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ENVIRONMENTAL LAW & POLICY CENTESTATE OF ILLINOIS ILLINOIS INDIANA MICHIGAN MINNESOTA OHIO WISCONS Pollution Control Board

November 6, 2000

P.C.#109

## HAND DELIVERED

Ms. Dorothy Gunn Clerk of the Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Suite 11-500 Chicago, IL 60601

## Re: Illinois Commerce Commission Docket R01-10

Dear Ms. Gunn:

Enclosed please find an original and 9 copies of the Comments on the Matter of Siting and Permitting of Single Cycle (peaking) Combustion Turbines in Illinois.

Thank you.

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Patricio Silva Midwest Activities Coordinator Natural Resource Defense Council

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ROBERT L. GRAHAM - CHAIRPERSON HOWARD A. LEARNER - EXECUTIVE DIRECTOR

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## ILLINOIS POLLUTION CONTROL BOARD Springfield, Illinois (October 5, 2000)

IN THE MATTER OF:

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

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STATE OF ILLINOIS Pollution Control Board

## **NOTICE OF FILING**

PLEASE TAKE NOTICE that on this date, November 6, 2000, I filed with Dorothy Gunn Clerk of the Illinois Pollution Control Board, James R. Thompson Center, 100 West Randolph, Suite 11-500, Chicago, IL 60601, the enclosed Comments on the Matter of Siting and Permitting Single Cycle (peaking) Combustion Turbines in Illinois.

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Patricio Silva

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Patricio Silva Midwest Activities Coordinator Natural Resources Defense Council Washington, D.C.

## ILLINOIS POLLUTION CONTROL BOARD Springfield, Illinois (October 5, 2000)

### IN THE MATTER OF:

R01-10

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STATE OF ILLINOIS Pollution Control Board

NATURAL GAS-FIRED, PEAK-LOAD ELECTRICAL POWER GENERATING FACILITIES (PEAKER PLANTS)

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Thank you for the opportunity to comment on the matter of the siting and permitting of single cycle (peaking) combustion turbines in Illinois.

The Natural Resources Defense Council (NRDC) is a nonprofit citizen organization dedicated to environmental protection, with more than 400,000 members nationwide. Since 1970, NRDC has sought to reduce the adverse environmental impacts associated with the generation of electricity. Our efforts have focused on enacting and implementing state and federal laws and regulations, including such landmark legislation as the Clean Air Act and Clean Water Act, that protects public health and the environment from harm caused by air and water pollution. Another priority for NRDC is the enactment of state and federal electric utility restructuring legislation that insures that more open and competitive electricity markets do not yield unwanted dividends such as increased air and water pollution, particularly increased releases of sulfur dioxide, nitrogen oxides, carbon dioxide and mercury.

NRDC generally supports the siting and construction of introduction of new natural gas-fired combustion turbines as a transitional generating technology, alongside development of new renewable electric generating technologies and additional investment in energy efficiency. We are particularly interested creating market and regulatory conditions favorable to replacing, or backing out highly polluting fossil fuel-fired generating facilities in favor of high efficiency, environmental sound electric generating technologies. The siting and permitting of new electric generating facilities ideally, should integrate evaluation of individual project and aggregate multiple project potential environmental and public health impacts. Such a process should provide ample opportunity for meaningful public participation to allow a thorough and complete assessment and recognition of the host communities values and concerns.

Electric power plants are the country's largest industrial source of the pollutants that cause acid rain, mercury poisoning in lakes and rivers, and global warming. To reduce this pollution, NRDC is aggressively promoting renewable energy sources like wind and sun, and energyefficiency improvements in appliances, business equipment and buildings.<sup>1</sup> We pursue these advances through new and existing laws, better regulations, and financial incentives. In particular, NRDC is focused on making sure that plans governing competition in the electric industry provide incentives for clean energy and efficiency. NRDC also holds electric utilities accountable in court for the pollution they create.

<sup>&</sup>lt;sup>1</sup> For example, New York promotes environmentally sound building practices through a package of tax incentives offered to developers who build environmentally sound commercial and apartment buildings. This "green building credit" – is aimed at encouraging the housing materials and construction industries to adopt green practices on a large scale by providing incentives to invest in increased energy efficiency, recycled and recyclable materials and improved indoor air quality. (See http://www.nrdc.org/cities/building/nnytax.asp).

Since enactment of the Illinois Electric Service Customer Choice and Rate Relief Law of 1997, the Illinois has drawn considerable attention from merchant power plant developers, seeking to participate in the restructured electricity market. To date that interest has manifested itself in the filing of numerous permit and zoning variance applications before state agencies and municipalities for over 55 new electric generating facilities, with a potential generating capacity of 22,000 MW. A review of applications received and information from developers indicates that nearly all these new electric generating facilities will be equipped with single cycle combustion turbines intended to operate only during periods of peak demand load. These new electric generating facilities consist of one or more single cycle combustion turbines capable of natural gas and frequently distillate fuel oil, firing in a configuration permitting rapid start-up (typically 20-30 minutes from cold start). These combustion turbines typically operate for abbreviated periods during episodes of approaching maximum electrical demand.

## SUDDEN INFLUX OF PEAKER PROJECTS INTO ILLINOIS

Why is Illinois experiencing such an increase in proposed single cycle natural gas-fired combustion turbines? Many developers of new electric generating facilities believe there are lucrative short-term profits to be made by siting as many peak load serving single cycle combustion turbines as they can within the next 18-24 months, anticipating peak demand episodes similar to that experienced by Illinois in 1999. During summer 1999, the Chicago area experienced interruptions in electric service, included a protracted interruption within the Loop. An investigation conducted by the U.S. Department of Energy concluded that those service interruptions were due to failures in the distribution system infrastructure, inadequately maintained by the incumbent electric utility, Commonwealth Edison.<sup>2</sup>

It should be noted that siting additional peaking single cycle combustion turbines, even within Commonwealth Edison's service territory will not necessarily avoid a repetition of the 1999 electric service interruptions in metropolitan Chicago. Rather, improvements and upgrades of the distribution system infrastructure were and remain the principal problem and need.

Electricity demand in Illinois is forecast to continue increasing, and several incumbent electric utilities perceive a need for additional generating capacity dedicated to operating primarily during episodes of peak demand.<sup>3</sup> The electric reliability council serving Illinois and portions of Wisconsin, MAIN, reports that projected maximum internal demand for electric generation in 2000 at 49,615 MW, approximately 3% higher than 1999 projected maximum internal demand. The actual peak demand in summer 1999 was 49,027 MW, approximately 1.8% above projections.<sup>4</sup>

For the summer 2000 peak demand period, MAIN projected available generating capacity at 56,523 MW, including generating capacity available from independent power producers and limited imports. This figure includes 3,076 MW of new electric generating capacity available

<sup>&</sup>lt;sup>2</sup> U.S. Department of Energy, Final Report of the U.S. Department of Energy's Power Outage Study Team on Electric Reliability Events of the Summer of 1999 (March 2000) p. 7.

<sup>&</sup>lt;sup>3</sup> Commonwealth Edison solicited merchant plant developers to cite peaking single cycle combustion turbines at, or appurtenant to existing generating facilities within its service territory.

<sup>&</sup>lt;sup>4</sup> North American Electric Reliability Council, 2000 Summer Assessment: Reliability of the Bulk Electricity Supply in North America (May 2000) p.30.

for dispatch, representing 11 new generating facilities, upgrades at existing generating facilities and temporary facilities.<sup>3</sup>

The experience of Illinois is not unique. Electricity demand is expected to continue growing rapidly for the foreseeable future, requiring significant construction of additional electric generating capacity, especially if downward trends in energy efficiency and demand-side management investments continue in the United States. The Energy Information Administration (EIA) forecasts that by 2020, an additional 300 gigawatts of electric generating capacity will be required to satisfy increasing domestic energy demand and replace retired fossil fuel-fired and nuclear generating units.<sup>6</sup> Even under their most conservative forecast scenarios "gas technologies are expected to dominate new generating capacity additions."<sup>7</sup> EIA predicts that 90% will be combustion turbine technology,<sup>8</sup> with additions of combined cycle generating capacity being the fastest growing segment of the electric power industry through 2020.<sup>9</sup> Other independent forecasters predict increases of similar magnitude, all relying upon natural gas consumption to fuel much of that new electric generating capacity.<sup>10</sup>

Much of this new natural gas-fired generating capacity is expected well before 2020 with EIA's short-term forecast predicting nearly 100 gigawatts by 2010, while other forecasters suggesting up to 180 gigawatts by 2010. All forecasts do agree that the majority of this new generating capacity will be either single or combined cycle natural gas-fired combustion turbines, with combined cycle units augmented with heat-recovery steam generators.<sup>11</sup>

Illinois is experiencing the leading edge of an energy "Oklahoma land rush" phenomenon that has already played itself out in New England, where energy markets were deregulated earlier than in Illinois. By early 1999 some 63 electric generating projects were proposed in New England, totaling 31,000 MW of generating capacity, of which between 7,000 and 8,000 MW are expected to actually be built.<sup>12</sup> By way of comparison, the current annual peak demand in New England is approximately 22,544 MW with the New England Independent System Operator (ISO) calculating that an additional 4,000 MW of generating capacity is all that is required to meet short term expected increases in electric demand.

The 31,000 MW of generating capacity originally proposed in New England was winnowed down to approximately 9,437 MW by power plant siting authorities and environmental regulatory agencies in Massachusetts, Maine, New Hampshire, Connecticut, and Rhode Island. Most relevant is that of the 36 combustion turbines being permitted at 19 electric generating

<sup>&</sup>lt;sup>3</sup> Id. p. 30-31. Approximately 60% of the new generating capacity is owned by independent power producers. MAIN predicted 2,223 MW would "be available by June 1, an additional 600 MW by July 1, and the balance by August 1." P. 31.

<sup>&</sup>lt;sup>6</sup> Energy Information Administration, *Annual Energy Outlook 2000* DOE/EIA-0383(2000), p. 65. EIA forecasts that 90 percent of new capacity is projected to be combined-cycle or combustion turbine technology fueled by natural gas or both oil and gas. In comparison, 21 gigawatts (or 7 percent) of new capacity is expected to be new coal-fired capacity.

<sup>&</sup>lt;sup>7</sup> Energy Information Administration, Annual Energy Outlook 2000 DOE/EIA-0383(2000), p. 65.

<sup>&</sup>lt;sup>1</sup> <u>Id.</u> pp. 64-71.

<sup>&</sup>lt;sup>9</sup> Energy Information Administration, *Annual Energy Outlook 2000* DOE/EIA-0383(2000) Appendix A, Reference Case Forecast, Table 9.

<sup>&</sup>lt;sup>10</sup> <u>Id.</u> p. 97 (comparing natural gas forecasts of EIA, WEFA, Gas Research Institute, and Standard & Poor's DRI). <sup>11</sup> "Gas Turbines, Combined Cycles Harvest Record Orders," *Power* (March/April 2000) p. 30; "Merchant Power Projects Push for Competitive Edge," *Power* (January/February 2000) p. 32.

<sup>&</sup>lt;sup>12</sup> Carl J. Levesque, "Merchant Plants, Coast to Coast" Public Utilities Fortnightly (January 1, 1999) p. 26.

facilities across New England, <u>all</u> are combined cycle natural gas-fired combustion turbines.<sup>13</sup> These combustion turbines are expected to operate as intermediate load following or base load units, rather than peaking units.

In the neighboring state of New York, 20 new electric generating facilities are undergoing siting review representing a total of 15,064 MW of generating capacity, available information indicates they will be equipped with combined cycle combustion turbines (See discussion below on New York siting process for additional details).

### **RECENT TURMOIL IN THE CALIFORNIA ENERGY MARKETS**

The electric generating facility siting review process administered by the California Energy Commission has been the subject of earlier testimony addressing only the recent reliability concerns in California. We offer a broader perspective on the matter. The conventional wisdom is that electricity consumption in California is surging out of control; "the Internet" and a booming economy often are frequently invoked as explanations. In fact, the California system peak from 1990-1999 grew less than 2% per year (to about 50,000 MW, with 41,000 MW representing total demand on the three large investor-owned systems).<sup>14</sup> Total statewide consumption of electricity increased less than 1% per year from 1990-1998 (less than one third the rate of the 1980s). Recent data indicate significant short-term consumption increased over the first six months of 2000 compared to the same period a year earlier, with much warmer weather playing a strong role.

Electricity use spiked in June 2000, up almost 13% compared to the much cooler June of a year earlier.<sup>15</sup> This clearly contributed to sharply higher wholesale electricity prices for June 2000, which averaged about twelve cents per kilowatt-hour (a sixfold increase over the June 1999 figure). It didn't help, obviously, that natural gas prices also were soaring above five dollars per million Btu (if sustained, this would drive the fuel costs alone for older gas-fired power plants past five cents per kWh produced). The first three weeks of July saw more moderate weather in California, and both electricity and peak consumption were down compared to the same period a year earlier; average wholesale electricity prices dropped about 40%. However, at more than seven cents per kWh, these prices were still very high by recent historical standards, and more unpleasant surprises are entirely possible in the months ahead.

The short term reliability crisis in California should be quickly and cost-effectively resolved by additional investment and deployment of energy efficiency and renewable energy on sufficiently large scale, alongside entry into service of single and combined cycle natural gasfired combustion turbines already in the siting and construction process (more than 3500 MW already having completed the siting process).

The deployment of energy efficiency and renewable energy investments have already made significant contributions to California's economy and electricity grid. California's efficiency programs and standards have reduced peak electricity demand by 10,000 MW and total annual

http://www.energy.ca.gov for additional information.

<sup>&</sup>lt;sup>13</sup> US Environmental Protection Agency Region 4, "National Combustion Turbine List," provided on August 16, 2000. This is most up-to-date index available, but has not undergone full agency review nor is it likely current for activity in other EPA regions, and therefore likely understates total number of combustion projects. <sup>14</sup> California Energy Commission, *California Energy Demand: 2000-2010* (June 2000). See

<sup>&</sup>lt;sup>15</sup> California Independent System Operator, Market Analysis Report (July 24, 2000).

consumption has been reduced by approximately 15%. Since 1990, energy efficiency investments have reduced statewide electric bills by more than \$2.8 billion. As a result, "California continues to lead the nation in maximizing the amount of Gross State Product produced per unit of energy."<sup>16</sup> The RAND Corporation has pegged per capita benefits from twenty years of energy efficiency programs in California at about \$1,000 per capita, with cumulative utility investment for such purposes averaging only about \$125 per capita.<sup>17</sup> This and other independent reviews agree that California still has numerous untapped and inexpensive opportunities to get more work out of less electricity.

Renewable energy is also a critical part of California's energy portfolio, with about one-ninth of the state's supply now generated from wind, solar, geothermal or biomass resources. Thanks to a 1998 auction for new renewable capacity, more than 500 MW of urgently needed supply are now being added to the California system, with almost 100 MW already installed, more than 400 MW expected by the end of 2001, and at least 900 additional MW available for near-term purchase. The new capacity has gratifyingly short lead-times, with the 50 winning bidders all scheduled to be operating by summer of 2002.

We turn now to the questions posed to the Illinois Pollution Control Board by Governor Ryan in his August 6, 2000 letter requesting this proceeding.

# DO PEAKER PLANTS NEED TO BE REGULATED MORE STRICTLY THAN ILLINOIS' CURRENT AIR QUALITY STATUTES AND REGULATIONS PROVIDE?

Natural gas-fired combustion turbines represent the best available large-scale fossil fuel generation in terms of minimal adverse air quality impacts. Combustion turbines, particularly combined cycle applications are capable of obtaining 55-60% efficiencies and with best available pollution control technology to mimizie emissions of nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM10), volatile organic compounds (VOCs), and sulfur dioxide (SO2). Single cycle natural gas-fired combustion turbines are considerably less efficient, operating between 28-35% with combustion controls limiting NOx emissions to 15-25 ppm.

The national permitting data for combustion turbine projects compiled by EPA Region 4 identified indicates new electric generating facilities representing over 750 combustion turbines were in state or federal Clean Air Act permitting between 1998 and July 2000, with a projected generating capacity of 53,000 MW.<sup>18</sup> Of that total 340 combustion turbines were single cycle units, the actual figure may be significantly overstated since the figures represent permitted, not constructed combustion turbines. Developers frequently seek necessary air, water permits and zoning variances for multiple sites, but only build on the proposed electric generating facility on whichever site is the first to obtain all the necessary approvals.

While single cycle natural gas-fired combustion turbines can achieve 15-25 ppm with limited combustion controls, the aggregate impact of the proposed combustion turbine projects in Illinois would amount to several hundred tons, likely to be emitted during the worst ozone

<sup>17</sup> RAND, The Public Benefits of California's Investments in Energy Efficiency, p. xiv (March 2000).

<sup>&</sup>lt;sup>16</sup> California Energy Commission, *The Energy Efficiency Public Goods Charge Report*, p. 12 (December 1999); data on net benefits are from NRDC, *Investments in the Public Interest* (January 2000).

<sup>&</sup>lt;sup>18</sup> US Environmental Protection Agency Region 4, "National Combustion Turbine List," provided on August 16, 2000. This is most up-to-date index available, but has not undergone full agency review nor is it likely current for activity in other EPA regions, and therefore likely understates total number of combustion projects.

episodes since there is a strong correlation between ozone exceedances in Illinois during stagnant hot summer days, which usually coincide with episodes of peak electric demand.

We also recommend that the State of Illinois request that the U.S. Environmental Protection Agency withdraw the section 182(f) NOx waiver granted to the Chicago-Gary severe ozone nonattainment area, which exempts proposed new single cycle combustion turbines from obtaining emission offsets or utilizing best available control technology as would otherwise be required.<sup>19</sup> The section 182(f) NOx waiver permits single cycle combustion turbines to utilize less stringent NOx controls contributing resulting in additional NOx emissions that could be readily avoided and which will ultimately exacerbate the difficulty that the Chicago severe ozone nonattainment area faces in satisfying the upcoming attainment demonstration requirement of the 1-hour ozone standard.

## DO PEAKER POWER 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?

In isolation single cycle natural-gas fired combustion turbines do not pose a greater threat to public health and the environment than other types of state-regulated facilities, particularly coal-fired steam turbine generating units. However, the aggregate impact of siting several single cycle natural gas-fired combustion turbines should be thoroughly evaluated since these units can emit quantities of nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM10), volatile organic compounds (VOCs), and sulfur dioxide (SO2), and sulfuric acid mist (H2SO4) in quantities sufficient to trigger permit review thresholds under the Clean Air Act. Single cycle natural gas-fired combustion turbines can also emit toxic air pollutants, including formaldehyde, acetaldehyde, benzene, lead, mercury and beryllium in quantities sufficient to trigger permit review thresholds under the Clean Air Act.<sup>20</sup>

Toxic air pollutants emissions increase significantly at single cycle combustion turbines equipped to burn distillate fuel oils as an alternative fuel source. For dual fuel capable single cycle combustion turbines particularly the aggregate air quality impacts on the host community should be thoroughly evaluated alongside assessments of the noise; water and soil resources and public health impacts of these projects.

Single cycle units have lower capital costs, approximately \$300/KW of capacity versus \$500/KW of capacity for combined cycle units. While simple-cycle units can operate profitably at low utilization rates, many community groups have expressed concerns that many of these proposed single cycle combustion turbine projects maybe converted in the future to combined-cycle use by addition of heat recovery steam turbine generator and necessary ancillary equipment when combined-cycle economics become more favorable. A single cycle generating unit may not tax available water resources for example, but its conversion to combined-cycle operation could create significant allocation quandaries for the host community.

<sup>&</sup>lt;sup>19</sup> Approval of a Section 182(f) Exemption: Illinois, Indiana, Michigan and Wisconsin, Final Rule 61 Fed.Reg. 2428 (January 26, 1996). <sup>20</sup> Sime Box Emircion Standard Division Content of Content of

<sup>&</sup>lt;sup>20</sup> Sims Roy, Emission Standards Division, Combustion Group, US Environmental Protection Agency memorandum, *Hazardous Air Pollutant (HAP) Emission Control Technology for New Stationary Combustion Turbines* (December 30, 1999).

Single cycle combustion turbines are not particularly water intensive, consuming less than 100,000 gallons per day when low NOx burners are employed during natural gas operation to minimize NOx emissions. When firing distillate fuel oil, water consumption rises to up to 1,000,000 gallons per day when steam injection is employed to reduce NOx emissions. In comparison a 1,000 MW combined cycle natural gas-fired combustion turbine relying upon wet cooling consumes approximately 7,000,000 gallons per day.

## SHOULD NEW OR EXPANDING PEAKER PLANTS BE SUBJECT TO SITING REQUIREMENTS BEYOND THE APPLICABLE LOCAL ZONING REQUIREMENTS?

New electric generating facilities utilizing single and combined cycle combustion turbines should avoid disproportionately burdening any community, but particularly low income communities and communities of color. As demonstrated by the increasing unease reflected in testimony before to the Illinois Pollution Control Board in this matter, residents of many potential host communities are convinced from their experiences that existing local zoning requirements are not adequate to address all the public interest concerns associated with new or expanding electric generating facilities.

There appears to be a growing sense of unease in Illinois that current state and municipal review of new or expanding electric generating facilities is too limited and inadequate. That may be in part attributable to the lack of coordination between municipalities and Illinois regulatory agencies involved in permitting new electric generating facilities, particularly the Illinois EPA, charged with evaluating the air and water quality impacts of these facilities.

When applications are pending for multiple facilities, siting boards should select those that best meet these criteria rather than approve applications on a first-come, first-served basis.

### HOW DO OTHER STATES REGULATE OR RESTRICT PEAKER PLANTS?

California and New York require a coordinated and systematic evaluation the potential environmental and public health impacts of new electric generating facilities. This includes development of comprehensive environmental assessment which identifies the environmental consequences of the construction and operation of the facility; potential mitigation measures; thoroughly explores the compliance monitoring requirements and conditions of certification; evaluates alternatives for the facility; and considers the environmental consequences of any major transmission facilities needed.<sup>21</sup>

## California

The State of California created the State Energy Resources Conservation and Development Commission (California Energy Commission) in 1974 to forecast future electricity and energy needs, license energy facilities to meet such demand, promote energy efficiency, develop

<sup>&</sup>lt;sup>21</sup> Roberta Mendonca, California Energy Commission Public Adviser's Presentation on Siting Process (April 15, 1999) http://www.energy.ca.gov/sitingcases/1999-04-15\_public\_adviser.html (Accessed October 4, 2000).

renewable energy resources, and planning for and directing state responses to energy emergencies.<sup>22</sup>

The California energy facilities siting process is particularly rigorous, requiring demonstration of need, balanced against the potential environmental and public health impacts. An applicant seeking to site a new electric generating facility of 50 MW or greater is required to submit a pre-application for review by California Energy Commission technical staff to evaluate public health, environment, electric engineering and system reliability. The California energy facilities siting process requires a single regulatory permit (insured by simultaneous review of air, water quality permit requirements be relevant municipal, state and federal regulatory agencies), decided within a specific time frame, and providing for full participation by public, interest groups.

The California Legislature amended the energy facilities siting process by establishing a "fast track" process of 6 months for new electric generating facilities presenting no significant adverse environmental impacts, with the California Energy Commission granted emergency regulatory authority to develop the program expeditiously. Under AB 970, a peaking simple cycle combustion turbine can obtain a three year operating permit in under 4 months, if they present no significant adverse environmental impacts and are equipped with best available control technology. A condition of the three year permit is that peaking simple cycle turbine operator commit to conversion of the combustion turbine to a combined cycle operation within three years or cease operation.<sup>23</sup>

Single cycle natural gas-fired combustion turbines operating under contract with California Independent System Operator (ISO) which emit less than 5 ppm (recall that most peakers emit 15-25 ppm NOx with limited controls) and displaces more polluting existing generating capacity can obtain expedited air permit approvals.<sup>24</sup>

### New York

The State of New York recently consolidated the permitting of new electric generating capacity greater than 80 MW under the New York State Board on Electric Generation Siting and the Environment, under Article X of the New York Public Service Law. Prior to commencing construction, a power plant developer must obtain a "Certificate of Environmental Compatability and Public Need" for all projects proposed after December 1, 1999.

The New York State Board on Electric Generation Siting and the Environment is authorized to issue both air and water permits (CAA Title V permits and CWA State Pollutant Discharge Elimination System (SPDES)) in collaboration with the New York Department of Environmental Conservation. Under Article X, the project applicant is required to file a preliminary scoping statement explaining in detail:

the proposed facility and its environmental setting;

 <sup>&</sup>lt;sup>29</sup> Warren-Alquist Act, California Public Resources Code Section 25000 et seq. For additional information on new electric generating facility siting in California, see http://www.energy.ca.gov/siting/guide\_license\_process.html.
<sup>20</sup> California Energy Commission, *California Energy Legislation Highlights 2000* (October 2000).

<sup>24 &</sup>lt;u>Id.</u>

- potential environmental impacts from the construction and operation of the proposed facility;
- proposed mitigation;
- reasonable alternatives to the proposed facility; and
- other information that may be relevant or required by the Siting Board.<sup>25</sup>

The project applicant is responsible for ensuring the preliminary scoping statement is adequately publicized (indeed a record of the applicant's efforts must be submitted later in the review process under Article X) in the potential host community and interested members of the Siting Board, interested state agencies, municipalities, members of the State Legislature, local libraries, and other interested persons and organizations.

In addition to requiring the project applicant to publicize the preliminary scoping statement, Article X encourages public involvement by requiring the project applicant to hold public meetings, offer presentations to interested parties and establish a local presence in the community. To facilitate the evaluation of by project, the project applicant must submit with its application a fee equal to \$1,000 for each megawatt of generating capacity, not to exceed a total of \$300,000 to be used as an "intervenor fund," which the Siting Board examiner will disburse to municipal and local parties to defray the cost of expert witnesses and other technical assistance.

With the deregulation of the New York energy market, approximately 15,064 MW of new electric generating capacity have been proposed for 20 new or expanded electric generating facilities.<sup>26</sup>

The PG&E Athens project received its certificate of environmental compatibility and public need. NRDC opposed that project on the grounds of the significant water withdrawals originally proposed for cooling at the facility and its adverse aesthetic impact on the shore of the most scenic portion of the Hudson River Valley. At present NRDC is participating as an intervenor in 8 of the projects under Article X review.

### **Conclusion**

The Illinois Pollution Control Board could have a positive and salutary effect on the current "Oklahoma land rush" mentality affecting the Illinois energy market by recommending integration of the currently disjointed local zoning review process with consideration of draft state administered air and water permits. By pooling resources, communities and the State would be better equipped to make intelligent decisions regarding siting of new generating capacity, weighing the larger questions of needed future capacity against adverse potential environmental and public health impacts.

NRDC supports siting laws that encourage new power plants to: (1) use renewable fuels (2)

<sup>&</sup>lt;sup>25</sup> New York State Public Service Commission Consumer Guide: Certification Review Process for Major Electric Generating Facilities under Article X of the New York State Public Service Law for Applications Filed After December 1, 1999. See http://www.dps.state.ny.us/artx.htm (Accessed October 4, 2000).

<sup>&</sup>lt;sup>26</sup> Of the 20 new or expanded electric generating facilities in New York with an aggregate generating capacity of 15,064 MW, 11 combustion turbine projects are in full Article X review; 2 combustion turbine projects recently completed pre-application review; 7 combustion turbine projects filed preliminary scoping statements; and 1 combustion turbine project was recently announced.

implement state-of-the-art air and water pollution control systems; (3) locate on or near existing power plant sites that do not require new fuel supply or transmission infrastructure; and (4) avoid disproportionately burdening low-income communities and communities of color. In fact, siting laws should ensure that cumulative environmental and public health impacts decline over time as capacity increases. Although many expect that market forces should ensure that new, cleaner plants displace old, dirtier facilities, states and localities should adopt regulations that guarantee this. Also, the federal government should adopt comprehensive emission caps that will guarantee natural reductions in power plant emissions of carbon (global warming), nitrogen (smog), mercury (toxicity) and sulfur (acid rain and fine particles).

The issues associated with permitting and siting a large influx of single cycle natural gas-fired generating capacity do not necessarily require a comprehensive power plant siting regulations or legislation, but rather a comprehensive energy planning process, encompassing functions once carried out by the Illinois Commerce Commission. Developing a comprehensive energy strategy for Illinois, through input from interested stakeholders, elected officials and relevant state agencies, possibly in consultation with federal entities, that would prioritize preferred new generating options should be considered.

Sincerely,

Patricio Silva Midwest Activities Coordinator Natural Resources Defense Council