

# **The Policies of Power: Energy Planning for New York's Future**

*Recommendations from the  
Independent Power Producers of New York, Inc.*

*November 2008*



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## Background

On April 9, 2008, Governor David Paterson issued Executive Order No. 2, thereby establishing a process to develop a State Energy Plan (“Energy Plan”). A State Energy Planning Board (“Energy Board”) was created and tasked with the development of the Energy Plan. On August 7, 2008, the Energy Board released a Final Scope of the 2009 New York State Energy Plan. A draft Energy Plan is scheduled to be released no later than March 31, 2009, to be followed by a comment period and a release of a final Energy Plan no later than June 30, 2009.

During the development of the Energy Plan, “The Board shall consult with and seek to maximize input from State departments, agencies and public authorities, as well as private and public entities, including the New York Power Authority, the Long Island Power Authority, and the New York Independent System Operator, with respect to the development of the Energy Plan.”<sup>1</sup> Although no official process or timeline has been established to submit comments to the Energy Board prior to the release of the draft Energy Plan, it has been stated often by those tasked with drafting the plan that public input is welcome.

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<sup>1</sup> Governor David Paterson, Executive Order No. 2, April 2009

## Executive Summary/List of Recommendations

The Independent Power Producers of New York, Inc. (“IPPNY”) is a trade association representing companies involved in the development of electric generating facilities; the generation, sale, and marketing of electric power; and the development of natural gas facilities in the state of New York. IPPNY members generate over 75 percent of New York's electricity using a wide variety of technologies and fuels, including hydro, nuclear, wind, waste, coal, natural gas, oil, and biomass. New York's independent power producers have invested over \$10 billion to purchase, construct, and operate their facilities, and well over \$30 million in their communities located throughout New York State. Additionally, New York's generators pay annual taxes of nearly \$300 million and employ more than 10,000 individuals across the state. This document contains information and recommendations garnered from IPPNY's broad membership.<sup>2</sup>

Although several topics fall under the umbrella of an Energy Plan, IPPNY's comments will focus primarily on the following, as described in the Final Scope of 2009 New York State Energy Plan:

As is evident from the Executive Order, the 2009 NYS Energy Plan is intended to identify and assess critical factors that will affect the State's ability to meet its projected future energy needs, including its ability to sustain an environment capable of attracting reasonably priced capital to support necessary investments. Maintaining the adequacy and reliability of critical systems and infrastructure will be a primary focus of the Plan.

The ongoing evolution of New York State's competitive wholesale energy markets is essential for continuing to meet New York's energy needs in the future. This evolution is vitally dependent upon regulatory certainty and consistency, as an ever-changing or unpredictable regulatory landscape stifles the development of any market. New York is to be applauded for its efforts to develop a blueprint, which, ideally, will provide a clear indication of the tenor, scope, and direction of policies affecting the energy industry to come. To that end, IPPNY has outlined recommendations on a broad spectrum of energy-related issues in this White Paper.

### **Recommendations:**

- 1) The Energy Plan should strongly re-affirm a commitment to the competitive market model as the most appropriate approach to satisfy the long-term needs for reliability of energy supply at the lowest possible cost, for the benefit of consumers in New York State. Additionally, the Energy Plan should advance new policies only after full consideration has been given to the potential impact that such policies may have on New York's competitive markets. The importance of

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<sup>2</sup> All of the views expressed in these comments do not necessarily represent the positions of each of IPPNY's members. In addition, nothing in these comments should be deemed to waive any rights that IPPNY or any of its members may have to challenge the procedural or substantive legality of the State Energy Plan or any element thereof.

regulatory certainty cannot be overstated in terms of attracting needed investment to New York.

- 2) Sound energy policy should reflect a balance that encourages adequate supplies of three inter-related elements – generation, transmission and distribution, and energy efficiency and demand response. Sound regulatory policy should be characterized by a balanced approach to pursuing the sometimes conflicting goals of efficient and reliable electric markets, environmental stewardship, and maintaining and improving the state’s economic health.
- 3) Fuel diversity is an essential element of a reliable generation portfolio, and New York’s Energy Plan should promote policies to maintain and expand our diverse generation mix. The development of a comprehensive and efficient, fuel-neutral power generating facility siting statute is one of the critical components in this effort.
- 4) Additionally, fuel-specific policies will promote fuel diversity:
  - a. **Natural Gas** – Adequate and diverse sources of supply and improved infrastructure are needed to the extent that New York’s reliance on natural gas as a fuel source to power generating facilities increases. New natural gas pipelines or expansions of existing pipelines from historical sources of supply are needed, as is the monitoring of new sources of supply. Liquefied natural gas is one technology that can provide access to additional sources of supply.
  - b. **Coal** – The United States has an ample supply of coal, which is a relatively less expensive fuel. Existing economic and environmentally compliant coal facilities should remain part of the state’s generation portfolio. Furthermore, as carbon dioxide targeted environmental initiatives move forward, the development of carbon capture and sequestration technology becomes more important. Funds collected under the Regional Greenhouse Gas Initiative should be used, in part, for research and development of such technologies.
  - c. **Nuclear** – Nuclear energy provides reliable, virtually emission-free baseload power, and, therefore, it is imperative that the Energy Plan supports the ongoing operation of the state’s existing nuclear facilities, in addition to encouraging the development of additional nuclear resources.
  - d. **Renewable Energy** – The state’s Renewable Portfolio Standard (RPS) program has provided incentives to successfully advance renewable projects. Therefore, the Energy Plan should call for full funding of the RPS and call for the expansion of the program to include existing, non-governmental merchant hydroelectric facilities and energy-from-waste facilities as eligible for RPS incentives.

- 5) To ensure the continued development of competitive wholesale markets, the Energy Plan should recommend further exploration by the Public Service Commission (“PSC”) and the New York Independent System Operator (“NYISO”) into the establishment of a properly structured forward capacity market approved by the Federal Energy Regulatory Commission (“FERC”). Absent the implementation of such a forward capacity market, the use of competitively procured long-term contracts by and between regulated utilities or load serving entities and merchant parties to meet load should be explored. Both measures may be practical tools to aid in the financing of needed future projects.
- 6) New York’s Energy Plan should set a clear, long-range direction that balances energy policy with environmental and economic development initiatives. To best prepare future environmental policy, it is vital that the Energy Plan assess the cumulative impacts that all existing and pending environmental regulations may have on all aspects of energy policy, including cost, reliability, and fuel diversity, as well as areas of economic development. New York should be engaged in advocating for properly structured national emission reduction programs in lieu of state or regional efforts, which create geographic, economic and investment imbalances.
- 7) The New York Power Authority and the Long Island Power Authority should utilize requests for proposals (“RFPs”) in lieu of self-supply to competitively procure power from the market to satisfy their energy needs, to the extent that a forward capacity market is not adopted for New York. Neither entity should be encouraged, or indeed permitted, to engage in construction of infrastructure, unless it has been clearly demonstrated that a critical energy need cannot be met through the investment of private resources.
- 8) Empire Zone benefits are an important method of encouraging businesses to locate and expand in New York and should continue to be offered as incentives for the construction and/or expansion of all types of generating facilities.
- 9) A robust and dependable transmission and distribution system is essential for the continued reliable operation of the state’s power grid and for the addition of new generation. New York State should evaluate proposed transmission projects on a case-by-case basis, consistent with the cost allocation and recovery mechanisms contained in the NYISO’s FERC-approved tariff.
- 10) Energy efficiency and demand response (“EE and DR”) are valuable tools, which can help meet load under peak conditions and, when properly targeted, can even reduce the need for major infrastructure investment. However, due to the relatively long lead times for new construction, New York needs to proceed cautiously and avoid over-reliance on EE and DR as a long-term replacement for iron in the ground. In order to avoid reliability issues in the future arising from a supply/load imbalance, these resources must be properly targeted, measured, and verified.

IPPNY appreciates the opportunity provided to us and other stakeholders to submit input to members of the State Energy Planning Board, as you develop the 2009 New York State Energy Plan. Sound energy policy in New York State is vital for the future of our state, and the policies set forth in the Energy Plan will help set the course for how New York will overcome its energy, economic, and environmental challenges in years to come. We offer ourselves as a resource going forward in this planning process.

## Discussion

Specific recommendations are made by this document in regards to individual policies; however, there are two broader themes that IPPNY contends must be adhered to as an Energy Plan is developed.

### **First:**

**New York State must maintain and enhance its commitment to policies that foster the continued evolution and implementation of competitive energy markets.**

In fact, previous State Energy Plans have endorsed competitive electric markets and recognized the leadership role that New York has attained on an international level in the architecture of these markets. In 2002, the State Planning Board proclaimed, “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.”<sup>3</sup> IPPNY contends that this statement remains applicable today.

### **Second:**

**New York’s Energy Plan must acknowledge that one of the critical underpinnings of robust, competitive markets is regulatory certainty and consistency.**

Minimizing regulatory uncertainty and unpredictability will reduce risk and attract investment at lower costs. The availability of capital for investment is a critical factor for the success of any industry that is capital-intensive in nature; the energy industry is no exception. Generating facility upgrades cost in the millions of dollars, and the development and construction of new, or repowering of existing, power generating facilities costs hundreds of millions, if not billions, of dollars. Investment in such facilities comes with the inherent risk of vying in competitive wholesale energy markets, a risk borne by investors rather than ratepayers. Investors must weigh the merits of each project against those risks and make an informed decision about whether or not such an investment is prudent. However, the ability to make an informed decision is diminished by an ever-changing regulatory landscape, when shifts in policy and the resulting changes in regulations can make otherwise sound investments uneconomic almost overnight. As has been made even more apparent recently, there is limited capital in the world, in this country, and in this region. In the face of this changed financial landscape, we must foster – not thwart – commitment by those looking to invest in New York State. Therefore, the Energy Plan should develop a blueprint that sets the appropriate tone and the direction for policies going forward, providing assurance that viable projects today are not stripped of such viability tomorrow.

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<sup>3</sup> 2002 State Energy Plan and Final Environmental Impact Statement, June 2002

# Competitive Wholesale Energy Markets Benefit New York State

In 1996, the New York State Public Service Commission issued its seminal order setting forth its policy on competitive electricity markets and declaring its intent to encourage competition wherever feasible.<sup>4</sup> The PSC found that introducing competition to the electric industry in New York was expected to reduce rates, spur innovation and efficiency, increase customer choice, and encourage economic growth. The results from introducing competition into New York's energy markets have justified making the transition.

One of the most important benefits of well-functioning competitive markets is that they provide the appropriate incentives for efficient investment and operational decisions. The lack of an ensured regulated return, which is central to competitive markets, is a strong inducement that drives innovation and dictates that generation resources are operated efficiently. Unlike the regulated paradigm, competition provides the price signals to promote an efficient level of investment in appropriate locations. Though only a little over a decade old, competitive markets have bolstered system reliability, increased generator availability and efficiency, retained needed existing generating facilities and, to some degree, encouraged the development of new generation. All of these benefits are critically important and show that New York's energy needs can continue to be satisfied by electricity producers in the future.

In fact, generator availability has reached an all time high in New York under the competitive market design. Impressively, average generating facility availability increased from 87.5 percent (1992–1999) to 94.4 percent (2000–2007).<sup>5</sup> This increased availability of existing facilities is equivalent to adding 2,400 megawatts (“MW”) – four medium-sized generating facilities – to the grid. The importance of generator availability cannot be overstated, especially during times of peak demand. It is essential to note that in 2006, when electricity demand records were set three times in rapid succession in one summer, independent power producers continued to operate their facilities with unprecedented efficiency to meet the needs of consumers.

Not only are consumers' needs being met reliably, the cost of electricity, when adjusted for inflation, has been trending lower. According to the New York State Department of Public Service, the total real cost of electricity for the typical residential customer in New York dropped by almost 16 percent between 1996 and 2004.<sup>6</sup> Similar reductions were experienced by commercial and industrial customers. Correspondingly, despite upward pressure on prices from record fuel prices, continued increased usage and additional government regulation, wholesale power prices remained stable on an inflation-adjusted basis. Another study

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<sup>4</sup> Cases 94-E-0952 *et al.*, *In the Matter of Competitive Opportunities Regarding Electric Service*, Opinion and Order Regarding Competitive Opportunities for Electric Service, Opinion 96-12, May 20, 1996

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<sup>5</sup> “New York’s Energy Future,” NYISO President and CEO Stephen Whitely, Presented at IPPNY Fall Conference, September 2008  
[http://www.ippny.org/files/pdfs/Fall08/SWhitley\\_Fal12008.pdf](http://www.ippny.org/files/pdfs/Fall08/SWhitley_Fal12008.pdf)

<sup>6</sup> “Staff Report on the State of Competitive Energy Markets: Progress To Date and Future Opportunities,” New York State Department of Public Service, March 2006

found that "...comparing changes in consolidation of control areas within New York, combined with reduced outage rates for nuclear and fossil generating units, results in [savings for New York consumers] between \$100 and \$200 million/year..."<sup>7</sup>

These natural results occur when competition is introduced into an industry that previously had little incentive to become more efficient and cost-effective. An equally compelling benefit of competition is that it shifts the risk of poor investment and operational decisions from the consumer to the company's shareholders. Under the regulated paradigm, investment decisions largely were rewarded with both a return of, and on, the investment. In the competitive arena, merchant companies internalize fully risks associated with recovering a return of, and on, its investment. Thus, in the event of poor investment decisions, consumers are no longer subjected to the costs of uneconomic resources through utility rates.<sup>8</sup>

Independent power producers in New York clearly have been willing to take the risk of

<sup>7</sup> "A Cost-Benefit Analysis of the New York Independent System Operator, The Initial Years," The Analysis Group, March 2007

<sup>8</sup> Ratepayers would not be required to pay the more than \$350 million of cost overruns incurred by Consolidated Edison Company of New York, Inc. ("Con Edison") in its construction of its East River Repowering Project ("ERRP"), had the project been developed by an independent power producer. See Case 05-S-1376, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc., for Steam Service*, Direct Testimony of Con Edison witness Victor Gonnella, Exhibit VG-2 (testifying that at the time Con Edison submitted its Article X application, Con Edison estimated the cost of the ERRP to be \$406 million) and Order Determining Revenue Requirement and Rate Design (September 22, 2006) at 6 (capping cost recovery for ERRP at \$788.3 million)

investment. Merchant companies have spent billions of dollars to acquire generating facilities from the investor-owned utilities through protocols that were designed to maximize auction proceeds for the benefit of New York's consumers. In addition, substantial new generation has been built in New York State since 2000, with more than 80 percent of it sited where demand is greatest. The trend experienced here in New York has mirrored the national trend.

According to an October 2007 study,<sup>9</sup>

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*"...private investors, not consumers, have borne the financial risk of the new generating capacity..."*

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between 1996 and 2004, roughly 74 percent of electricity capacity additions nationwide were made by non-utility entities who are not

assured full cost recovery through rate based, cost-plus contracts. A conservative estimate of the capital costs of the capacity added nationally between 2000 and 2007 is approximately \$73 billion. As a result, private investors, not consumers, have borne the financial risk of the new generating capacity built in many parts of the country.

The importance of this shift in risk cannot be overstated. As shown in the Figure 1 on page 14,<sup>10</sup> cost overruns from utility-built projects are not unusual and continue to this day. Most often, consumers are forced to foot this bill, which has amounted to billions of dollars.

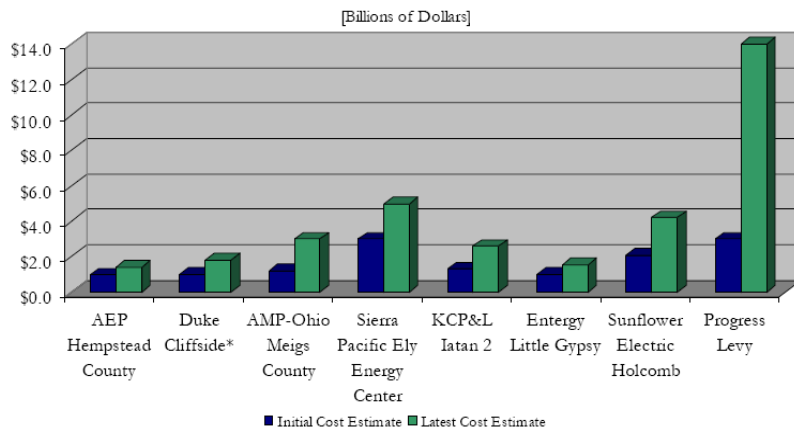
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<sup>9</sup> "Decoding Developments in Today's Electric Industry — Ten Points in the Prism," The Analysis Group, October 2007

<sup>10</sup> "POWERFACT: Rising Utility Construction Costs in Regulated States Place Consumers at Risk," Electric Power Supply Association, April 2008



**Figure 1. Utility Construction Cost Estimate Increases: Original vs. Latest Estimates**

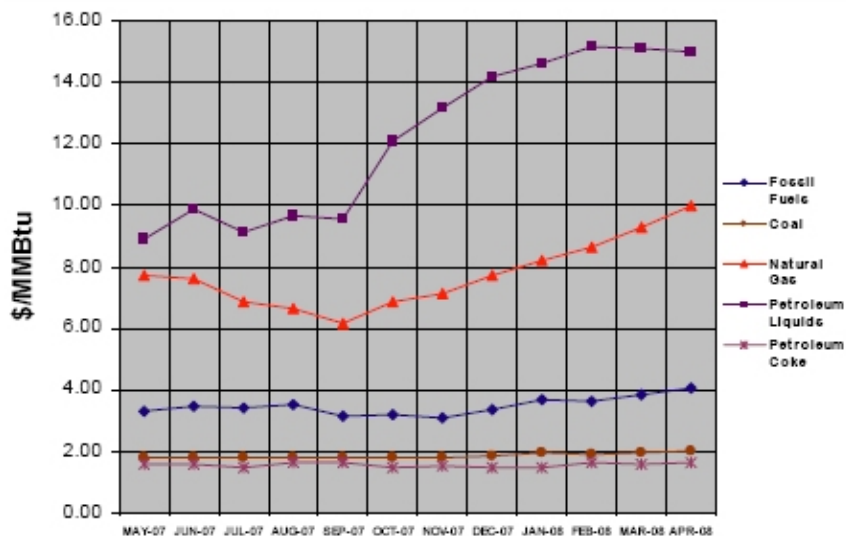


[\* Note: Duke Cliffside estimates are shown for the one 800-MW unit granted approval, not the two 800-MW units originally proposed]

In any market structure, several factors affect the cost to produce electricity that are out of the control of the consumer, the utility, and the independent power producer. The price of fuel is the most prominent factor in rising energy prices across the country (see Figure 2 below), and New York State is not immune to these effects. Natural

gas prices play a particularly important role in this state's energy market. Over 60 percent of the state's installed capacity burns one or both of these fuels. The prices of oil and gas have risen at stunning rates over the past decade and are unlikely to return to previous levels."<sup>11</sup> In addition, with the exception of renewable energy projects, proposed generation projects have been

**Figure 2. Electric Power Industry Fuel Costs May 2007 through April 2008 - EIA**



gas prices play a particularly important role in this state's energy market. According to the NYISO, "New York State's generation supply has been, and remains, heavily

predominantly gas-fired units. As such, this

<sup>11</sup> Power Trends 2008, New York Independent System Operator

reliance on natural gas will continue for, and may increase in, the foreseeable future. However, it is not natural gas only that has seen an increase in price. Comparing January through April 2008 to the same period last year, the prices were up 21.5 percent for gas, 81.1 percent for petroleum liquids, and 9.7 percent for coal.<sup>12</sup>

Additionally, the price for all classes of commodities important to electricity infrastructure has been increasing rapidly. According to the Brattle Group,<sup>13</sup> over the past ten years the cost of steel products has increased 70 percent, copper 300 percent, aluminum 70 percent, cement 40 percent and electric wire nearly 60 percent. As a result, the construction cost index for a range of new generating facilities has increased by 130 percent between 2000 and 2007.<sup>14</sup> This rapid cost increase has continued in 2008.

Beyond input costs, environmental compliance is significantly increasing the cost of operation and construction, most notably for coal-fired facilities, and has become a driving factor with respect to the type of facilities that will be constructed as we go forward. Meeting existing clean air regulations is expected to cost an additional \$2.7 billion a year in 2010 and \$4.4 billion in 2015.<sup>15</sup> This total is before taking into account the recently adopted Regional Greenhouse Gas Initiative (“RGGI”) and the potential for federal carbon requirement,

which could be enacted in the next few years.

Despite these overwhelming challenges, independent power producers continue to own, operate, and develop generating facilities, and they are doing so better than ever before. Competition has spurred greater efficiencies, funded by investors, rather than consumers. Indeed, competitive market structures motivate power producers to undertake investments and improvements that lead to productivity gains, and many of the nation’s generating facilities now are operated much more efficiently than in the past. Just as in any competitive market, market signals embedded in the competitive wholesale markets in New York have created incentives for producers to undertake needed investments and creative improvements in operating practices to achieve such cost savings.

Generation divestiture combined with competitive conditions has led to operational improvements in existing facilities that in one way or another have reduced their operating costs. According to a study by the Economic Analysis Group (“EAG,” located within the U.S. Department of Justice’s Antitrust Division), “There is now substantial evidence that, in states that have restructured, generating firms have lowered their costs and improved their operating performance... Greater efficiency and lower costs enhance total economic welfare, provide investment incentives and save on scarce input resources.”<sup>16</sup> These improvements include: increases in the efficiency of fuel-consumption (i.e. heat rates) of fossil fuel-fired facilities; decreases in the length of refueling outages; lower operations and maintenance expenses; and

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<sup>12</sup> Electric Power Monthly, Energy Information Administration, August 2008

<sup>13</sup> “Transforming America’s Power Industry: The Investment Challenge, Preliminary Findings,” The Brattle Group, April 21, 2008

<sup>14</sup> IHS Inc. and Cambridge Energy Research Associates, “Power Capital Costs Index,” February 14, 2008

<sup>15</sup> “Decoding Developments in Today’s Electric Industry – Ten Points in the Prism,” The Analysis Group, October 2007

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<sup>16</sup> “Electricity Restructuring: What Has Worked, What Has Not, and What is Next,” Jeff Lien, Economic Analysis Group, April 2008

decreases in labor and other non-fuel operations and maintenance costs across all facilities. Improvements that increase generator availability are particularly valuable because they increase the quantity of power produced by less-costly generating facilities and have limited the need to bring additional new facilities on line to meet the same load levels.

Another strong attribute of restructured markets is that they have improved the efficiency by which facilities are “dispatched” (i.e., turned on and off) to meet consumer demand. In principle, all grid operators attempt to dispatch the least-costly mix of generating facilities to meet consumer load. Restructuring has increased the efficiency of these decisions in a number of ways. It has facilitated the increased “geography” of dispatch decisions, which allows costs to decline by using lower-cost resources in one region to displace higher-cost power resources in another. The EAG study also found that “[Independent System Operator] markets produce spot prices that more clearly reflect the cost and value of consumption and production than the pricing mechanisms that existed prior to restructuring. ISO pricing and dispatch generally ensure that when the transmission network allows it, lower cost generators will run before higher cost generators.” The result of geographic consolidation in New York, through state of the art dispatch and control of the power system, allows lower cost generation resources to take advantage of minute-by-minute increases and decreases of reliability margins on the transmission system. This fact, in addition to the impact of reduced outage rates for nuclear and fossil fuel units, results in benefits of between \$100 and \$200 million per year, which is roughly five percent of the system-

wide production and fixed operation and maintenance costs.<sup>17</sup>

These efficiencies also bode well for the environment. Adding newer, more efficient power production technology and dispatching the system more efficiently has led to reductions in air emissions from generating facilities. In addition to the environmental benefits associated with efficiency, competitive markets also have allowed renewable energy to flourish.<sup>18</sup> According to the American Wind Energy Association (“AWEA”), the development of renewable energy facilities is thriving under competition. In addition to the facilities already on line, eighty-three wind-powered generation projects are currently under construction nationally, totaling just over 8,500 MW. These projects are expected to be completed this year or in early 2009. According to AWEA, of the wind generation projects currently under construction, 7,944 MW (93 percent) are being developed by competitive suppliers, while 7,841 MW (92 percent) are being constructed in regions that have organized wholesale electricity markets. Here in New York State, over 700 MW of wind generation capacity has been incorporated into the grid, with over 7,000 MW worth of projects in the development queue. More renewable projects have been developed in

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<sup>17</sup> “Decoding Developments in Today’s Electric Industry — Ten Points in the Prism,” The Analysis Group, October 2007

<sup>18</sup> “Whereas wind companies are developing projects both in areas with regional wholesale competitive market structures and those without; and Whereas development has proven to be easier in areas with competitive wholesale electricity markets and this fact is confirmed by studies and experiences in Europe and the US... The AWEA board ... supports the preservation and expansion of competitive regional wholesale electricity markets,” American Wind Energy Association Board of Directors Resolution, January 2008

Regional Transmission Organization (“RTO”)-operated markets, due to the open access transmission policies that enable suppliers to obtain economical transmission service, the visibility of prices by location and time of day, and the ability to sell into spot markets and/or to multiple buyers.

## Meeting New York's Future Energy Needs

To date, due to the ongoing development of New York's wholesale markets, market signals have retained needed existing facilities and supported the development of demand response programs. As a result, the market is providing the resources that are necessary to meet load for the near future. There are, however, significant impending capacity needs. It can take several years to design, permit, and build new facilities needed to maintain reliability. In order to maintain the system's long-term reliability, new facilities must be readily available or under development to meet future needs.

The NYISO, in conjunction with stakeholders in the New York market, utilizes a process to identify long-term bulk power system reliability needs and how those needs will be met. This process, called the Comprehensive Reliability Planning Process ("CRPP"), begins with a Reliability Needs Assessment ("RNA"), which determines the state's reliability needs over a 10-year planning period, based on the forecast demand for electricity and projected system conditions. When needs are identified, the second part begins with the request for solutions, with the expectation that Market-Based Solutions will come forward to meet the identified needs. The NYISO then evaluates all proposed solutions to determine whether they will be sufficient to meet the identified reliability needs. Finally, a Comprehensive Reliability Plan ("CRP") is developed, setting forth the facilities and schedule that are expected to be implemented to meet those needs. Relating to the Energy Plan, IPPNY believes that the NYISO's planning processes to evaluate state energy needs and solutions should continue to be relied upon as we go forward.

The 2008 RNA<sup>19</sup> reported that an equivalent of 500 MW in Zone J (New York City), or a total of 750 MW with either 250 MW each in Zones F (Capital), G (Hudson Valley, Millwood, or Dunwoodie), and J or 250 MW in Zone G and 500 MW in Zone J is required to meet anticipated power needs in 2012. By 2017, the equivalent of 2,750 MW of resources should be available to the state's bulk electricity grid to accommodate the anticipated retirement of some existing capacity and increased electricity demand, so that federally mandated reliability guidelines are met. About half of those megawatts should be located in the southeastern part of the state, according to the report.

The most recently completed CRP,<sup>20</sup> issued in July of this year, indicated that the market has responded with project proposals to meet identified reliability needs. That response is yet another indication of the willingness of independent power producers to assume the business risks associated with the development and construction of projects that will satisfy the energy needs of New York in the future. Certain regulatory risks, however, continue to cause uncertainty, and steps must be taken now to provide certainty with respect to these risks, thereby increasing the likelihood of successful development of new merchant resources.

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<sup>19</sup> "2008 Reliability Needs Assessment, Supporting Documents, and List of Appendices For The 2008 Comprehensive Reliability Planning Process," New York Independent System Operator, December 10, 2007

<sup>20</sup> "2008 Comprehensive Reliability Plan, *A Long-Term Reliability Assessment of New York's Bulk Power System*" FINAL REPORT, New York Independent System Operator, July 15, 2008



The NYISO currently is in the process of finalizing its draft 2009 RNA. While this study does not find any reliability needs on the system resulting from violations of the loss of load expectation (“LOLE”) reliability criteria, its findings are based on two core components included in the study’s base case: (i) a lower load forecast; and (ii) a defined and significant degree of success in the state’s energy efficiency efforts.

The Energy Plan must set policy to foster the construction of new, and the continued retention of, needed existing energy resources. To achieve this result, the Energy Plan must establish a balanced approach, incorporating three components of a successful energy system – generation, transmission and distribution, and energy efficiency and demand response. The following suite of recommendations is designed to ensure that the state’s energy needs continue to be met in the future in a reliable and cost-effective manner, while limiting environmental impacts.

## **Electricity Generation**

Even with successfully implemented energy efficiency programs, New York State is likely to need additional electric generating capacity to meet our energy needs going forward. That is why the core component of sound energy policy is promoting the development of new generation resources and maintaining the needed megawatts currently operating on the system. In doing so, it is important that we balance environmental considerations to ensure that fuel diversity is maintained. In addition, a comprehensive siting law should be enacted, and the competitive wholesale market structure should continue to be refined.

In assessing New York’s generation needs, special consideration must be given to New

York City, due to the likely constrained nature of this area and its concentrated load patterns. In addition, the role played by two New York authorities, the New York Power Authority (“NYPA”) and the Long Island Power Authority (“LIPA”), must be addressed. Lastly, the importance of Empire Zone designations as applied to electric generating facilities must be recognized.

### ***Fuel Diversity***

Fuel diversity is one of the keys to affordable and reliable electricity. A diverse availability of fuel and power supply resources, bolstered by additional strides in efficiency, will strengthen our economy and security, while making important global contributions to a cleaner environment. In order to best ensure fuel diversity and system reliability, New York must maintain its needed existing facilities and promote the siting and development of a broad spectrum of new resources.

Governor Paterson appears to have embraced the importance of fuel diversity, as his Executive Order refers specifically to “[A]n assessment of objectives and strategies to increase energy supply and to reduce energy demand, considering factors **such as fuel diversity**, environmental justice, consumer costs, economic competitiveness, greenhouse gas reduction, renewable resources, and the maintenance of reliable electric and natural gas systems.” [Emphasis added]

A diverse fuel mix protects consumers from contingencies such as fuel unavailability, price fluctuations, and changes in regulatory practices. To meet future energy needs while maintaining the state’s diverse fuel portfolio, IPPNY makes the recommendations found on the following pages.

## ***Balanced Environmental and Energy Policies***

A clean and healthy environment is a goal that can be supported universally.

Unquestionably, New York State has taken an aggressive approach to addressing environmental concerns, the goals of which are laudable and could lead to new economic opportunities. Environmental regulations, however, if not implemented in a balanced manner, also may significantly affect the state's ability to maintain fuel diversity and, therefore, overall system reliability. The NYISO's *Power Trends 2008* report underscored the importance of evaluating the cumulative effects of environmental regulatory initiatives to determine overall

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*"This effort...is about making sure that the state's environmental rules and its energy policy can work well together..."*

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impacts on energy system reliability and the competitive marketplace.<sup>21</sup> This effort is not about reducing environmental protection; instead, it is about making sure that the state's environmental rules and its energy policy can work well together, without jeopardizing the state's reliable and fuel-diverse energy system.

IPPNY is encouraged that the Governor's Executive Order and the Scope of the State Energy Plan identify the importance of assessing state environmental policies and programs that impact the state's development and implementation of energy

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<sup>21</sup> "The extensive scope of the electric power sector's role in the implementation of various environmental initiatives requires a collaborative and coordinated effort among state and local government agencies, the NYISO and stakeholders throughout the electric industry so that environmental goals can be met in a manner consistent with the essential reliability requirements," *Power Trends 2008*

policy and programs. To date, New York has not taken a comprehensive approach to balancing avoided environmental impacts with the need to maintain system reliability and fuel diversity, as well as energy investment for economic development.

The Energy Plan should set a clear, long-range direction for energy policy that environmental initiatives will follow. Certainty and advanced planning in environmental regulations will allow developers to make efficient investment decisions, which ultimately will support public benefit goals of achieving cleaner and cost-effective sources of supply. To best prepare future environmental policy, it is vital that the Energy Plan assess the cumulative impacts that all existing and pending environmental regulations may have on reliability and fuel diversity. This evaluation under the State Energy Plan should be conducted in coordination with the NYISO's Comprehensive Reliability Planning Process, with specific input from the NYISO and its Environmental Advisory Council, from the New York State Reliability Council ("NYSRC"), and from market participants.

This cumulative impact evaluation is especially important because the NYISO has identified that new generating capacity may be needed under certain circumstances during the same period when these rules are anticipated to take effect. It will be essential for any reliability and market concerns that are identified by the cumulative assessment to be factored into the NYISO's CRPP. This is important for two reasons. **First**, it will dictate whether proposed regulations are feasible and should, on balance, go forward in light of their impacts. **Second**, when such comprehensive review – balancing environmental, energy, and economic development considerations – finds a

proposed regulation should be pursued, it will allow the market sufficient time to send appropriate price signals for the development and construction of required new generating capacity. New development and upgrades to existing facilities require long lead-time capital-intensive investments.

As New York State considers additional new initiatives, the Energy Plan should be the forum to consider their ramifications, including in areas such as: (1) the potential interstate impacts of New York specific rules (such as leakage and how a given program may alter the current equilibrium in New York versus the larger Northeast region and the rest of the nation); (2) methods to incorporate mechanisms to deal with unintended consequences from environmental initiatives that could impact energy reliability and costs (such as the need to plan ahead on how to minimize disruptions and build in “safety valve” features); and (3) the need to focus on areas where the greatest benefits versus costs for the attribute that is being targeted can be achieved.

All of these factors must be assessed comprehensively. To that end, IPPNY has developed a document (attached, pg. 36) that outlines the confluence of several environmental initiatives taking place in New York. Attention must be focused on the structure and timing of these programs and their overall effects. For example, the current initiatives have widely varying impacts and require different solutions. A cumulative look must be taken at all programs (existing and new) to evaluate cost and reliability impacts. In particular, in light of the substantially changed financial situation as well as the fact that the first auction cleared at a price more than 50 percent higher than was modeled in the impact analyses, an overall Regional

Greenhouse Gas Initiative assessment must take place sooner than the scheduled 2012 review. Thus, an evaluation of the ongoing allowance auctions under RGGI should be performed by Potomac Economics, the auction monitor, along with stakeholder input, following the auction that is scheduled to be held this December. The results of this analysis should be provided to the public prior to the March 2009 auction.

Furthermore, the process that is developed for conducting this cumulative analysis and incorporating its results into decision-making should become standard practice for the development of Regulatory Impact Statements, which accompany environmental regulations that have energy impacts. Without balancing environmental proposals with energy and economic development needs and goals, environmental regulations can potentially have a negative cumulative effect on cost, at minimum and overall system reliability in the worst case.

Although balanced environmental policies will aid in the maintenance of fuel diversity, specific actions can be taken to advance the vitality of individual fuel sources.

- **Natural Gas**

Natural gas-fired generation is a clean and efficient fuel source for producing power. Due to its dispatchable (flexible) nature, it also provides important load-following capability, which becomes even more critical as more sources that are intermittent are added to the energy system. As our reliance on natural gas has grown, we also must make sure that we have adequate and diverse sources of supply – especially in high demand areas like Long Island and New York City, where there is a limited ability to bring other forms of generation on





































