
- I wanted to just give you the bullet
- 21 points on what the Ozone Transport Assessment Group
- 22 said on the issue of NOX reductions.
- 23 They made eight basic conclusions.
- 24 Regional NOX reductions are effective in producing

- 1 ozone benefits; two, the more NOX reduced, the
- 2 greater the benefit; three, ozone benefits are
- 3 greatest in the subregions where emission reductions
- 4 are made; four, although decreased with distance,
- 5 there are also ozone benefits outside of the
- 6 subregions where emission reductions are made; five,
- 7 both tall stack and low stack NOX reductions are
- 8 effective; six, air quality data indicates that
- 9 ozone is pervasive, is transported an once aloft, is
- 10 carried over and transported from one day to the
- 11 next; seven, the range of ozone transport is
- 12 generally longer in northern states; and eight, NOX
- 13 controls on utilities are recommended for states in
- 14 the OTAG region. It's a 22-state region which
- 15 includes Illinois.
- To help Illinois come to the decision that
- 17 the NOX waiver should no longer be in place on
- 18 August 22nd, 2000, I submitted a petition to Carol
- 19 Browner, an USEPA administrator, on behalf of the
- 20 ten organizations I mentioned earlier.
- 21 A copy of this petition, which was
- 22 prepared pursuant to the procedures laid out in
- 23 Section 182(f)(3) of the Clean Air Act, is now being
- 24 provided to the Illinois Pollution Control Board.

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1 May I approach?
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- 2 HEARING OFFICER JACKSON: Yes. We will mark
- 3 that as Chicago Legal Clinic Exhibit 1.
- 4 (Document marked as
- 5 Chicago Legal Clinic
- 6 Exhibit No. 1
- for identification, 9/14/00.)
- 8 MR. HARLEY: The petition asks USEPA to revoke
- 9 the NOX waiver for New Source Review in Illinois.
- 10 The ten groups that I mentioned, large
- 11 policy groups, that have been active for decades in
- 12 pursuing environmental protection in Illinois, local
- 13 groups that are fighting for the future of their
- 14 communities, urge Illinois to support this petition
- 15 to end the NOX waiver for New Source Review.
- The NOX waiver no longer makes sense, yet
- 17 it is creating an artificial market for peakers in
- 18 the state. These peakers should be regarded as
- 19 major sources if they have the potential to emit 25
- 20 tons per year or more in the non-attainment area.
- 21 They should be required to demonstrate
- 22 lowest achievable emission rates. They should be
- 23 required to help us solve our NOX problem by
- 24 acquiring offsets. That's the conclusion of my

- 1 testimony.
- 2 HEARING OFFICER JACKSON: Thank you,
- 3 Mr. Harley. Are there any questions?
- 4 MR. RAO: I have a clarification.
- 5 Mr. Harley, just for the purpose of the --
- 6 to clarify the record, can you describe in what
- 7 region of the state the NOX waiver applies?
- 8 MR. HARLEY: The NOX waiver applies to the
- 9 Chicago metro area. I believe it also applies in
- 10 the East St. Louis metro area as well, although I
- 11 have no clients from the East St. Louis area.
- MR. RAO: So this 25 tons per year trigger that
- 13 you mentioned, that would apply only within the
- 14 non-attainment area?
- MR. HARLEY: Yes, that's correct.
- MR. RAO: And for the rest of the state, it's
- 17 still the 250 tons per year?
- 18 MR. HARLEY: That's right. You would reason
- 19 back from the air quality in the region which the
- 20 construction was proposed.
- 21 MR. RAO: Thank you.
- DR. FLEMAL: Mr. Harley, I gather you're aware
- 23 that the Board currently has before it a set of
- 24 proposed regulations that would address the NOX SIP

- 1 call for the state of Illinois?
- 2 MR. HARLEY: Yes, I understand that that's
- 3 underway.
- 4 DR. FLEMAL: To your understanding, would
- 5 adoption of those regulations in any way address the
- 6 concerns that you raised with us today?
- 7 MR. HARLEY: It's difficult to know. I've
- 8 spoken to several of the groups that I have
- 9 mentioned and I -- no one has seen the actual NOX --
- 10 Illinois response to the NOX SIP call.
- 11 The way that I see the NOX SIP call
- 12 functioning is that the NOX SIP call will create a
- 13 budget which will impact every one of the already
- 14 permitted peaker facilities in the non-attainment
- 15 areas. There will be a budget of NOX credit which
- 16 are allocated to different sources and the peaker
- 17 plants will be left to curtail their emissions and
- 18 divide that budget as best they can.
- 19 In the Aurora facility permit, for the
- 20 first time, I saw that the Illinois Environmental
- 21 Protection Agency had inserted cautionary language
- 22 for this permitted facility indicating that don't be
- 23 surprised when the NOX SIP call comes into effect.
- 24 So I think that the NOX SIP call will go

- 1 back and capture the facilities that are already --
- 2 that have already received permits from the Agency.
- 3 The NOX waiver addresses a somewhat
- 4 different issue. The NOX waiver addresses the
- 5 facilities that have not yet received a permit. It
- 6 addresses the issue of proliferation of new NOX
- 7 generating peaker plants. It's a different emphasis
- 8 than what I think will be addressed in the NOX SIP
- 9 call.
- 10 DR. FLEMAL: Do you anticipate that the cap
- 11 that the NOX SIP call would impose or its adoption
- 12 would impose, would, in fact, be a disincentive
- 13 towards further peaker power plant sitings in
- 14 Illinois?
- MR. HARLEY: I think it will create a more
- 16 accurate cost for the peaker facilities than
- 17 presently exists. I don't know if it would
- 18 prevent -- there's so many other factors that would
- 19 go into that.
- DR. FLEMAL: The specific language that you say
- 21 you noted in the Aurora petition, I forget just how
- 22 you characterized it, but your understanding is is
- 23 that although they may be permitted for

- 1 end up being able to make that emission because of
- 2 the position of the cap under the NOX SIP call?
- 3 MR. HARLEY: There -- that's correct, yes.
- 4 MS. MANNING: Mr. Harley, is it your
- 5 understanding that Illinois is the only state that
- 6 got a NOX waiver?
- 7 MR. HARLEY: No. Illinois is not the only
- 8 state that got a NOX waiver. At the time of the
- 9 granting of the NOX waiver, Illinois was joined with
- 10 some other states in the petition process. In
- 11 addition, there were NOX waivers granted for some
- 12 other places around the country.
- 13 My understanding is that there was a NOX
- 14 waiver granting, for example, in some -- for a
- 15 region in Texas that was also non-attainment.
- 16 Unlike the NOX waiver that was granted for Illinois
- 17 and other Midwestern states, that one had an
- 18 automatic provision built into it. When the review
- 19 was conducted, the NOX waiver was rescinded, but
- 20 there is -- there's nothing in the conditional NOX
- 21 waiver that was granted to Illinois, I believe it
- 22 was also Michigan, Indiana, Wisconsin, that would

- 23 ever create a review of that waiver apart from a
- 24 petition like the one that I've described.

- 1 MS. MANNING: So is it your understanding that
- 2 our neighboring states, Wisconsin, Indiana, Ohio,
- 3 the rest of the regional five states, that major
- 4 source review is triggered at 25 tons per year?
- 5 MR. HARLEY: I don't know the answer to that
- 6 question.
- 7 MR. MELAS: I have a question on that.
- 8 Initially, you said that when the EPA
- 9 granted the waiver it was conditional?
- MR. HARLEY: Yes.
- MR. MELAS: Even though there was no automatic
- 12 review provided?
- 13 MR. HARLEY: That's correct.
- MR. MELAS: Can or -- can the USEPA
- 15 unilaterally revoke it?
- 16 MR. HARLEY: Yes.
- 17 MR. MELAS: It doesn't have to be requested?
- 18 MR. HARLEY: It doesn't have to be requested,
- 19 but it has been requested. The section of the Clean
- 20 Air Act I referred to which is 182(f)(3) allows any
- 21 person to petition the administrator for a

- 22 determination on a NOX waiver. It's not limited to
- 23 simply requesting a NOX waiver. It's also big
- 24 enough to allow for a petition to be filed

- 1 subsequent to the granting of the NOX waiver whether
- 2 or not that's still a good idea.
- In addition, in the decision in the code
- 4 of -- in the federal register in which the USEPA
- 5 granted the NOX waiver, they said it was conditional
- 6 and they said they would reopen or consider
- 7 reopening based on the OTAG determinations, but that
- 8 has never been done.
- 9 MR. GIRARD: Mr. Harley, what process would the
- 10 USEPA follow in reviewing your petition to rescind
- 11 the NOX waiver?
- MR. HARLEY: The administrator of the USEPA has
- 13 a non-discretionary duty to complete her review and
- 14 to issue a decision on our petition within six
- 15 months from its date of submission. The green card
- 16 I received back from the USEPA indicated they
- 17 received it on August 28th.
- 18 MR. GIRARD: Thank you.
- 19 MS. McFAWN: The OTAG report that you read the
- 20 eight conclusions from, what -- could you give us a

- 21 cite to that or --
- MR. HARLEY: Yes. It's actually contained in
- 23 the petition that I provided as an exhibit for the
- 24 record. It was issued in 1997, Ozone Transport

- 1 Assessment Group, final report, 1997, November of
- 2 1997.
- 3 MS. McFAWN: Thank you. Is the entire report
- 4 attached to your petition?
- 5 MR. HARLEY: No. It's a voluminous report.
- 6 MS. McFAWN: That's what I thought.
- 7 MR. HARLEY: It's available online. That's
- 8 where I got it.
- 9 MS. McFAWN: Maybe you could tell us whether
- 10 you -- did you develop any conclusions of the
- 11 summary that you read off or was that in the final
- 12 report?
- 13 MR. HARLEY: It was contained in the executive
- 14 summary of the introduction of the report.
- MS. McFAWN: Thank you.
- 16 HEARING OFFICER JACKSON: Is that all for
- 17 Mr. Harley? Thank you very much.
- 18 MS. McFAWN: Thank you.
- 19 MR. HARLEY: Thank you.

- 20 HEARING OFFICER JACKSON: At this point, we're
- 21 going to take a short five-minute break and we will
- 22 come back and hopefully be able to conclude our
- 23 hearing for the day. Thank you. We'll go off the
- 24 record.

- 1 (Whereupon, after a short
- 2 break was had, the
- 3 following proceedings
- 4 were held accordingly.)
- 5 HEARING OFFICER JACKSON: Okay. We'll go back
- 6 on the record. We have two more speakers listed on
- 7 our list of pre-registered speakers. They are Jim
- 8 Musial and his daughter, Valerie. Are the Musial's
- 9 here? No. Okay. We have then -- I don't believe
- 10 Mark Sargis has joined us. I'll announce that once
- 11 again.
- 12 All right. We'll move on then. We have
- 13 two individuals who have signed in to speak today.
- 14 Mr. Nesvig, you are first on the list. Are you
- 15 ready to go?
- 16 MR. NESVIG: Of course.
- 17 HEARING OFFICER JACKSON: Okay. I'd just
- 18 remind you to please state your name and spell it

- 19 for the court reporter and let her know who you are
- 20 here on behalf of if you are speaking on behalf of
- 21 an organization. Thank you.
- MR. NESVIG: Thank you for allowing me to talk.
- 23 My name is Bud Nesvig, N-e-s-v-i-g. I have a
- 24 professional license as an electrical engineer. I

- 1 am quite knowledgeable about operations of electric
- 2 power plants, including peaker plants. I am
- 3 retired. I am interested in this primarily due to
- 4 the fact that I have been involved with the energy
- 5 commission for the city of Evanston for some eight
- 6 to nine years and I am not speaking on their behalf,
- 7 but I am interested primarily from the viewpoint
- 8 that it's very difficult to obtain the reason why
- 9 these peaker plants are even going in.
- 10 They are going in, as far as I know, on
- 11 Commonwealth Edison sites, which makes it -- and
- 12 these sites are all such that is quite convenient to
- 13 connect into the overall transmission system, but to
- 14 go to Commonwealth Edison to find out exactly what
- 15 their game plan is in doing this or among the people
- 16 that are involved in investing in the peaker plants,
- 17 we have, for example, a gentleman in Wilmette where

- 18 I live who spoke on behalf of the -- one of the Zion
- 19 plants and he was there on behalf of the owners of
- 20 the equipment that's going in to the site when that
- 21 is permitted.
- 22 So basically my interest, I guess you
- 23 would call it, part curiosity and part to try to
- 24 find out exactly what the blazes is going on here

- 1 because after all, I do live in the area. I live in
- 2 the area that could be very well polluted by all
- 3 these plants.
- 4 I was particularly interested this evening
- 5 with Dr. Overbye's discussion and he brought up a
- 6 subject which I hadn't -- it hadn't even occurred to
- 7 for some time and that is that there is available
- 8 electric power in Minnesota. There is obviously
- 9 additional electric power available in Canada. In
- 10 fact, some of the eastern, northern states obtain
- 11 their electric power from Canada. They buy it from
- 12 Canada.
- For over 25 years, I chaired a committee
- 14 for the Canadian Standards Association and I can
- 15 assure you that the people, or at least the
- 16 officials in Canada, are interested in doing all

- 17 kinds of things to increase the amount of commerce
- 18 that they have with the United states and it is a
- 19 little surprising to me that somebody hasn't gone to
- 20 Canada and talked to the people in Canada about the
- 21 idea that why not build a transmission line?
- 22 Afterall, for the gas pipelines, there is
- 23 no problem with the people that are selling gas, for
- 24 example, that -- they have turned out to be quite

- 1 interested in actually financing pipelines. There
- 2 will have to be more pipelines in Illinois to take
- 3 care of the peaker plants. Somebody's going to
- 4 build that. But why hasn't Commonwealth Edison, for
- 5 example, gone to the people up in Canada that are --
- 6 the utilities and see if they would like to, for
- 7 example, fund and put in a transmission line coming
- 8 to Chicago or the Chicago area? I would think about
- 9 it.
- 10 And just as a -- I was very interested in
- 11 what Dr. Overbye explained, particularly his
- 12 graphical ability to explain what is going on here
- 13 as far as power plants. I thought he did an
- 14 excellent job of it, but for lack of being able to
- 15 find out exactly what's going on as far as the

- 16 peaker plant, it's my understanding that each peaker
- 17 plant contains or will contain more than one turbine
- 18 generator. The present 20 sites may contain a total
- 19 of 400 turbine generators.
- I haven't found anybody that would dispute
- 21 that, that each plant that's permitted could have up
- 22 to five turbine generators and 400 sounds to me --
- 23 if this is all permitted, if all the 20 sites, they
- 24 could have just -- as you were at Elwood this

- 1 morning or today, you should have seen a plant that
- 2 could be operating, maybe it was operating, you saw
- 3 a plant also under construction and they have two
- 4 more permits that are pending. There could be a
- 5 total of four plants if not more, on that one site.
- 6 Each of them could hold up to five turbine
- 7 generators. That's 20 just in that one location.
- 8 Pretty good investment. There must be a reason for
- 9 wanting to put all this in.
- 10 If you go any further and take a look at
- 11 the amount of electric power that is being
- 12 generated or can be generated, again, if all these
- 13 sites are filled with turbine generators, you're
- 14 going to have the equivalent of something in the

- 15 neighborhood of 25 nuclear plants.
- 16 The state of Illinois doesn't need all
- 17 that. You would have to be looking way out in the
- 18 future to find if the state goes to that point, that
- 19 they would need the electric power that could be
- 20 produced by the equivalent of 25 nuclear plants.
- 21 That's why I have a big question. What's really
- 22 going on here?
- 23 Also, the permits are issued prior to
- 24 final design of the plant. There is some

- 1 information that is available that they haven't
- 2 decided in a particular plant whether there's going
- 3 to be three of a smaller turbine generator -- no,
- 4 five of a smaller turbine generator or three of a
- 5 much larger turbine generator. I would think all of
- 6 this before whatever is done as far as authorizing
- 7 the construction that all of this ought to be in
- 8 place and not leaving it up to some investors and
- 9 contractors to decide what's really going to go on
- 10 here.
- 11 Also, if you read the Chicago Tribune this
- 12 morning, you would find that the city of Chicago,
- 13 which probably most of you know, at least I did not

- 14 know, was under some kind of requirement requiring
- 15 the Federal Environmental Group, that they have to
- 16 be cautious about how much more pollution they can
- 17 allow in Chicago, that they're under some kind of
- 18 umbrella that they have -- that they are not
- 19 supposed to exceed. If that's true, these same
- 20 possible 400 peaker plants are all west of Chicago.
- 21 The prevailing winds are all east of Chicago. What
- 22 are they going to do with all the pollution?
- We also know that, for example, that
- 24 Southern California, Edison subsidiary, Mission

- 1 Energy bought Commonwealth Edison's coal plant and
- 2 those coal plants are continuing to operate. In
- 3 fact, Mission Energy purchased Citizens Energy
- 4 primarily to market the output of those coal plants.
- 5 So those coal plants will continue to pollute the
- 6 areas around the city of Chicago. Some of them were
- 7 in the city of Chicago, which makes me wonder as to
- 8 where is all this power going to go, plus the fact
- 9 that I do know that there is a power sharing
- 10 arrangement between Peoples Energy, which is to be
- 11 the new owner of Commonwealth Edison, and
- 12 Commonwealth Edison. Is there a relationship? I

- 13 don't know why we can't ask that kind of question
- 14 and why we can't get an answer.
- But basically, I would like to see a
- 16 moratorium on issuing permits and construction of
- 17 peaker power plants until the Illinois Environmental
- 18 Protection Agency and the Illinois Pollution Control
- 19 Board can initiate regulations that determine what
- 20 electric power generating capacity is actually
- 21 needed in Illinois for its citizens and commerce as
- 22 a whole and take suitable action and we also are
- 23 going back to this whole situation as far as
- 24 pipelines -- gas pipelines, who is regulating the

- 1 addition of gas pipelines in the state of Illinois?
- 2 I thank you.
- 3 HEARING OFFICER JACKSON: Thank you,
- 4 Mr. Nesvig. Are there any questions?
- 5 MR. GIRARD: I have a question, Mr. Nesvig.
- 6 You mentioned that you were associated with an
- 7 energy commission of Evanston.
- 8 MR. NESVIG: Yes.
- 9 MR. GIRARD: Could you tell us a little bit
- 10 about what that commission does and what its makeup
- 11 is?

- 12 MR. NESVIG: The energy commission was an
- 13 outgrowth of an earlier committee which was
- 14 primarily initiated in the city of Evanston due to
- 15 the fact that their franchise with Commonwealth
- 16 Edison was coming up for renewal and this earlier
- 17 committee -- this goes back to 1988 through 1992 --
- 18 was primarily to find an alternate for Commonwealth
- 19 Edison due to the amount of outages that the city
- 20 was experiencing and the length of the outages. It
- 21 was not uncommon to have the city of Evanston be out
- 22 for not for a few hours, but it could be for a few
- 23 days, and this kind of made the officials somewhat
- 24 nervous.

- 1 The city of Evanston renewed the
- 2 franchise, but not on a 35-year base, which is the
- 3 base for most of the communities that have signed
- 4 franchises with Commonwealth Edison, but they signed
- 5 an extension for seven years and with the extension
- 6 came the city of Evanston's formed commission. The
- 7 primary goals of the commission was to find some
- 8 kind of suitable alternate for Commonwealth Edison.
- 9 To put it kind of bluntly, there's never been a --
- in the eight years that that commission has

- 11 operated, the city of Evanston, the council and the
- 12 city staff have absolutely no interest in operating
- 13 an electric utility. Even though that could all be
- 14 operated on the basis that you could -- there's all
- 15 kinds of contractors that would like come in and
- 16 would actually operate, but there's a couple of
- 17 things that make it very difficult. One is that
- 18 what are you going to operate because if you have a
- 19 city that is experiencing, even today, a lot of
- 20 outages, you have to know that the distribution
- 21 system is such and this is basically, in my opinion,
- 22 true of Commonwealth Edison's total system, it is
- 23 basically antiquated. It has not been maintained.
- 24 This afternoon driving in here, one of the

- 1 transformers is burning at the corner of Wacker
- 2 Drive and Dearborn and it's shutting down all
- 3 things, City Hall, that ought to get their
- 4 attention, and -- but they even admitted, I went to
- 5 a meeting in Itasca back on May 18th, and the reason
- 6 I remember that is because I was very interested in
- 7 Commonwealth Edison stating at that meeting that
- 8 they had not maintained the distribution system for
- 9 20 years and would like to have everybody understand

- 10 that it would take more than two years to bring it
- 11 up-to-date.
- 12 What it really amounts to in this
- 13 long -- I'm trying to give you the city of Evanston.
- 14 You would have to replace the distribution system.
- 15 You certainly wouldn't want to buy something that is
- 16 this old and you would have to know that the
- 17 transformers in it and the cables in it have all
- 18 been overloaded. There's now studies that were done
- 19 by the ICC that prove the fact that this system has
- 20 been overloaded. If you know about electrical
- 21 installation, if you keep overloading it and it's a
- 22 progressive situation whereby the insulation
- 23 deteriorates, and by the deterioration it's going to
- 24 cause -- you're going to have an easier time on

- 1 additional overloading. What you're going to have
- 2 is more outages, more failures.
- What I'm really telling you is the energy
- 4 commission has not been successful and it is up at
- 5 the present time in the city of Evanston as to
- 6 whether it will be continued and where they're going
- 7 to go from here. That's the long-winded answer to
- 8 your question. Sorry about that.

- 9 MR. GIRARD: No. Well, you've answered my next
- 10 three questions also. So thank you.
- 11 HEARING OFFICER JACKSON: Anything else for
- 12 Mr. Nesvig?
- MR. NESVIG: Thank you.
- 14 HEARING OFFICER JACKSON: Thank you.
- 15 Mike Shay is our next speaker. My list
- 16 indicates that you're here on behalf of Will County
- 17 Planning.
- 18 MR. SHAY: That's correct. My name is Mike
- 19 Shay. I'm the senior planner responsible for
- 20 long-range planning for Will County and we have been
- 21 dealing with these facilities a lot.
- Mr. Overbye's presentation was
- 23 particularly interesting. In hearing that these
- 24 facilities can be located anywhere within the grid

- 1 network, the facilities -- we wondered why these
- 2 facilities were being located in this region also so
- 3 we called these -- called various locators of these
- 4 facilities and said, why? They gave us a very
- 5 simple answer.
- 6 They said because Chicago is a place where
- 7 a lot of transmission lines and a lot of natural gas

- 8 lines cross and they're also very close to a large
- 9 market for their power. So we continued to notice,
- 10 like, a trend towards locating them in Will County.
- 11 When we found out that wasn't necessarily a trend
- 12 towards Will County, but more towards the Chicago
- 13 area, and the leadership of Will County became very
- 14 concerned about equitable distribution and we were
- 15 not convinced that these facilities are being
- 16 distributed equitably throughout the grid.
- 17 Sorry. It's been a long hearing. To --
- 18 as an interim measure to help control these uses
- 19 within our jurisdiction, which is the unincorporated
- 20 area of Will County, which accounts for a vast
- 21 majority of the land area and roughly 15 to 20
- 22 percent of the population, we did put in place
- 23 restrictions, land use restrictions on peaker
- 24 plants.

- 1 We restricted them to industrial in one of
- 2 our agriculture districts and we restricted them to
- 3 a quarter-mile radius. They have to be a quarter
- 4 mile away from any residential structure, use or
- 5 district. It's a fairly restrictive standard. But
- 6 when we took this to the county board and to the

- 7 land use and zoning committee, and the planning and
- 8 zoning commission, they said, are you sure that's
- 9 good enough? They were very concerned about these
- 10 uses.
- 11 So we continued to do research and we
- 12 found some things that alarmed us a lot. It's a
- 13 very significant amount of leverage. The largest
- 14 thing that we found that concerned us was that Will
- 15 County's aquifer reserve water is about 66 million
- 16 gallons a day. That's how much we have -- it's
- 17 currently recharging -- that we could use for water
- 18 supply. We contacted several facilities and went on
- 19 several industry websites and they said five to 12
- 20 million gallons a day per facility for a combined
- 21 cycle facility and roughly a million gallons a day
- 22 for a simple cycle facility.
- 23 So we contacted some of them that actually
- 24 started operation in Will County, including the one

- 1 that you visited today. We arranged tours. On our
- 2 tour, we found out they're actually planning -- or
- 3 they were planning for an expansion and this comes
- 4 to a key point that I'd like to discuss today.
- 5 There was discussion earlier about separating simple

- 6 and combined cycle plants. We do not think you can
- 7 separate those two facilities.
- 8 Simple cycle facilities are designed and
- 9 physically organized to be converted to combined
- 10 cycle facilities down the road and that plans that
- 11 we received as we reviewed these petitions
- 12 explicitly and clearly state that; that they are
- 13 designed to be converted or added onto at a later
- 14 date. So we do not want to see those two issues
- 15 separated at all.
- So they -- we get into more discussions
- 17 with them and they say 16 million gallons a day for
- 18 one of the facilities which we visited, which means
- 19 that four such facilities of which there are already
- 20 that many could eat up the entire reserve water
- 21 capacity for Will County. We are not likely to get
- 22 more lake water. River water is another issue
- 23 altogether regarding quality of our water. So when
- 24 you add that to the fact that we are the fastest

- 1 growing -- numerically growing county in Illinois
- 2 and also the fastest in the sunbelt, we see a
- 3 problem for a collision between growth and these
- 4 facilities alone for that resource.

- 5 We are also concerned -- when we continue
- 6 to do our research, we said, that's a lot of water
- 7 to draw from one facility. How do they get that?
- 8 Well, they drop wells in the aquifer obviously and
- 9 they pull it up at such a rate that it creates a
- 10 drawdown. It creates a reverse cone or a cone of
- 11 water supply and the radius on that for a facility
- 12 of the magnitude that we were discussing is six
- 13 miles drawdown, 300 feet drawdown at the point of
- 14 the well and still 25 to 50 feet of the six-mile
- 15 radius.
- 16 Will County has thousands and thousands of
- 17 wells; residential, industrial or group wells.
- 18 We're concerned about well failure because we
- 19 continue to place these facilities over time and if
- 20 they're to be converted to combined use facilities.
- 21 We're also seriously concerned about the
- 22 Clean Air Act in Illinois and that's been widely
- 23 discussed today from an environmental standpoint. I
- 24 would also like to point out that that also can

- 1 affect transportation funding at a later date.
- 2 So we're going to experience growth and
- 3 not -- then we're not going to be able to fill

- 4 facilities to deal with that growth after it's
- 5 already in place. We also face the additional
- 6 problem that we're only in the unincorporated area.
- 7 So if we regulate these facilities restrictively,
- 8 they will do what many of them have already done and
- 9 go to municipalities that feel that they have
- 10 something to gain by the placement of these
- 11 facilities regardless of what they are and that is
- 12 why we feel action on part of the state or the
- 13 federal government is required so that we can't
- 14 simply hop jurisdictions or play an annexation war
- 15 or play two municipalities off of each other for a
- 16 lower level of regulation, which is exactly what is
- 17 happening in placement of these facilities.
- 18 I think the Bartlett facility demonstrates
- 19 that. If you investigate the political situation,
- 20 you're going to restrict us, we'll go across the
- 21 street to the next people power.
- 22 With that, we also -- I'd also like to
- 23 comment very briefly on the issue of taxation. The
- 24 lawsuit that resulted in the Illinois Supreme Court

- 1 decision that stated generators were personal
- 2 property, that lawsuit started in Will County. I

- 3 think you will find that the supervisor of the
- 4 assessment is a guy named Richard Loding (phonetic).
- 5 He is very familiar with the precise nature of the
- 6 assessments for those facilities.
- 7 With that, I will conclude with my
- 8 presentation in the interest of brevity.
- 9 MS. KEZELIS: I have a question. I, too, hope
- 10 to be brief, Mr. Shay.
- 11 The status of the suggestions that you and
- 12 the planners for Will County propose to your board,
- 13 what is the current status?
- MR. SHAY: Well, we have a first set of
- 15 regulations in place. We're currently discussing
- 16 the second set of -- we're researching and
- 17 discussing the second set. If I had to provide a
- 18 guess, which bureaucrats despise doing, but I will
- 19 do nonetheless, I would suspect that they will
- 20 prohibit the use of aquifer water for electric
- 21 generation.
- MS. KEZELIS: When do you expect that given
- 23 bureaucracy moves slowly? How long do you think it
- 24 would take?

- 2 about these facilities was great and the entire
- 3 process for the first round of regulation took just
- 4 under a month. Now, when we would initiate that
- 5 next round, I'm not certain because a date has not
- 6 been set. So it could be a couple of months, but we
- 7 are very concerned about the facilities themselves
- 8 and we're very concerned about jurisdiction about
- 9 that.
- 10 MS. KEZELIS: Do you know the name of the
- 11 particular aquifer to which you've been referring?
- 12 MR. SHAY: There are -- if I remember
- 13 correctly, there are three separate aguifers in Will
- 14 County. There's the Elmhurst deep aguifer and I
- 15 cannot remember the names of the other two. There
- 16 are two other aquifers here and sure enough, through
- 17 chance, a number of pipelines, transmission
- 18 facilities, happen to intersect over aquifers.
- 19 MS. KEZELIS: How many peakers are currently in
- 20 Will County in the unincorporated area, if you know?
- 21 MR. SHAY: In the unincorporated area?
- MS. KEZELIS: Uh-huh.
- MR. SHAY: There are none left. They have all
- 24 been annexed. One of them actually --

- 1 MS. KEZELIS: How have they been annexed?
- 2 MR. SHAY: One of them went entirely through
- 3 the approval process for Will County and then was
- 4 annexed. A couple of others started the process
- 5 with Will County and were -- well, one voluntarily
- 6 annexed and the other one, I don't like to use the
- 7 word coercion, but was coerced to become annexed and
- 8 so they are within municipalities.
- 9 There is another one that is partially
- 10 located in Will County. To my understanding, there
- 11 are four that are within Will County currently and a
- 12 number of other applications we've been notified of.
- 13 MS. MANNING: What are those municipalities
- 14 that are located -- obviously, the village of
- 15 Elwood, is one?
- 16 MR. SHAY: Elwood, you visited, Manhattan has
- 17 one. There is Channahon and I can't remember the
- 18 fourth one. I think it's in eastern Will County.
- 19 DR. FLEMAL: We previously heard that some of
- 20 the collar counties are moving towards adopting
- 21 ordinances that establish a hearing process for
- 22 siting.
- 23 Is Will County doing anything along those
- 24 lines?

1 MR. SHAY: Anything that requires approval of

- 2 any sort? When I say any sort, it requires a
- 3 conditional use approval or a reason. In Will
- 4 County's case, we chose the conditional use
- 5 approval. It has to go through a series of
- 6 hearings. Our internal process is you have to go to
- 7 the planning and zoning commission, which is a group
- 8 of interested citizens who make recommendations to
- 9 the Will County Board on planning decisions on --
- 10 yes, our planning decisions. That is kind of
- 11 intercepted by a committee of the Will County Board
- 12 called the land use and zoning committee, which is a
- group of seven of the county board members and they
- 14 then review those applications and that's the ending
- 15 point for smaller ones. These would then actually
- 16 go on to the Will County Board as a whole for its
- 17 decision-making.
- Now, let me add something on top of that.
- 19 If you're within the planning area of jurisdiction
- 20 or if you're in a township that has formed a
- 21 planning commission, you have to go to theirs first.
- 22 So in theory, you could have as many as
- 23 five public hearings before you would be approved
- 24 for one of these facilities. That means a process

1 of maybe five or six months to get one approved.

- 2 It's a fairly extensive -- it is a very extensive
- 3 process.
- DR. FLEMAL: There has been no attempt, though,
- 5 I gather at the county level to establish a
- 6 particular siting procedure that would address some
- 7 of the special aspects of peakers?
- 8 MR. SHAY: By choosing districts and radius
- 9 condition, those are the deciding factors. To place
- 10 one outside -- to get a reason to place one outside
- of those districts would probably be very difficult.
- 12 So you need to be placed within one of those
- 13 districts and then go through this process.
- 14 That process has set criteria for it to
- 15 gain a conditional use approval. So there are
- 16 criteria in place as a matter of course and then
- 17 there are the additional criteria, the district and
- 18 radius. We're also concerned about hours of
- 19 operation, but that's --
- 20 MS. MANNING: The radius, is that what you were
- 21 talking about before when you were saying we
- 22 recommend -- one of the recommending -- things that
- 23 you were recommending was a setback and I think you
- 24 talked about a quarter of a mile?

1 MR. SHAY: It's not actually a setback. We

- 2 require you to have a distance between a generating
- 3 structure --
- 4 MS. MANNING: From the -- is it structure to
- 5 structure?
- 6 MR. SHAY: It's from the structure. It was
- 7 intended so that if a peaker facility wanted to
- 8 ameliorate themselves from the surrounding area
- 9 because Will County is largely rural, they could
- 10 actually purchase the land that's surrounding them
- 11 and that would move any potential residence or
- 12 conflicts under their umbrella of control.
- So we gave them the option to purchase
- 14 that land and basically eliminate the problems
- 15 presented by the radius. So we were looking for
- 16 ways to make it so they could actually build a
- 17 facility, but do it in sort of a responsible way.
- MS. MANNING: But it was still just a quarter
- of a mile from structure to structure?
- 20 MR. SHAY: A quarter of a mile from a
- 21 structure, district or use. When I say use, you
- 22 guys aren't planners, so let me explain use quickly.
- 23 Use doesn't necessarily mean a house or an
- 24 apartment. Schools are considered a residential

- 1 use. Churches are considered a residential use. So
- 2 we really tried to create a situation where they
- 3 were not working in organized areas and it's also
- 4 our hope that if they become a combined cycle that
- 5 will also help ameliorate some of the drawdown from
- 6 their wells.
- 7 MS. McFAWN: Is the only industry that you're
- 8 concerned about the drawdown well or is that general
- 9 a concern?
- 10 MR. SHAY: It's the only industry we know of
- 11 that draws that amount that quickly. We can't find
- 12 another that draws from the aquifer at that rate,
- 13 but we're unaware of one that draws at that rate.
- 14 Let me illustrate this real quickly. When
- 15 you're talking about 16 million gallons a day, that
- 16 means that three of those facilities could put a
- 17 pipe on the end of the Fox River in St. Charles and
- 18 the river would end while it was in operation.
- 19 MS. MANNING: Where did you get those figures
- 20 in terms of the drawdown effect and how much water
- 21 is actually being used by these facilities?
- MR. SHAY: We got from the -- well, we got the
- 23 information on flow and amount of the aquifers and
- 24 reserve capacity from the Illinois Water Survey.

- 1 They regularly publish those statistics and we
- 2 acquired them from them and then we acquired numbers
- 3 on the use actually directly from the industry
- 4 itself.
- 5 The engineers who built the Elwood
- 6 plant, we -- our land use and zoning committee and
- 7 planning and zoning committee visited those
- 8 facilities. In those discussions, we asked them
- 9 about water use and they gave us very frank answers
- 10 on that. The number that they gave us came out to
- 11 16 million gallons a day and we confirmed with them
- 12 that that was an accurate assessment. So we're
- 13 fairly confident of those numbers.
- MS. McFAWN: How did you confirm that, in
- 15 writing, by any chance?
- 16 MR. SHAY: I'm not sure. I can find out.
- 17 MS. McFAWN: Well, I was just thinking if it
- 18 wasn't in letter form, it would be -- we'd like to
- 19 see such a letter, if possible.
- 20 MR. SHAY: Okay. And how would I get that to
- 21 you? Is there someone I could talk to about
- 22 contacting you?
- MR. MELAS: Yes.
- MS. KEZELIS: Mr. Shay, what's your

- 1 understanding about the Elwood facility; single or
- 2 combined?
- 3 MR. SHAY: My understanding is that it is
- 4 currently a single cycle plant that the two
- 5 additional -- the Elwood two and Elwood three will
- 6 also be simple cycle. All three of those phases,
- 7 though, are designed to be converted to combined
- 8 cycle should they wish to do so.
- 9 MS. KEZELIS: So the 16 million gallons per
- 10 day --
- MR. SHAY: Would be if they became a combined
- 12 cycle. They are not currently. They do have a
- 13 well, but it's comparably small.
- 14 MS. MANNING: Pardon me. What did you just
- 15 say? I missed that part.
- MR. SHAY: Oh, they do have a well operating
- 17 there at both facilities that we visited, but
- 18 they're drawing a very comparative small amount of
- 19 water.
- 20 MS. MANNING: Right now? But your concern is
- 21 that when and if they become cogeneration
- 22 facilities?
- 23 MR. SHAY: That is correct.

- 1 ordinance that prohibits the use of aquifer water or
- 2 electrical generating facilities, would that also
- 3 apply to a facility that tried to site itself inside
- 4 a municipality in Will County?
- 5 MR. SHAY: No. That's why we're concerned
- 6 about jurisdiction hopping, but it would also cover
- 7 a number of the intersections of pipelines and
- 8 transmission facilities.
- 9 MR. GIRARD: Thank you.
- 10 MS. KEZELIS: Is there an association of county
- 11 planners in Illinois?
- 12 MR. SHAY: There's an informal group of county
- 13 plan directors. I know of no formal organization.
- 14 I know there is a regional language --
- 15 MS. KEZELIS: Yes.
- 16 MR. SHAY: -- which you're part of, but they
- 17 don't appear in any regulatory authority -- well,
- 18 with one exception, which doesn't matter in this
- 19 case.
- 20 MS. KEZELIS: I was actually thinking more in
- 21 terms of sharing information.
- MR. SHAY: Yes. We've been -- McHenry County

- 23 has been faced with several very difficult decisions
- 24 as perhaps have some others. McHenry was probably

- 1 the first that encountered these. In their
- 2 experiences and research really kind of got our
- 3 effort rolling and so we're not standing alone, but
- 4 we do all face the issue of municipalities.
- 5 MS. MANNING: Would you just explain for the
- 6 record a little more in detail your role with the
- 7 county?
- 8 MR. SHAY: Yes.
- 9 MS. MANNING: Do you have a planning
- 10 department? Are you the head of that planning
- 11 department? Are you a staff person for the --
- MR. SHAY: At the county, there are several
- 13 departments. One of these is the land use
- 14 department. The land use department has five
- 15 divisions. It's got building, planning, zoning,
- 16 waste management and GIS -- engineering and so I
- 17 $\,$ am -- there is a planning director and I am
- 18 underneath the planning director and I am
- 19 responsible for a long range of efforts for Will
- 20 County.
- 21 MR. FLEMAL: One of the things that this board

- 22 may see it necessary to do ultimately in our
- 23 decision here is to address the issue of how much
- 24 local and how much regional or state level oversight

- 1 there ought to be in the siting of these facilities.
- We've heard quite a range of perspectives
- 3 from it should be entirely in the hands of the
- 4 locals with the facility to what I think I heard you
- 5 say that there should be a strong top-down oversight
- 6 on the plants.
- 7 First off, have I characterized where
- 8 you're coming from correctly?
- 9 MR. SHAY: Okay. I would like a strong state
- 10 or national presence on the issue of drawing from
- 11 wells.
- MR. FLEMAL: Solely on that issue?
- 13 MR. SHAY: And issues that affect
- 14 cross-jurisdictional -- an aquifer doesn't make a
- 15 jurisdictional boundary. It could go across several
- 16 counties and several municipalities, et cetera.
- 17 Well, local authorities, because we are competing
- 18 for economical development efforts and because of
- 19 the nature of the politics between them, are often
- 20 played against each other by the private industry.

- 21 In situations like that, that should
- 22 become more the responsibility of the state. The
- 23 state should be involving itself in those
- 24 cross-jurisdictional issues, as it often does, with

- 1 issues likes tax, with NIPC itself, the Department
- 2 of Transportation, et cetera.
- 3 DR. FLEMAL: What would you reserve to the
- 4 local, be it municipal or county level local
- 5 government, what part of the decision-making
- 6 process?
- 7 MR. SHAY: I would reserve for them the site
- 8 design, the general location, what zoning districts
- 9 it's allowed in, that sort of thing. I would treat
- 10 it like a normal land use in the sense of local
- 11 authority. When you place how far it's going to be
- 12 from a property line, how far does it have to be
- 13 from other uses, how should the site look and
- 14 appear? Is that system and county going to say is
- 15 construction -- are construction vehicles from that
- 16 city road appropriate or safe? Keeping in the
- 17 standard land use format, but I think the station
- 18 adopts things that we cannot exercise full control
- 19 over. Right now, most immediately apparent one of

- 20 those is water use.
- 21 DR. FLEMAL: How about in the general arena of
- 22 environmental impact? What sorts of environmental
- 23 impact decisions should be divided upon between
- 24 local and state government from your perspective?

- 1 MR. SHAY: I'm not sure I am prepared to answer
- 2 that.
- 3 DR. FLEMAL: I know it's a tough area.
- 4 MR. SHAY: It's a very complex issue.
- 5 DR. FLEMAL: Maybe one of the toughest kinds of
- 6 aspects of this whole issue the Board will have to
- 7 address.
- 8 MR. SHAY: You know, the state doesn't have a
- 9 role in that and it doesn't have a role in that
- 10 because it's very similar to water use. Pollution
- 11 and environment issues do not obey jurisdictional
- 12 boundaries. So I guess I'm asking the state to take
- 13 additional authority in cross-jurisdictional issues,
- 14 which is what they have shown a pattern of doing
- 15 because it's efficient for the community as a whole
- 16 to do so.
- MS. McFAWN: Ms. Zingle --
- 18 MR. SHAY: There is --

- 19 MS. McFAWN: Let me just follow with one
- 20 question. Ms. Zingle had brought up that under the
- 21 incinerator law that other communities can have
- 22 input into a siting decision. For instance, that
- 23 might be under consideration by Will County.
- 24 What would you think about that type of

- 1 sharing?
- 2 MR. SHAY: I am not totally familiar with
- 3 incinerators, but I can tell you how land use goes
- 4 and that is smaller jurisdictions have the
- 5 authority -- or not the authority, but have a clear
- 6 and legal involvement in the decision-making of
- 7 larger jurisdictions, but it does not go the other
- 8 way.
- 9 To create an example for that, a
- 10 municipality can do as it pleases. When the county
- 11 hears the petition near that municipality, then the
- 12 municipality has a direct and active role in
- 13 decision-making. In fact, municipality or a
- 14 township can legally challenge certain decisions
- 15 made by the county -- the county and planning zoning
- 16 commission and Will County Board and force a super
- 17 majority vote of the County Board to affect a

- 18 decision.
- 19 So smaller localities could have a large
- 20 impact on county-wide decision-making, but it's only
- 21 one way. Obviously, we would prefer to be -- have
- 22 it both ways, but that's up to the legislatures, I
- 23 quess.
- Dr. FLEMAL: Are you familiar with the SB 172

- 1 landfill siting process? I know Will County has had
- 2 some exposure to that. Does this come from your --
- 3 MR. SHAY: I'm afraid I don't. It sounds like
- 4 an aircraft name to me.
- 5 DR. FLEMAL: The question I was prepared to ask
- 6 is if it required an answer of you since it's not
- 7 within your area of expertise is, whether the kinds
- 8 of criteria that are set up under that SB 172
- 9 process for the siting of pollution control
- 10 facilities may be landfills should serve as any kind
- 11 of model for a state-wide review process of peaker
- 12 plants as well?
- 13 MR. SHAY: I'm simply unfamiliar with it.
- DR. FLEMAL: I put that on the record perhaps
- 15 maybe others around who --
- MR. SHAY: We'll be looking.

- MS. MANNING: Also for purposes of the record,
- 18 when people have referred to the incinerator law, I
- 19 believe that that really is kind of folded into what
- 20 we generally refer to as the regional pollution
- 21 control facility process. Perhaps the criteria is
- 22 different from incinerators than it is for
- 23 landfills, but I think when we review decisions of
- 24 government, local government, even on some

- 1 incinerators, for example, we did that through the
- 2 same process that we would do the landfill siting
- 3 process. Just so there's no confusion in the
- 4 record, I believe that is the same process, although
- 5 the criteria may be different whether the local
- 6 government is looking at an incinerator or whether
- 7 they're looking at a landfill. If there's any
- 8 further clarification, we might need to that at our
- 9 next opportunity.
- 10 MS. KEZELIS: Mr. Shay, the water use, as you
- 11 know, is not something that we are to address. The
- 12 Governor has appointed the water commission to
- 13 address water use for the state. Nonetheless, your
- 14 reference to the water use a few moments ago, I
- 15 needed clarification of.

- 16 You indicated that approximately 16
- 17 million gallons per day would be used by a combined
- 18 peaker facility and that the drawdown for such a
- 19 facility would impact roughly a six-mile radius, is
- 20 that correct?
- 21 MR. SHAY: That's correct, according to the
- 22 information we have from the Illinois Water Survey.
- 23 MS. KEZELIS: So you received that information
- 24 from the Water Survey itself?

- 1 MR. SHAY: Yes. We got it off their website.
- 2 They have a very graphical explanation.
- 3 MS. KEZELIS: I'm familiar with their website.
- 4 I wasn't sure what the source was for your statement
- 5 and that's what I was trying to get to.
- 6 MR. SHAY: It's Dr. Wood Stanley's presentation
- 7 on their website.
- 8 MS. KEZELIS: Okay. Thanks.
- 9 MS. MANNING: For purposes of the record, he
- 10 gave that presentation to the first meeting of the
- 11 Water Research Advisory Committee, which I sit on
- 12 behalf of the Board. It is cochaired by director
- 13 Tom Skinner of the IEPA, director Brent Manning of
- 14 the Department of Natural Resources, which the

- 15 surveys are housed in the Department of Natural
- 16 Resources. So that Dr. Wood Stanley gave us that
- 17 presentation.
- 18 MR. SHAY: Just -- he recently updated that
- 19 presentation on his website as well. He expanded it
- 20 a little bit if you want to take that into
- 21 consideration when reviewing it.
- MS. McFAWN: You said at the outset that you
- 23 had a concern about equitable distribution. I
- 24 assume that was distribution of the electricity for

- 1 power, is that right?
- 2 MR. SHAY: No.
- 3 MS. McFAWN: No?
- 4 MR. SHAY: The equitable distribution of these
- 5 facilities are over the region. We're concerned
- 6 that Will County has a lower incup level than any of
- 7 the surrounding counties and it has a number of
- 8 communities which have been economically troubled
- 9 and we're concerned about the equitable locations.
- 10 We're concerned that we would become a concentration
- 11 by these facilities over time.
- MS. McFAWN: Is that concern related to the use
- 13 of water and air? I mean, you said you are

- 14 concerned --
- 15 MR. SHAY: Oh, it's water. It's air. It's
- 16 utilitied industrial land. It's the use of our
- 17 infrastructure and our extended infrastructure in
- 18 recent years and resources in form of water and air.
- 19 We're also concerned -- you know, the county or some
- 20 municipality within our county constructs an
- 21 industrial park and we have the investment in that
- 22 land for employment and tax revenue and we will not
- 23 always be able to get that return because of the way
- 24 that these facilities are assessed. If they wish to

- l locate there so that they cannot only sell to the
- 2 wholesale market, they can sell on the retail market
- 3 directly to the adjacent facility.
- 4 MS. MANNING: To your knowledge, does Will
- 5 County already possess a sort of higher than average
- 6 amount of land that's zoned industrial number one
- 7 and number two land that we might --
- 8 MR. SHAY: I have not studied that. I have not
- 9 made a comparison between us and other counties yet.
- 10 We are going to be actively pursuing that because
- 11 we're updating a new process. We just initiated a
- 12 process Monday night of updating our comprehensive

- 13 plans. So we'll be doing that soon. We don't
- 14 currently have an assessment.
- 15 HEARING OFFICER JACKSON: Anything else for
- 16 Mr. Shay? Thank you very much, sir.
- 17 MR. SHAY: Thank you.
- 18 HEARING OFFICER JACKSON: At this point, that
- 19 concludes all of the speakers who have either
- 20 preregistered or signed it at the door to present
- 21 testimony to the Board this evening.
- 22 Are there any persons in the audience who
- 23 wish to speak to the Board at this time? Just once
- 24 again, I'll ask for Jim Musial or his daughter,

- 1 Valerie. Not present?
- Okay. As a brief housekeeping matter, I
- 3 neglected to accept Susan Zingle's testimony in as
- 4 an exhibit in this matter. I believe she had
- 5 presented three exhibits at our hearing last week in
- 6 Naperville. So this one will be marked as Zingle
- 7 Exhibit 4.
- 8 (Document marked as
- 9 Zingle Exhibit No. 4
- for identification, 9/14/00.)
- MS. MANNING: Before we leave the record as

- 12 well, since it's served us well, I think, to sort of
- 13 ask for information, one of the persons who
- 14 testified in our Naperville hearing, I think her
- 15 name was Connie Schmidt, I say that to Ms. Zingle
- 16 and whoever else might want to respond to this
- 17 particular issue, raised the issue of vibrations,
- 18 the potential in the concern of vibrations and
- 19 specifically spoke to the proximity for one of the
- 20 peaker facilities as being planned.
- 21 If you have any information about that
- 22 particular subject or if anyone else does, the Board
- 23 would certainly appreciate hearing whatever
- 24 information there is. Certainly, it's not geared

- 1 towards one of the specific questions, but if there
- 2 is an issue out there regarding that particular
- 3 concern, we have no information in the record about
- 4 it other than her concern. Thank you.
- 5 HEARING OFFICER JACKSON: Okay. The transcript
- 6 from today's proceeding, as I mentioned, at the
- 7 beginning of the hearing will be transcribed and
- 8 available within three to five business days. As
- 9 soon as we receive it, we will place it on our
- 10 website.

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11
               The next hearing in these sets of inquiry
12
     hearings is scheduled for next Thursday at 3:00 p.m.
     in Grayslake up in Lake County. We invite you all
13
     to attend. At this point, we are adjourned and we
14
15
     will see you next week. Good night.
16
                      (End of Proceedings.)
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STATE OF ILLINOIS)

SS.

COUNTY OF C O O K)

I, TERRY A. STRONER, CSR, do

hereby state that I am a court reporter doing

business in the City of Chicago, County of Cook, and

State of Illinois; that I reported by means of

10	machine shorthand the proceedings held in the
11	foregoing cause, and that the foregoing is a true
12	and correct transcript of my shorthand notes so
13	taken as aforesaid.
14	
15	
16	
17	Terry A. Stroner, CSR
18	Notary Public, Cook County, Illinois
19	
20	SUBSCRIBED AND SWORN TO before me this day
21	of, A.D., 2000.
22	
23	Notary Public
24	