



## Resources

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November 2, 2000

Illinois Pollution Control Board  
Ms. Dorothy Gunn  
Clerk  
100 West Randolph Street, Suite 11-500  
Chicago, IL 60601

RE: Written Comments to IPCB docket number R01-10.

Dear Ms Gunn:

Enclosed is Ameren Corporation's written comments in the above referenced docket.

Thank you for your attention to this matter.

Very truly yours,

Udo A. Heinze  
Manager, Strategic Projects  
AmerenEnergy Resources Company

Enclosure

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CLERK'S OFFICE

NOV 06 2000

STATE OF ILLINOIS  
Pollution Control Board

*R01-10*  
*P.e.#107*

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ILLINOIS POLLUTION CONTROL BOARD

**RECEIVED**  
CLERK'S OFFICE

NOV 06 2000

STATE OF ILLINOIS  
*Pollution Control Board*

IN THE MATTER OF )  
 )  
NATURAL GAS-FIRED, PEAK LOAD ) R01-10  
ELECTRICAL POWER GENERATING )  
FACILITIES (PEAKER PLANTS) )

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**WRITTEN COMMENTS of UDO A. HEINZE**

**ON BEHALF of AMEREN CORPORATION**

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My name is Udo A. Heinze. I am manager of Strategic Projects for AmerenEnergy Resources Company's development group. AmerenEnergy Resources Company was formed in 2000, is part of the Ameren family of companies and is a holding company. One of its subsidiaries is AmerenEnergy Generating Company, which assumed the electric generating assets of AmerenCIPS. AmerenEnergy Resource Company's development group has responsibility for developing a number of generating facilities within the state of Illinois. Upon commercialization, these facilities will become part of AmerenEnergy Generating Company.

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In my current position I am directly involved in the development of generating projects for AmerenEnergy Resources. I have been employed by the Ameren companies (and one of its predecessor companies, Union Electric) for over 28 years in a variety of positions. I hold a bachelor's in Mechanical Engineering and a Master of Business Administration degrees and am a registered professional engineer in the State of Missouri. I am a resident of Monroe County, IL.

1 The purpose of my testimony is to address various issues raised during the Illinois  
2 Pollution Control Board hearings on “peaker plants”. I have personally attended several  
3 sessions of these hearings and have studied the transcripts. I think the board should be  
4 commended on its very thorough process of seeking diversified input to the peaker plant  
5 issues raised by Governor Ryan and the subject of these hearings. As is evident from the  
6 record, everyone who wanted to present his or her views was given ample opportunity to  
7 do so.

8

9 My comments will focus on the following areas:

- 10 1. Emissions
- 11 2. Siting
- 12 3. Water
- 13 4. Hazardous materials on plant sites
- 14 5. Property Tax issues
- 15 6. New Rule Applicability
- 16 7. The Governor’s Questions

17

18 **Emissions:**

19 Much of the testimony in these hearings centered on the emissions emanating from a  
20 “peaker facility”; primarily NOx and its impact on ozone formation. NOx emissions will  
21 be strictly controlled and capped under a new “NOx SIP Call” regulation currently being  
22 reviewed by the Illinois Pollution Control Board (IPCB). This new regulation will assure  
23 that ambient air quality standards for ozone will be met throughout the state, including

1 the Chicago area. Since NOx emissions will be “capped” in the State, all existing and  
2 new peaker plants within the State will have to keep their emissions under the cap.

3

4 SO2 emissions in the State are already capped under the existing Federal Acid Rain  
5 program. In addition, these sources are subject to existing State and Federal emission  
6 standards. Thus, there is no need for additional requirements to control these air  
7 emissions from peaker units.

8

9 Most of the new peaker plants in the State are simple cycle gas-fired combustion turbines  
10 that must meet annual emission limits. As a matter of economics, the owners of these  
11 facilities are striving to achieve the lowest possible NOx emission rates to allow the  
12 facility to operate a sufficient number of hours to earn an adequate return on investment.  
13 The lower the actual emission rates, the more likely the investment will be worthwhile.  
14 This is a marketplace mechanism that encourages the use of cost effective control  
15 technology.

16

17 As part of the air permit application process, air quality modeling is conducted to  
18 demonstrate that the new facility will not have a significant impact on air quality. A  
19 significant impact is an extremely low threshold, far below any threat to public health or  
20 the environment. If a new facility has a significant impact on air quality, it must apply  
21 additional pollution control equipment or the permit is rejected.

22

1 There was some discussion at the hearings regarding the need to have new peaker plants  
2 apply Best Available Control Technology (BACT) or Lowest Achievable Emission Rate  
3 (LAER) controls. For sources that exceed the major source threshold, such as base load  
4 plants or intermediate load plants, these technologies are already required as a matter of  
5 law. For simple-cycle gas turbines, the installation of add-on BACT or LAER pollution  
6 control equipment is simply not practical from a technical viewpoint, or it is extremely  
7 expensive. If such add-on controls were to be required by the IPCB, it might have a (1)  
8 negative effect on air quality and will have a (2) negative effect on meeting the electrical  
9 generation needs within the State. This is because the added expense to units, which  
10 were designed to operate a maximum of only 10-15 percent of the time, would make  
11 these units uneconomical to build and operate. The probable market reaction would be to  
12 either not build these small simple-cycle peaker facilities and risk power shortages at  
13 critical times, or to build larger units, where such additional expense might be cost-  
14 justified. However, the effect on air quality of these larger units would be worse (greater  
15 overall emissions), and the cost of electricity would be unnecessarily higher. Thus it  
16 could discourage development of an already very clean source of new power within the  
17 State and encourage the development of higher emitting generating facilities, or worse  
18 yet, result in insufficient generating capacity, power market price spikes or shortages of  
19 power.

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21 There were also some concerns raised in the hearings regarding emissions during startup  
22 of these peaker plants. While mass emissions during startup conditions might be slightly  
23 higher than normal operations, they are still extremely low and of short duration. A

1 simple cycle gas turbine usually takes from 10 to 30 minutes to reach normal operating  
2 conditions. The Illinois Environmental Protection Agency (IEPA) has already instituted a  
3 process in the permitting of new peaker plants to account for the slightly higher mass  
4 emissions that may occur during startup conditions. Thus, there is no need, nor any  
5 practical benefit, to establish more rigid requirements for startup conditions for peaker  
6 plants.

7

8 It has been well documented in these proceedings that the air permitting process required  
9 by the IEPA includes significant review of a proposed facility including the modeling of  
10 air quality emissions. The purpose of this review and modeling is to determine the level  
11 of emissions expected from the proposed facility and its impact on the area in which it  
12 will be located. Based on the level of emissions and modeling results, the IEPA makes a  
13 determination of whether the proposed facility should be considered a significant new  
14 source or not. The IEPA determination establishes the criteria under which it will issue  
15 an air construction permit for the proposed installation.

16

17 We believe that the combination of current procedures in place and marketplace  
18 mechanisms appropriately balance the environmental requirements and adequacy of the  
19 supply of electricity to meet requirements at the most critical times of the year. Further,  
20 we believe that the requirement that significant modification requires an existing facility  
21 obtain a new environmental review by IEPA prior to implementing such modifications is  
22 just and proper. It is the IEPA's responsibility to insure those projects meet State and

1 Federal environmental regulations. It is the applicant's responsibility to insure that they  
2 operate their facilities within the terms of their permits.

3

4 **Siting:**

5 Prior to electric deregulation in Illinois, authority for the siting of generating facilities  
6 resided with the Illinois Commerce Commission. Part of that authority included not only  
7 authorizing the construction of the proposed generating facility at a specific site but also  
8 conveying to the developer the right of eminent domain in obtaining the necessary  
9 property for such development. Such authority superceded any authority at the local  
10 level. This existed to assure the right type of facility was built at the optimum location  
11 from a transmission and load requirements standpoint.

12

13 Since electric deregulation, there is no longer any review required by the Illinois  
14 Commerce Commission on proposed generation developments. Site selection is up to the  
15 developer provided that local zoning boards concur with the specific site selected and  
16 issue the required zoning permit. Control of siting has effectively been transferred from  
17 the centralized State level to the local level, however, with one notable exception. The  
18 right of eminent domain did not follow the transfer to the local level. Hence, the  
19 developer must obtain the sought after site under normal business arrangements, rather  
20 then through a taking under eminent domain. Control is again at the local level. If the  
21 property can not be obtained, then the developer has no recourse. The deregulation law  
22 recognized that the marketplace is the mechanism that will provide the necessary balance  
23 between the various stakeholders.

1 We believe that zoning should be a local issue, not imposed by a state agency. Local  
2 officials are in a much better position to represent the desires of their constituents on the  
3 siting of facilities within their jurisdictions than would be the case under a centralized  
4 State agency in Springfield.

5

6 **Water:**

7 Water is a significant issue throughout Illinois not just in the counties comprising and  
8 surrounding Chicago. Although we have successfully dealt with this issue at the local  
9 level concerning generating projects outside the Chicago area, from the testimony it is  
10 clear that for some high-density areas water usage may be a broader issue. In those cases  
11 the issues involved may encompass more than just the local water district balancing the  
12 needs of its constituents. Consequently, for those areas, it may be prudent to consider  
13 water usage on a regional rather than purely local basis if that is the conclusion of the  
14 Board.

15

16 **Hazardous Materials on Plant Site:**

17 During the hearings concerns were raised by nearby residents on the storage of oil at  
18 peaker plant sites. Oil is generally used as a backup fuel for the combustion turbines.  
19 Many facilities, including generating plants, have had on-site fuel storage for decades. In  
20 the case of peaker plants the normal fuel used is natural gas which, of course, is supplied  
21 by pipeline and not stored on site. Normally peaker units utilize either No. 1 or No. 2  
22 fuel oil as the backup fuel. However, not all peaker facilities incorporate backup fuel  
23 capability. In those instances where they do, it becomes part of the permitting process

1 and would be presented to both the IEPA as part of the air construction application and  
2 the applicable zoning authority.

3

4 If a facility does incorporate dual fuel capability and has oil storage on site, regulations  
5 require that dikes be part of the installation that will impound the oil tanks so that in the  
6 event of a spill, it is contained within a defined area. In addition, significant safeguards  
7 are incorporated to insure that on-site oil storage and use will be safe to both the  
8 personnel and equipment at the facility as well as the communities outside the site  
9 boundaries. These issues are not significantly different than other businesses, which have  
10 on-site fuel, oil storage.

11

12 We do not believe that the storage of fuel oil as backup fuel represents a new risk that  
13 requires further regulation or control.

14

15 **Property Tax Issues:**

16 Property taxes within Illinois are a local issue. Generally, Combustion Turbines  
17 (peakers) are not considered real property for tax purposes. This is because they are  
18 portable and can be relocated. Statements were made during the hearings, which implied  
19 that peaker plants are getting a "free ride" because they pay little or no property taxes and  
20 may get tax abatements in some cases. Power plants, whether peaking or not, generate  
21 taxes in many forms other than strictly property based including sales and revenue,  
22 among others, and frequently have heavy overall tax burdens.

23

1 We believe that the local taxing authority is the appropriate jurisdiction to address these  
2 issues. The level of tax burden is, and should be, determined by the local taxing authority  
3 and such tax burden can be significant. The same is true of tax abatements. It is not a  
4 foregone conclusion that all proposed peaker plants will obtain tax abatements – many  
5 have not.

6

7 **New Rule Applicability:**

8 Generating facilities by their nature are complex apparatus. In addition, the major  
9 equipment, turbines, generators, control systems and transformers are long lead-time  
10 items requiring up to a year or more after procurement, for delivery. This lead-time  
11 frequently takes longer than the permitting process. Construction of a peaker facility  
12 typically takes 2-3 years from project initiation to actual commercialization. Noise  
13 abatement, emission limitations and performance enhancements need to be engineered  
14 into the project up-front. In many cases retrofitting technologies after the facility has  
15 been constructed is neither economic nor practical.

16

17 As regulations governing facilities change, it is more reasonable that those changes apply  
18 to facilities that have not committed to purchase orders for equipment rather than to  
19 facilities already completed or in the process thereof. Upon committing to the purchase  
20 of major equipment, the specifications for that portion of the facility's design have  
21 usually been established. And, once the appropriate permits have been issued and actual  
22 construction begun, a majority of the design parameters have been set and the majority of  
23 the project cost has been committed. Imposing new standards applied retroactively can

1 seriously effect the viability of completing an in-progress project and at minimum will  
2 create delays and cost overruns, and unfairly burden investors who have diligently  
3 complied with the requirements that existed at the time they committed to the project and  
4 on that basis made significant capital commitments.

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6 The nature of generation development with its inherent long lead times and capital  
7 intensity, requires that "regulatory certainty" be of paramount importance. It is on this  
8 basis of regulatory certainty that companies are willing to invest tens and in some cases  
9 hundreds of millions of dollars on a single generation project. Changing the rules  
10 retroactivity places a large cloud over these projects and will surely have a significant  
11 dampening effect on the viability of existing and future projects thereby creating an  
12 environment where uncertainty of the supply of power and price spikes for electricity  
13 may result.

1 **The Governor's Questions:**

2 In a letter to Chairman Manning dated July 6, 2000, Governor Ryan requested that the  
3 Illinois Pollution Control Board initiate a series of hearings to solicit public comment on  
4 five questions. Below are Ameren's views on these questions:

5

6 **1. Do peaker plants need to be regulated more strictly than Illinois' other**  
7 **current air quality statutes and regulations provide?**

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9

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11 No. We believe that the weight of testimony and evidence presented in the Board's  
12 hearings clearly show that current air quality statutes and regulations covering both  
13 emissions and noise are adequate and proper.

14

15 **2. Do peaker plants pose a unique threat, or a greater threat than other**  
16 **types of state-regulated facilities, with respect to air pollution, noise**  
17 **pollution, or groundwater or surface water pollution?**

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19

20 No, we do not believe that peaker plants pose a unique threat or greater threat than other  
21 types of state-regulated facilities. The air pollution regulations to which they must adhere  
22 are significant and appropriate. Illinois noise pollution standards are among the most  
23 stringent in the country. Existing requirements covering ground and surface water  
24 pollution adequately address these issues.

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**3. Should new or expanding peaker plants be subject to siting requirements beyond applicable local zoning requirements?**

5 No. We believe that local zoning requirements are sufficient and that the local zoning  
6 process has worked as it was designed. Local zoning officials are best suited to ascertain  
7 the desires of their constituents on zoning issues. This has resulted in some proposed  
8 peaker projects being accepted by local zoning boards and the communities within they  
9 reside, and the denial of some proposed peaker projects by the local zoning boards. The  
10 system appears to be working the way it was envisioned.

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**4. If the Board determines that peaker plants should be more strictly regulated or restricted, should additional regulations or restrictions apply to currently permitted facilities or only to new facilities and expansions?**

17 We believe strongly that any new regulations or restrictions should be applicable on a  
18 date-certain basis, prospectively applied. Retroactive application would be grossly  
19 unequitable to the affected businesses that are attempting to supply much needed energy  
20 and electric capacity to consumers. In determining the applicability of such new  
21 regulations or restrictions, the date of purchase of the impacted equipment should govern.  
22 As previously stated the lead-time for new equipment can exceed a year. This  
23 application is consistent with how such rules are applied on the federal level under the  
24 NSPS program.

1           **5. How do other states regulate or restrict peaker plants?**

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Although there was some testimony addressing this question, most of it involved states which do not share Illinois' circumstances. Specifically, Illinois deregulated its electric systems more than a year ago whereas other states put up as examples, notably Ohio and Wisconsin are not that far along. The California example cited is more representative of what not to do, rather than what Illinois should do. California attempted to control natural market forces, which resulted in an imbalance between electric supply and demand. Illinois has chosen a market-based approach to achieve the appropriate supply/demand balance. In addition, Illinois has a strong local zoning system; the zoning systems of other states are unclear. Consequently, we do not believe that other states' approaches necessarily should be applied to Illinois. In short, we believe that the current siting process in Illinois is appropriate and meets the desires and needs of the vast majority of its citizens in a manner that is fair and equitable while insuring that the State and region will have sufficient and reliable electric power when needed.

Thank you for the opportunity to take part in these proceedings.

  
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Dated: November 2, 2000