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**Via Hand Delivery & Electronic Mail**

June 13, 2007

Hon. Jaclyn A. Brillig  
Secretary  
New York State Board on Electric  
Generation Siting and the Environment  
Three Empire State Plaza  
Albany, NY 12223

RECEIVED  
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Re: Case 01-F-1276 – Application by TransGas Energy Systems LLC for a Certificate of Environmental Compatibility and Public Need to Construct and Operate a 1,100 Megawatt Combined Cycle Cogeneration Facility in the Borough of Brooklyn, New York City.

Dear Secretary Brillig:

The undersigned was made aware on June 7, 2007 that the City of New York (“NYC”) filed a letter on May 8, 2007 with the Board responding to the TransGas Energy Systems LLC’s (“TransGas”) letter of April 30, 2007.<sup>1</sup> The NYC letter simply repeats NYC’s opposition to the proposed location for the cogeneration plant (not the plant itself) and alludes to the prior pleadings filed by both parties.

As TransGas’ April 30, 2007 letter explains (p. 6), gas-fired cogeneration is the environmentally superior, fossil fuel choice for an urban location, in fact, for any location. In commenting upon proposed legislation designed to reenact Article X, Consolidated Edison Company of New York, Inc. (“Con Edison”) recently acknowledged that cogeneration “. . .is the most efficient use of fossil fuels. . .”<sup>2</sup> NYC also commented that “. . .with respect to the carbon standard, we believe there must be an added incentive for cogeneration plants. Utilizing waste steam for heating, cooling and/or industrial processes

<sup>1</sup> TransGas, nor its counsel, received an electronic or hard copy of the NYC letter on or about May 8, 2007.

<sup>2</sup> *Comments of Consolidated Edison Company of New York, Inc.*, dated May 1, 2007 (Att. A hereto).

raises the efficiency of the units dramatically and reduces overall carbon dioxide emissions.”<sup>3</sup>

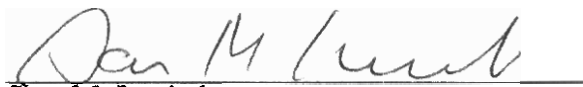
Analyses performed in the Article X proceeding demonstrate that the TransGas cogeneration plant could displace at least 730,000 tons of CO<sub>2</sub> annually from New York State electric power plant production.<sup>4</sup> That is the equivalent of removing approximately 142,000 cars from the road. Recent analyses by TransGas that include selling steam to Con Edison and displacing steam production from its older facilities, as well as obviating the need to build a new combined cycle electric plant, show that TransGas could displace approximately 3.2 million tons of carbon dioxide annually, or the equivalent of 500,000 cars. As described in the attached paper, cogeneration “. . . is a less carbon-intensive technology than almost anything that can be adopted today.”<sup>5</sup>

By supporting TransGas, NYC could take giant steps toward achieving environmental goals laid out by Mayor Bloomberg in PlaNYC and also have the park of its choosing built at the proposed location, at no cost. Far from being inconsistent with NYC’s environmental and land use plans, TransGas is perfectly consistent with them.

Respectfully submitted,

READ AND LANIADO, LLP  
Attorneys for TransGas Energy Systems LLC

By:

  
Sam M. Laniado

SML:tac  
Attachments

cc: Active Parties (*Via Electronic Mail*)  
Hon. Judith Lee  
Chief, Administrative Law Judge (*Via Hand Delivery and Electronic Mail*)

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<sup>3</sup> See, *Memorandum to Hon. Paul D. Tonko and Hon. James W. Wright* from Michelle Goldstein, Director, State Legislative Affairs, dated June 6, 2007 (Att. B, hereto).

<sup>4</sup> Revised Section 16 to TransGas Application Amendment, dated August 22, 2005, pp. 16-21

<sup>5</sup> See Att. C hereto: *Cogeneration/Combined Heat and Power: A Carbon Reduction Technology That is Here Now*, by James W. Bowen, dated June 12, 2007, unpublished.

5/1/07

## **Governor Spitzer's Plant Siting Bill**

### **Comments of Consolidated Edison Company of New York, Inc.**

Governor Spitzer's power plant siting bill was released on April 24, 2007. Con Edison offers the following comments for consideration:

1. Because new electric plants would be limited to low density population areas (3000 people or less within one mile of the plant site), the bill would not permit the siting of new electric or cogeneration plants in New York City.
2. Because the existing in-City generating units have relatively low capacity factors and primarily burn natural gas, a repowered unit would not be able to meet the requirements for a 75 % reduction in the emission rate for NO<sub>x</sub>, CO<sub>2</sub>, PM10 and PM2.5 and a 10% reduction in the annual emissions for these pollutants. Thus, the bill would effectively preclude any clean repowering of electric plants in New York City.
3. The bill makes no provision for the siting of cogeneration facilities, which make the most efficient use of fossil fuels.
4. The bill makes no provision for the siting of steam only plants, which have significant environmental benefits.
5. Oil burning for electric and steam generation is essential for fuel diversity during cold weather periods when an adequate supply of natural gas may not be available and for electric system reliability, as prescribed by the rules of the NYISO. In order to meet this limited oil burning requirement, the bill's CO<sub>2</sub> emission limitation of 850lb/MWh should be increased to 975lb/MWh.
6. The bill would not meet its objectives of (i) ensuring that New York City has an adequate and reasonably priced supply of electric power to meet current and future energy demands and (ii) encouraging the modernization and/or retirement of older, inefficient and more polluting in-City power supply facilities.

### Recommendations

1. Recognize the energy and environmental benefits of cogeneration
  - a. add another category of "qualified facility" – cogeneration facility – that would be eligible for permitting under this bill
  - b. the requirements for cogeneration facilities would be the similar to those for positive emission facilities; the primary exception being that the population limitation would not apply
2. Recognize the energy and environmental benefits of a reliable steam supply system
  - a. add another category of "qualified facility" – district heating steam facility – that would be eligible for permitting under this bill
  - b. the requirements for steam facilities would be the similar to those for positive emission facilities; the primary exception being that the population limitation would not apply
3. Provide for the siting of new electric generation facilities in high load areas, such as New York City to improve reliability
4. Reduce the required emission rate reduction to 50% for clean repowering of units
5. The 10% annual emission rate reduction requirement should not be limited to comparison with the repowered unit. The analysis should look at the older, dirtier generation displaced within the region by the new unit.
6. Increase the CO<sub>2</sub> emission limitation to 975 lb/MWh to permit the burning of oil for limited periods (up to 720 hours)
7. Other recommendations:
  - a. the requirement for use of non-potable water should not be applied to cogeneration and steam generation facilities; these facilities require clean water for steam production
  - b. the requirement for climate impact analysis should be limited to the CO<sub>2</sub> emissions of the proposed facility



THE CITY OF NEW YORK  
OFFICE OF THE MAYOR

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Director  
State Legislative Affairs

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Albany, New York 12210  
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**MEMORANDUM**

**TO:** Hon. Paul D. Tonko, Chair, Assembly Committee on Energy  
Hon. James W. Wright, Chair, Senate Committee on Energy and Telecommunications  
Legislative Conference Committee Members

**Cc:** Judith Enck, Deputy Secretary for the Environment  
Steven A. Mitnick, Assistant Secretary for Energy and Telecommunications  
Thomas C.C. Congdon, Special Assistant for Energy  
Gil Quiniones, New York City EDC  
Victoria Simon, New York City EDC

**RE:** Comments on Article X

**FROM:** Michelle L. Goldstein

**DATE:** June 6, 2007

This memo is respectfully submitted to the Legislative Conference Committee to provide comment on proposed legislation under Public Service Law, Article X. The City of New York has been advocating for the passage of a new power plant siting law since Article X expired on January 1, 2003. As noted in Mayor Bloomberg's letter of March 31, 2004 to then Governor Pataki, Senator Bruno and Speaker Silver (copy attached hereto), "While the current absence of an Article X siting procedure is only one cause of ...delay [in the development of new generating capacity in New York], it is one which you have perhaps the most direct and immediate means to address."

We would like to share with the Committee the salient issues with which the City is most concerned and urge you to reach a consensus on a workable siting process that will ensure a reliable energy supply while protecting the environment and promoting meaningful public involvement. We have reached out to various stakeholders and provided comment on the Governor's recent draft legislation. A copy of the Governor's bill and our comments are attached. The City also remains committed, as part of its long-term sustainability plan, to pursue energy conservation and demand-side management in concert with the Governor's and Legislature's programs.

Repowering

As stated in the City's recently released PlaNYC 2030, it is extremely important for the City to maximize existing power plant sites, either by building additional generation facilities within the existing site or modernizing the plant's technology. This "repowering" process can increase efficiency up to 40% and reduce greenhouse gas and other air emissions by replacing or reducing the use of aging facilities. Article X should establish an approval process which will encourage such repowering.

Specifically, we support the inclusion of an appropriate carbon dioxide emissions standard into Article X. The limit of 975 pounds per megawatt hour, proposed by the Governor and the Assembly, is appropriate for combined cycle baseload generation. In fact, this limit is more stringent than the standard of 1100 pounds per megawatt hour recently set by the California Energy Commission. For fast-starting simple cycle peakers, however, we recommend a separate standard of 1100 pounds per megawatt hour. These units are crucial because of the City's fluctuating power use. Our research tells us that such units will not be able to meet the 975 pounds per megawatt hour limit yet will be substantially cleaner and more efficient than the aging natural gas and oil peakers currently in use in the City. We believe both standards together will help to significantly mitigate carbon dioxide emissions. In addition, we recommend the allowance of offsets of up to 10% to help a facility reach these standards. The offsets should represent new reductions and be verifiable.

Further with respect to the carbon standards, we believe there must be an added incentive for co-generation plants. Utilizing waste steam for heating, cooling and/or industrial processes raises the efficiency of the units dramatically and reduces overall carbon emissions. California provides this incentive in the method of calculating compliance with the carbon dioxide emission limits. Therefore, we recommend, for the purposes of demonstrating compliance with the applicable emission rate for a co-generation unit, the electricity production in megawatt hours be the sum of the electricity produced and the useful thermal energy output expressed in megawatt hours.

#### Criteria for Granting Certification

Many have argued for additions to or clarification of the criteria used in granting or denying Article X certification to build a power plant. The following issues are of particular concern to the City:

- Article X should include a requirement for evaluating the cumulative environmental and health impact on the host community. In addition, environmental justice issues should be considered by determining whether a project places an additional burden on a community that already has a significant level of pollution generated within the community. We believe that State regulation or guidance is necessary for the proper conduct of these analyses.
- There should be a prohibition on the use of potable water for cooling unless there is a justification demonstrated as to why potable water should be used.
- As is already contained in all the currently proposed versions of Article X, a proposed project must be deemed consistent with applicable coastal zone management and local waterfront revitalization plans. Further, formally proposed or pending area-wide land-use plans, including zoning changes, should also be considered.

#### Representation of the City's Interests

Given the requirement of the Independent Systems Operator and the Energy Reliability Council that the City generate 80 percent of its power needs within the City, City government and residents have a particular interest in actively engaging in the siting process. Therefore, in selecting the two ad-hoc members of the siting board for City projects, we suggest that one from the community district in which the project is located and one resident of the City, not from the community district, be appointed. The selection process should include consultation with community groups and local elected officials.

There should also be explicit provisions in Article X requiring that the City be automatically notified of a project and served with all filings, and be made, statutorily, a party to all proceedings involving projects within the City or the City's watershed. We also continue to advocate for broad public outreach and availability of important documentation on the internet, with translation of narratives into Spanish and other languages that might be appropriate to the host community.

Thank you for considering the City's concerns regarding Article X and for your efforts in serving the State of New York. We hope that the Legislature will pass this important legislation this session.

Attachments

**COGENERATION/COMBINED HEAT AND POWER:  
A CARBON REDUCTION TECHNOLOGY THAT IS HERE NOW**

**James W. Bowen**

**Background:** Cogeneration, or Combined Heat and Power, as it is predominantly known outside the United States, is a mature technology in widespread commercial use. The benefits of cogeneration have always been economic, but with recent emphasis on the reduction of the carbon “footprint” of individuals, corporations, governmental and nonprofit entities, cogeneration has yet another rationale: it is a less carbon-intensive technology than almost anything that can be adopted today.

**How It Works:** In most applications, one or more natural gas turbine engines drive a generator shaft, which produces electricity. The exhaust of the turbine, essentially like a large jet engine, contains a great deal of heat. Some of the exhaust stream, rather than just being vented into the atmosphere, is diverted to a Heat Recovery Steam Generator, which heats water to a temperature far above the boiling point. The steam produced by the waste heat of the gas turbine can be used in industrial processes, building or district heating, pulp and paper manufacture, or refining and petrochemical processes, for example. Because the user gets steam from the HRSG, the user does not have to have a separate boiler. Thus, instead of a boiler and a power plant (which may be elsewhere on the grid), the user has only one cogeneration plant. Obviously, this is more efficient and economical of fuel. Note also that because the cogeneration plant is typically onsite, it is capable of serving the user as a source of emergency power during periods when the power grid is not operating.

**Carbon Footprint Reduction:** With increasing public and intergovernmental pressure to reduce carbon dioxide emissions and the recent ruling by a U.S. Circuit Court of Appeals that the Environmental Protection Agency cannot decline to regulate carbon dioxide as a pollutant, many companies, nonprofit and educational institutions, and government agencies are seeking to reduce the amount of carbon dioxide emissions for which they are responsible.

In many locations in the United States, the dominant fuel for power production is coal, which produces a high quantity of carbon dioxide for each watt generated. Fuel oil, while less common, also is a high-carbon fuel source. The supply of zero-carbon hydroelectric, wind, and nuclear electricity is increasing, but new generating capacity is expensive and is not going to displace coal in the foreseeable future. Carbon-friendly natural gas provides another alternative; where it can substitute for coal in many power generation applications.

For the user who buys power as delivered off the electric grid, the resulting electricity is generated with a mix of all of the above sources: coal, fuel oil, hydro, nuclear, gas, and wind. On average, as coal is the dominant fuel for power, the portfolio in most locations will tend to have a relatively high level of carbon. In comparison, a new gas plant will tend to produce less carbon dioxide per watt of electricity than the average of the

portfolio of plants available on the grid. In most places in the country, a new gas-fired power plant alone would reduce the user's carbon footprint.

When that gas plant is combined with a HRSG, however, then the carbon savings become even more dramatic. Because the user does not have to run a boiler when steam is being provided from the gas turbine's exhaust, ALL of the carbon dioxide that would have been produced by burning fuel to boil water in traditional boilers has been eliminated.

Through the use of cogeneration, the user has not only increased its energy efficiency, it has dramatically reduced its carbon footprint.

The technological alternatives such as solar, tidal, and geothermal power production currently provide far less than 1% of the nation's power needs, and because of their high capital cost, are likely to remain niche sources of power for the foreseeable future. Wind is an increasingly important and useful technology, but it is intermittent in many instances and is not cost-competitive, depending upon public subsidies and mandatory renewable portfolio standards to create a market. New nuclear and hydroelectric plants, due to their capital-intensive and mega-project nature, are not likely to provide much additional power within the next decade. Thus, for the large power and heat user desiring to reduce its carbon footprint, the most practical alternative that is available today is natural gas-fired cogeneration.

**Summary:** In almost all cases, cogeneration provides a "win-win" in terms of cost, efficiency, reliability, and carbon footprint reduction. It is a smart environmental technology for power and heat production that is here now.

June 12, 2007

*James Bowen is President of Momentum Development Corporation, a Houston-based firm that develops energy projects and provides advisory and management services. Momentum Development Corporation, 5100 Westheimer, Suite 200, Houston, Texas 77056; +1 713 968 9292; [jbowen@momentumcompanies.com](mailto:jbowen@momentumcompanies.com)*