BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

PRE-FILED TESTIMONY OF DEIRDRE K. HIRNER

NOW COMES the ILLINOIS ENVIRONMENTAL REGULATORY GROUP ("IERG"), by one of its attorneys, Katherine D. Hodge of HODGE & DWYER, and submits the following Pre-Filed Testimony of Deirdre K. Hirner for presentation at the August 24, 2000 hearing scheduled in the above-referenced matter:

Testimony of Deirdre K. Hirner

My name is Deirdre Hirner and I am the Executive Director of IERG. IERG is a not-for-profit Illinois corporation comprised of 68 member companies engaged in industry, commerce, manufacturing, agriculture, trade, transportation or other related activity, and which persons, entities, or businesses are regulated by governmental agencies which promulgate, administer, or enforce environmental laws, regulations, rules or policies. IERG was organized to promote and advance the interests of its members before governmental agencies such as the Illinois Environmental Protection Agency ("IEPA") and the Illinois Pollution Control Board ("Board"). IERG is also an affiliate of the Illinois State Chamber of Commerce, which has more than 5,000 members in the State.

On behalf of IERG, I want to express our appreciation to the Board for allowing IERG the opportunity to offer testimony on this very important subject. The Governor has asked the Board to hold hearings soliciting information and public input regarding the environmental effects of gas-fired, peak-load electrical generating facilities ("peaker plants"). The Board has stated that following the hearings and the filing of written comments, it will issue an informational order. This order is to include the Board's recommendation as to whether any additional requirements should be imposed on peaker plants to protect the environment, and if so, whether regulatory or legislative measures are needed. IERG's members include utilities and industrial companies that depend on reliable electrical supply to operate their facilities. Thus, as set forth more fully below, IERG is particularly interested in this proceeding.

While IERG does not hold itself out as an expert on what are termed "peaker plants," we are certainly well aware of the need for a reliable, dependable and safe source of electric and thermal power to businesses, especially in the manufacturing sector. A reliable and dependable source of energy is necessary not only to conduct normal operations, but also to assure the safety of process operations, both for the facility and the surrounding community. This is perhaps the single most important reason that industrial facilities have always taken steps to provide on-site back-up energy generation capacity. Emergency generators are the most common means of providing back-up generation. Emergency generators allow the operation of critical facility functions in the time of a rare power outage. Thus, while the emergency generator is vital when needed, its usage is infrequent. This results in the purchase and maintenance of equipment that is not used very often, but must be kept on-site to deal with irregularities in electrical supply.

As the nature of the electric generation industry changes from that of a regulated monopoly to a free market competitive structure, the consumers of electricity must likewise change. One of the most important ways that the industrial community is adjusting to deregulation is by exploring the increased use of on-site co-generation facilities. These facilities are intended to provide both electricity and steam to the host facility. The variations on this theme are numerous: the power facility may or may not be owned by the industrial facility; the power facility may supply power to the grid as well as to the facility; or the power facility may provide excess steam to other facilities in the immediate area. The common thread however, is that the industrial facility has arranged for a dedicated supply of vital electric and/or steam energy for the safe and reliable operation of the facility.

This is not to imply that Illinois industry will become energy self-sufficient. There will always be an important interrelationship between the manufacturing and electric generation sectors. This interrelationship is evolving with the advent of deregulation. Deregulation has proven to be beneficial to all consumers in other areas such as air travel and telephone service. IERG has no doubt that the same benefits will accrue from deregulation of the electric generation business, if the transition is not unduly hampered. IERG therefore urges caution in recommending re-regulation, albeit in a different form.

In addition to the foregoing, our testimony today will address three issues that we believe the Board should consider when issuing its report to the Governor. These issues are as follows:

- The type of facility that the Board should include in its report to the Governor;
- The locational constraints on power generating facilities; and
- The current state of air pollution regulation.

The type of facility that the Board should include in its report to the

Governor: As noted above, the type of units that are operating, under construction or being considered by industrial facilities are generally captive co-generation units. A reading of the Governor's letter to the Board as well as the Board's Order in this matter indicates that the scope of these hearings should be limited to facilities meeting the classic definition of "peaker plants." The particular trait that identifies a "peaker plant" is that it is specifically constructed to supply only electrical power, only in times of peak demand. This is almost the exact opposite of the more sustained operational mode of the on-site industrial units described above. Further, as described more fully below, a "peaker plant" is very different from on-site units at an industrial facility, in terms of physical and operational characteristics, as well as financial investment and return.

It is critically important that the Board make this difference very clear in its report to the Governor. Any and all findings that the Board makes should be restricted to "peaker plants" and not to other types of electric generating facilities, be they on-site emergency generators, co-generation units or base-load power plants.

It is important to add that because of peaker plants' intended use, they will play a critical role in the new world of deregulated electric power generation. The industrial community, as well as the commercial and residential community, will rely on peaker plants to level out load demands at high demand times of the year. The days of electric utility companies having an obligation to provide adequate power in return for a guaranteed rate of return are being phased out. Soon, the supply of electricity will be on a good business decision basis. Accordingly, peaker plants will be built based on a business decision that there will be a need for peak power in a specific area. The decision

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to construct will, by necessity, be made based on the projected ability to make a fair and reasonable return on investment.

I would stress that peaker plants will be necessary to insure a safe and reliable electricity supply at critical times of the year. The Board should keep this in mind when formulating its recommendations. Each obstacle or additional cost added to peaker plants will be reflected in the cost of the final product - electricity. In the worst case, the decision to construct may be deferred. Such a decision would leave Illinois without necessary electric capacity. That would be an unacceptable outcome.

The locational constraints on power generating facilities: In the case of cogeneration facilities or emergency generators, the locational choice is simple. The electricity-generating facility must be located on or near the site that will be receiving the energy output. This is especially true in the case of co-generation when steam is one of the energy products. Facilities of this type do not have the option of choosing their location – it is dictated by a pre-existing facility. Although IERG maintains that this type of on-site facility does not fall under the purview of these hearings, we wanted the record to reflect the unique location constraints that co-generation and emergency generator units face.

We expect that others will speak to the significant body of law and regulations available to local governments to address siting issues for peaker plant facilities. We have a strong interest in assuring that peaker plants are able to locate and operate in the State of Illinois, as many of our members may well have to rely on peaker units to provide energy at critical times. Additionally, some of our members own and operate peaker units.

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More regulation for the sake of more regulation is not only counterproductive, but in this case may well be destructive. In an age of deregulation and open competition, companies with limited resources will apply those resources in an area that allows the best rate of return. If artificial obstacles are placed in the path of development, the State of Illinois may well find itself short on electric energy at the most critical times. We urge the Board to carefully review all information provided at these hearings and to recommend regulatory changes only if current procedures are inadequate to resolve documented real problems.

The current state of air pollution regulation: Several of the questions asked in the Governor's letter to the Board related to air pollution issues raised by peaker plants. One of the questions asked by the Governor was: *Do peaker plants need to be regulated more strictly than Illinois' current air quality statutes and regulations provide?* This question may be expanded to ask: *Do peaker plants need to be regulated more strictly than federal, current and proposed air quality statutes and regulations provide?* This provide? Our answer to this question is an unequivocal "no," for the following reasons.

Current federal emission standards include new source performance standards ("NSPS") that assure that certain existing and new facilities utilize the best control technology available. <u>See, e.g.</u>, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. Subpart GG contains NOx and SO₂ emission standards, as well as monitoring and testing provisions.

Further, any project which has the potential to emit over 250 tons/year of NOx, or any other criteria pollutant, will have to undertake a prevention of significant deterioration ("PSD") review. Alternatively, any natural gas-fired electric plant of more than 250 mmBtu/hour heat input, that has the potential to emit 100 tons per year or more of NOx, or any other criteria pollutant, will have to undertake a PSD review. This rigorous review must take place before the IEPA issues a construction permit. PSD review includes best available control technology. Thus, any peaker plant that undergoes PSD review will necessarily involve consideration of some emission controls.

If it is economically feasible to build and operate a peaker plant with operating restrictions that allow the facility to avoid formal PSD review, this does not mean that the peaker plant will be harmful. The basic tenet of PSD is to assure that air quality in a given area is not adversely affected. PSD provides an assurance that the National Ambient Air Quality Standards ("NAAQS") will not only continue to be maintained, but that the air quality will not be significantly lowered. The NAAQS are the benchmarks for air quality, which form the foundation of the triggers for PSD review. Therefore, facilities that do not have the capacity to trigger PSD review are understood to be facilities that will not create unsafe air quality conditions.

PSD review will, in combination with the dictates of the NSPS, establish a minimum performance level and a protective upper limit on emissions that will be codified as a federally enforceable permit condition. In addition, operational limits will be imposed to insure that the emission limits are met. Recordkeeping and reporting requirements are typically included to demonstrate compliance with the emission and operational limitations. Accordingly, there are existing permit and regulatory safeguards that assure proper operation of these types of units.

As proposed in new Subparts W and U of 35 Ill. Admin. Code 217, all peaker plant facilities will be subject to a NOx cap and trade system to be applied on a regional (21-state) basis. The essence of this system is that the total NOx emissions both in Illinois and in the 21-state region will be capped. Accordingly, (if proposed Subpart W is adopted) fear that additional peaker plants will increase the total tonnage of NOx in the overall region is unfounded. Rather, new peaker plants will begin operation with a share (new source set aside) of the *existing* NOx emissions, and will have to purchase additional allocations from previously permitted facilities in order to operate. The result is a zero sum effect in which the overall NOx emissions will remain unchanged after the start-up of a new peaker unit. It is critical to note that this so-called "cap and trade system" is *above and beyond permit limitations*. A peaker plant cannot exceed a PSD limitation. Thus, there should be no fear of a so-called concentration of units in an area, from air quality perspective. PSD will assure that air quality is maintained. In sum, IERG strongly believes that the current regulatory scheme is more than adequate to address any air quality concerns raised by peaker units.

Conclusion: Times are changing rapidly in the area of electric generation. We have all come to expect that when we flip the switch – in our factories or in our homes – that the lights will go on. Recently, we have read that in parts of the West Coast that may no longer be the case. Illinois must not put itself in a position that diminishes the benefits of deregulation by a re-regulation effort. One thing is sure – peaker plants are and will be needed. They will be needed in Illinois, as well as across the border in Iowa where the regulatory climate may be more hospitable. We urge the Board to consider the need and benefits of a safe and reliable supply of electric power along with the strength of current regulatory programs, including NSPS and PSD, before it considers the need for additional regulation. Any recommendation for additional regulation must be justified to address

real and quantifiable problems specific to peaker plants that cannot be remedied by existing programs. The Board's report would not be complete if it did not address the very real issues on both sides of this complex equation. Thank you for the opportunity to testify today, and I would be pleased to answer any questions the Board may have at this time.

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IERG reserves the right to supplement or modify this pre-filed testimony.

Respectfully submitted,

By:___

Katherine D. Hodge

Dated: August 17, 2000

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