

## **SECTION 2.1**

# **PROMOTING ENERGY INDUSTRY COMPETITION**

## **INTRODUCTION**

The 1994 State Energy Plan introduced the potential for energy competition in New York State, and the 1998 State Energy Plan identified New York's vision and the State's actions and plans for achieving that vision. This 2002 State Energy Plan (Energy Plan) reflects on the achievements made to date in opening energy markets to greater competition and considers whether any changes should be made in the State's vision for the future. The pursuit of effective competition, wherever practicable, in the provision of natural gas and electricity services is the policy of the State of New York. Such competition has the potential to reduce energy costs over the long term, increase customer choices and satisfaction, provide economic development advantages, enhance system reliability, promote technological changes and improvements, and improve environmental quality.

In the wake of recent developments in energy markets, particularly in the western region of the country, many people question whether customers are better off today than they were under full regulation of utility services. To answer that question, several key areas should be considered: price, reliability; economic development; adequacy of supply and delivery capability; and environmental impact. Each of these were discussed in the 1998 Energy Plan and findings were made. This section of the Energy Plan will discuss those areas, relating the 1998 findings to current conditions, and then will present and discuss several specific issues that are currently facing New Yorkers. The Electricity and Natural Gas Resource Assessments, found elsewhere in this Energy Plan, provide a more detailed review of the state of the competitive markets, as well as the state of the infrastructures available to support those markets.

## **STATUS OF COMPETITION**

### **Price**

The 1998 State Energy Plan noted that the natural gas and electric industries were in transition to retail competition. Prior to reaching the end-state, however, the 1998 State Energy Plan concluded that customers would still experience reduced prices because of multi-year rate plans that had been authorized by the New York State Public Service Commission (PSC) and because customers would now begin to have the ability

With regard to the siting of major electric facilities under Article X of New York's Public Service Law (PSL), the 1998 State Energy Plan held that certification may be premised on a determination that the proposed facilities would promote or contribute to a competitive market for wholesale or retail electricity. As of May 1, 2002, twenty four major electric power plant proposals subject to Article X have been announced formally to date, and 18 formal applications have been filed (one was subsequently withdrawn). Seven of those proposals have been approved (one of the seven has recently been canceled), and four projects are now under construction. With regard to natural gas, additional delivery system facilities are needed, and several proposals are pending before the Federal Energy Regulatory Commission (FERC) or have recently been authorized. The New York State Energy Research and Development Authority (NYSERDA) and the NYISO initiated a study to assess the interrelationships between natural gas and electricity, as well as the interrelationship with petroleum products. The results of that study to date are discussed below (see "Natural Gas and Electricity Interrelationships").

### **Environmental Impacts**

The 1998 State Energy Plan maintained that increased competition in the energy markets would not have an undue adverse impact on the environment, as compared with traditional industry regulation, because environmental oversight would continue and mitigation measures would be implemented as necessary. Most of the Article X applications filed to date are for efficient, gas-fired combined cycle generation units; several are simple cycle installations. All use state-of-the-art clean technology, and several will result in the repowering of existing, inefficient, and more polluting generation. Modeling on these proposed power plants show expected reductions in air pollution in the State through the displacement of older, more polluting, electricity generation, and the analyses performed for the Electricity Resource Assessment in this Energy Plan support these results. Equally important are new programs designed to reduce customer energy demand, increase the efficiency of generation technologies, and promote indigenous and renewable resource development.

All Article X applicants and non-Article X power project developers must apply for applicable air and water quality permits from the New York State Department of Environmental Conservation (DEC). The permits are based on compliance with all applicable State and federal air and water quality regulations and requirements, including Prevention of Significant Deterioration (PSD), New Source Review (NSR), and Maximum Achievable Control Technology (MACT). Many Article X applicants have proposed air-cooled condensers (dry cooling), which use very little water compared to wet evaporative cooling or once-through cooling technologies. Additionally, depending

on site locations, other environmental mitigation measures have been imposed by the Article X Siting Boards.

The events of the past four years continue to support the validity of the 1998 State Energy Plan findings. In all the key areas (price, reliability, economic development, adequacy, and environmental impact), the evidence shows that competition has been beneficial, but greater benefits can be achieved. The transition to competitive energy markets continues, and the State must remain ready to identify and resolve issues as they may arise.

## **COMPETITIVE ISSUES FOR THE FUTURE**

The Electricity and other Resource Assessments presented in this Energy Plan provide assessments of both the state of the energy infrastructure and the markets supported by this infrastructure. The Assessments identify issues and barriers that confront the implementation of competitive markets and present various options that might be available to address those issues or overcome the barriers. With the background provided by the Assessments, this section addresses in more detail several critical issues affecting competition.

### **Policy Framework**

The rigid, statutory-based approaches used for restructuring the utility industries in other regions of the country have led to significant problems and caused some advocates of competition to reevaluate their positions. Consequently, several states have retreated to “wait and see” positions, and some have even considered reversing course. In contrast, New York State’s flexible approach to restructuring is designed to allow adjustments to be made as new policies are implemented and competitive barriers are revealed.

For example, most stakeholders agree that a primary barrier to effective wholesale competition in the energy industries is the lack of adequate resources in certain areas where they are needed most. This translates to a need for additional supply resources (either commodity or delivery resources) and demand-reduction techniques. The lack of adequate natural gas delivery and storage infrastructure in some areas constrains the market, which, in turn, leads to more volatile prices. For electricity, additions to the delivery system and/or added generation and reduced demand in certain areas of the State are needed. In response, the State has advocated increasing gas and

Increased public participation in the Article X siting process through creation of an Office of Public Advisor to assist and advise interested parties and members of the public regarding participation in the siting and certification processes for major electric generating facilities. State agencies should continue their pre-application information programs and training workshops for prospective applicants and affected communities.

2. The effectiveness of current statutory language providing for intervenor funding, giving consideration to providing funding at the time of project preliminary scoping and allowing broader use of intervenor funding.
3. The appropriateness of developing specific procedures with respect to the expansion, modification, or repowering of existing major generating facilities.
4. Additional modifications and measures to Article X's procedural requirements that would enable the Siting Board to streamline its review where interested parties, including affected community groups, have reached consensus as to the specific issues presented by an Article X application.
5. Adding the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation as statutory parties to Article X proceedings in order to coordinate relevant permit requirements for Article X applications.

### **Natural Gas and Electricity Interrelationships**

Natural gas is the fuel of choice for new power generation projects (see Electricity Resource Assessment). Plans to build about 15,000 MW of new gas-fired generation capacity have been announced, with about 70% of these to be located in an area extending from Orange and Rockland counties through and including Long Island. It is not clear which and how many of these plants actually will be built or when they will be built. In addition, the sponsors of some of these proposed plants are seeking permits to burn oil as an alternate fuel and have proposed the installation of oil storage facilities. Other proposed generators would be natural gas-only plants. These new plants will compete against other generators and may well displace natural gas now used in older, less efficient power plants.

The natural gas delivery capacity that exists today was built to serve the winter peak needs of core (residential, commercial, and industrial) customers. In essence, it is now operating at maximum capacity during peak periods. Some project sponsors have signed agreements for capacity on proposed pipeline projects, at least to meet some of their requirements. Others, however, have not and plan to rely on wholesale marketers to

provide them with natural gas. Some wholesale marketers have contracted for capacity on proposed new pipeline expansion projects, but that capacity would not necessarily be dedicated to particular power plants.

NYSERDA and the NYISO initiated a study of the interrelationships between the electricity and natural gas systems in New York. Through integrated modeling of the natural gas pipeline and electric generation systems, the study analyzed the level of gas and oil use for electricity generation under a variety of pipeline and electricity generation expansion scenarios. Ongoing analysis is examining the interactions of the gas and electric system in contingency situations (*e.g.*, pipeline or compressor station outages, electric generator failures and system re-dispatch). See the "Natural Gas Assessment."

As a starting point, for the year 2002, the analysis assumes that electric generation and natural gas system expansion projects currently under construction, or expected to be in service throughout 2003, are completed. This includes a net increase in electric generating capacity of 527 MW and an increase in natural gas pipeline capacity of 465 MDT/D (see Natural Gas Assessment for details).

The study focused on the downstate area where much of the proposed increase in electricity generation capacity would be located and the ability of various increases in gas pipeline capacity to meet electricity generation needs. The study did not evaluate particular pipeline projects but instead examined post-2003 capacity addition of up to 800 MDT/D.

The study's overall findings are that:

1. If no post-2003 pipeline expansion projects are built, the existing gas and oil systems will be adequate to meet all electricity generation scenarios. Additional pipeline capacity, however, would benefit New York through reduced air emissions and enhanced contingency protection;
2. Pipeline capacity additions of between 300 MDT per day and 800 MDT per day would provide additional benefits to the electricity and natural gas systems, including enabling the use of larger quantities of cleaner-burning natural gas and providing better contingency protections.<sup>4</sup> Nonetheless, the more natural gas pipeline capacity built and used to serve electricity generation, the more dependent the electricity system is on natural gas availability and the more exposed it is to natural gas price variation.

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<sup>4</sup> Work is continuing to assess the impact on the electricity and natural gas systems resulting from additional contingencies.

periods. The competitive electricity generation market is moving toward a greater dependency on natural gas. Such a greater dependency on natural gas suggests a need to expand the natural gas infrastructure; use resources that will reduce our dependency on natural gas, such as greater use of renewable energy resources and advanced coal technologies; implement further electricity demand reduction techniques; and continue safe operation of nuclear power plants.

The U.S. Congress can assist New York by repealing the mandatory purchase of power from qualified generating facilities required of utilities under the PURPA and by establishing national mandatory reliability rules for the bulk power system (while allowing states to continue to set more rigorous standards when it is in the public interest).