BEFORE THE ILLINOIS POLLUTION CONTROL BOARD
November 6, 2000

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

COMMENTS OF INDECK ENERGY SERVICES, INC.

Indeck Energy Services, Inc. appreciates the opportunity to provide final comments in the instant matter. We also appreciate the amount of time and work the Board has devoted to gathering information to fulfill its charge. As we noted at the onset, the purpose of the instant hearings is to address five questions with respect to the siting of "peaking" power plants. We have reviewed the testimony and exhibits and must note, unfortunately, that following the first two hearings, few, if any of the commenters have actually addressed the Governor's questions. While some potential gaps in the regulatory framework have been alleged, which we will address later, it is our belief that this lack of response only goes further to demonstrate that peaking plants do not deserve to be singled out from any other industry with respect to legislation or regulation and that the Board's report should clearly state this to the Governor.

To support this conclusion, Indeck respectfully requests that the Board close these proceedings by focusing its attention back to the questions at hand. In light of the testimony offered, Indeck believes that its previously offered testimony, in conjunction with further comments offered herein, continues to accurately respond to the Governor's questions.

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

   Peaking plant developers must meet all conditions of the Illinois Environmental Protection Act, including all relevant permits; USEPA requirements; US Army Corps of Engineers requirements; industry standards; Federal, State, and local fire codes; electrical

codes; and several other applicable codes, standards, regulations, and permit requirements. With respect to air emissions, which is the subject of the question, the answer is clearly no. Air emissions from peaking facilities are tightly regulated by both State and Federal programs. The emissions from these sources have been characterized and their impacts have been evaluated using government agency-approved models and been found to be orders of magnitude below levels which would be of concern to impact public health or welfare. Despite emotional protestations to the contrary, these evaluations do include reviews of impacts on the young, the elderly, schools, asthmatics, sports fields, vegetation, animals, and all other potential receptors and amply demonstrate that no one is at risk from air emissions from peaking facilities.

With respect to NO_x, which is the major constituent of concern emitted from peaking facilities, these facilities are among the are lowest emitters of NO_x per kilowatt-hour produced, when compared to other means of electrical production. The NO_x SIP Call, which is the subject of another proceeding before the Board, will require a substantial reduction in the amount of NO_x emitted by all sources in the State. To help achieve this reduction, natural gas-fired peaking plants should be encouraged rather than discouraged. Certain technologies which have the potential to reduce the already minimal NO_x produced by these facilities have been suggested at the hearings; however, these technologies have not been proven on a commercial-sized scale sufficiently that most developers will risk committing to a permit that relies on such unproven technology for compliance. As such technologies become more viable, they will probably be considered and employed by developers as a way to reduce the number of NO_x emission allowances which will be required to be purchased by all emitters under the provisions of the NO_x SIP Call. Similarly, aero-derivative turbines, which have been described at these hearings as conducive to add-on technology (and may require add-ons, as by themselves they cannot achieve the low emission rates of the industrial frame turbines) may not be appropriate in all situations as they also consume significantly more water, produce much larger quantities of carbon monoxide, are much less efficient at high temperatures, and incur additional capital and maintenance costs so as to potentially not be economically viable or financeable.

With respect to water usage concerns, although not specifically addressed by the question, Indeck believes that the record clearly reflects the fact that technology exists to greatly reduce the amount of fresh water or groundwater required by peaking facilities or, for that matter, gas turbine combined cycle power plants. We also note that water supply capabilities vary from site to site and, as many of these technologies for reducing water use can result in increased costs or reduced efficiencies, each situation should be evaluated individually. It has been pointed out at the hearings that there may be gaps in the regulation of water usage, particularly on the impacts to neighboring systems (This is unlike air impact evaluations, which are not limited by local boundaries in assessing impacts). It has also been pointed out, and rightly so, that the water use impacts are not a function of the nature of the user, but should be evaluated and, if necessary, regulated as a function of the amount of proposed use. Indeck believes that the Board is making wise use of its resources and is to be commended for referring deliberations on the topic to the Water Resources Advisory Committee.

With respect to noise impacts, as has also been noted, substantial design consideration is given to meeting the Illinois noise regulations which were established by the Board in 1973. With this standard in place, Illinois EPA reports that it has never received a complaint regarding noise from any of the approximately 100 peaking plants that have come into operation since 1965. Therefore, it is Indeck's opinion that no further noise regulation is necessary.

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

With respect to this question, as Indeck has noted above, little or no testimony has been offered that compares the impacts of other State-regulated facilities to peaking facilities or cites reasons that peaking facilities should be subjected to any more stringent requirements than any other type of facility. As noted in Indeck's previous submittal,

with respect to other types of facilities, peaking facilities have impacts that are on a par with or significantly less than those of many other facilities that have no additional regulatory requirements. On a local scale, the air emissions associated with a 300 MW facility are a fraction of those associated with a coal-burning power plant and on the same order as a diesel-fueled plant a tenth its size. Looking at a state-wide picture, the average permitted emissions from peaking facilities, as compared with those from several other industries including refineries, metal producers and fabricators, other power plants, and airports, are at the very low end of the comparisons.

Water consumption impacts were also compared against other enterprises and found, in most cases, to be at the low end of the impacts. As noted above, water consumption concerns are more appropriately addressed on the basis of the amount of use relative to supply and not on the basis of the end use and Indeck commends the Board for referring the issue to the Water Resources Advisory Committee. With respect to sound, the plants' exemplary record speaks for itself.

Given the dearth of testimony regarding any unique threat posed by peaking facilities, and the fact that peaking plants have far less impacts than many others types of industry, it seems inconceivable that they pose a bigger or unique threat and are deserving of additional regulation, and in Indeck's opinion, the only answer to this question which is supported by the testimony should be a resounding no.

If, in fact, additional regulation is considered, Indeck believes that it would behoove the State to greatly increase its oversight of most other industries. While we do not for one moment believe that special regulations are any more appropriate for golf courses, bottlers, bakeries, hospitals, schools, factories, or other manufacturing or business facilities than they are for peaking facilities, we believe that it would be the duty of the Board to recommend them if it recommends such regulations for peakers.

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

As noted above, the impacts of peaking plants are minimal and additional requirements would seem unnecessary and the answer to this question should, again, be no. An examination of local zoning codes shows that most already allow for uses that are more intensive than a peaking plant in one or more zoning classifications. The fact that local zoning officials can and have exercised jurisdiction in these matters demonstrates the ability of local governing bodies to exercise their discretionary powers over land within their borders. If any alternate process is considered, it should be one that restricts the decision-making to facts in the record.

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?

As stated previously, one of the design bases for power plants, as well as other industry, are the rules and regulations in existence at the time of the design. Trying to design to hit a moving or potentially moving target could effectively bring design work to a halt, and, in this case jeopardize the electric reliability of the entire State. In this or any other industry, a period of regulatory certainty is necessary to allow the industry to move forward. Further, any change in philosophy, whether it be applied only to new construction or to currently permitted facilities, should also be applied evenly to all other industries in the State, because, as noted in our response to Question 2, the record does not support discriminating against peaking facilities.

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

Again, as stated previously, the process varies, of course, by state, with no model being the standard. Several other states have a process similar to Illinois'; that is, with local issues handled by one or two local agencies and state or federal issues going, most often, through the State. Other states have adopted a coordinated approach, with all

issues being directed through a single siting entity. This entity rules not only on all environmental issues, but also takes precedence over local zoning authorities.

In conclusion, Indeck would like to commend and thank the Board for the amount of time and energy it has devoted to collecting information to answer the Governor's charge. Sadly, the vast majority of public commenters did not avail themselves of the opportunity provided by the Board to address the matter at hand. Rather, much testimony was offered regarding the evils of peaking facilities, a great deal of which strained credulity. Such testimony may make for great sound bites, but not one shred of credible evidence was offered to support the notion that peaking facilities pose new or unique threats that are deserving of new or increased regulation. It is Indeck's opinion that the Board and its operative arm, the Illinois Environmental Protection Agency have established and are implementing an effective regulatory framework which protects and will continue to protect the public with respect to the subject of these matters.

Thank you again for the opportunity to address the matter at hand.

Sincerely,

Gerald Erjavec
Manager, Business Development
Indeck Energy Services, Inc.