

NY Unplugged?

Building Energy Capacity and Curbing Energy Rates in the Empire State

Max Schulz
Senior Fellow
Manhattan Institute for Policy Research

Energy prices are a major factor in New York's high cost of living and doing business, contributing to what Governor Eliot Spitzer has called a "perfect storm of unaffordability" driving people and firms out of the state.¹ The average retail price of electricity in New York is well above the national average. Only Hawaii and Connecticut have higher average rates.²

But high prices aren't the only problem. Within the next few years, New Yorkers will have serious reason to worry about whether their lights will even be staying on.

New York will need a lot more power – the equivalent of more than five new 500-megawatt generating plants – to avoid blackouts early in the next decade, according to the nonprofit corporation responsible for operating the state's bulk electricity grid.

Yet only one new large-scale generating plant, representing barely one-eighth of the required additional capacity, has been proposed in the state since the expiration five years ago of Article X, the landmark state law designed to speed the building of such facilities.

Action by Albany is urgently needed to expand energy capacity and reduce energy costs. Yet state laws and regulations in recent years have actually done the opposite – limiting capacity and raising costs. And the Spitzer administration's energy policies threaten to make the situation worse.

This report reviews the state policy missteps that have threatened to short-circuit New York's energy system and recommends a series of corrective measures, including:

- Reauthorize the Article X siting law without new restrictions on energy sources.
- Impose a moratorium on further increases to the System Benefits Charge used to fund state energy research and development programs, which has increased by almost 200 percent since being instituted in 1998 and which will have cost New Yorkers \$1.85 billion by 2011.
- Conduct a full-scale audit and cost-benefit analysis of the state's environmental and energy regulations that take into account the collective burden of those rules.
- Reconsider acid-rain regulations that add to New Yorkers' costs while doing nothing to stop acid rain caused by emissions from out-of-state power plants.
- Refashion the state's Renewable Portfolio Standard to allow energy companies, not state bureaucrats, to decide how to reach clean energy goals.
- Encourage further development of nuclear power and support the federal regulatory process for reviewing the proposed relicensing of the nuclear plant at Indian Point.
- Avoid tax and fee hikes that add to New York's already high energy costs.
- Suspend state involvement in the Regional Greenhouse Gas Initiative (RGGI), which will raise rates but fail to combat global warming, until feasible carbon-capture technologies are available.

ABOUT THE AUTHOR

MAX SCHULZ is a senior fellow at the Center for Energy Policy and the Environment at the Manhattan Institute for Policy Research. His work focuses on the practical application of free-market principles in energy debates at the international, federal, and state levels. The Center for Energy Policy and the Environment examines the intersection of energy, the economy, and the environment, with particular focus on the national-security aspects of energy in the 21st century.

Prior to joining the Manhattan Institute, Mr. Schulz served as Senior Policy Advisor and Director of Speechwriting for United States secretaries of energy Samuel Bodman and Spencer Abraham. In four and a half years at the Department of Energy, he worked extensively on issues ranging from energy supply and demand to nuclear security and nonproliferation. In 2004, he was a member of the United States delegation to the International Atomic Energy Agency's 47th General Conference in Vienna.

Mr. Schulz is a graduate of Vanderbilt University. He lives in Washington with his wife and sons.

CONTENTS

1	1. Dual Concerns: Cost and Reliability Table 1. Average Retail Electricity Prices Nationwide Figure 1. Electricity Prices by Service Region (cents per kilowatt hour) Table 2. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector
5	2. Two Steps Forward, Three Steps Back The Plant Siting Law's Expiration Table 3. Large Scale Power Plants Built in New York Before and After Article X Renewable Portfolio Standard Figure 2. Electricity Generation Sources in New York Environmental Regulations A New Tax
9	3. Worse Yet to Come? "15 by 15" Figure 3. New York State Annual Electricity Consumption, 1997-2030 How Green Is My Power Plant? Threatening Indian Point More Clean Air Regulations Regional Greenhouse Gas Initiative "High Demand Day" Initiative Figure 4. New York State Peak Summer Electricity Demand, 1997-2017 Congestion Costs Power for Jobs
17	Conclusion
18	Endnotes

I. Dual Concerns: Cost and Reliability

Residents of New York have long paid some of the highest electricity prices in the United States. According to the United States Energy Information Administration, the average retail price of electricity across all sectors of the New York state economy is nearly 16 cents per kilowatt-hour, which is 66 percent higher than the national average (Table 1). Overall, New Yorkers pay more for electricity than anyone except residents of Hawaii and Connecticut. Broken down by sector, New Yorkers pay the second-highest commercial electricity prices, third-highest residential electricity prices, and 12th-highest industrial electricity prices (Table 2).³

As illustrated in Figure 1, New York's energy cost problem is especially severe in the downstate region, where rates charged by Consolidated Edison and the Long Island Power Authority are among the highest found anywhere in the country – fully double the national averages for residential customers. But residential and commercial customers in most other regions of the state also pay rates well above the average.⁴

A number of factors explain New York's relatively high electricity rates. These include taxes imposed at both the state and local level, which apply to generators and transmission companies and are passed through to consumers. In addition, environmental and other regulations over the last two decades have resulted in increased usage of natural gas (as opposed to coal) by newly constructed power plants. This has driven prices higher when the price of gas has soared, as it has on several occasions in recent years.

On Long Island, ratepayers were forced to eat most of the \$6 billion cost of the Shoreham nuclear plant, which was completed in the 1980s and decommissioned at the state government's insistence in the early

1990s – without ever having generated a single kilowatt of commercial power.

Failure to upgrade the state’s electricity delivery and transmission system imposes significant congestion costs as well. And the cost of doing business in New York is generally higher than it is in other parts of the country.

Along with the state’s very high state and local tax burden on individuals and families,⁵ the high cost of power in New York helps explain the state’s relatively weak long-term economic performance and its exceptionally heavy loss of

population to other states. From 1996 through 2006, New York ranked 38th out of 50 states in job growth, and 29th in per-capita personal income growth (despite massive increases in financial-sector compensation during that period).

Costs aside, as dramatized by the August 2003 northeast region blackout and spot blackouts in Queens in the summer of 2006, New Yorkers increasingly have had to worry about the *reliability* of their electricity grid as well.

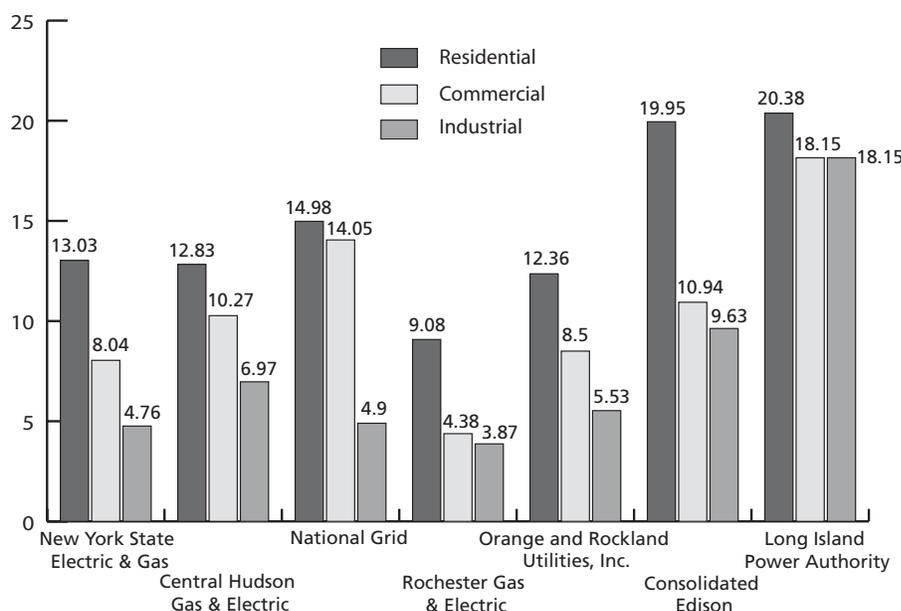
The New York Independent System Operator (NYISO), the nonprofit corporation responsible

Table I. Average Retail Electricity Prices Nationwide (Ranked from highest to lowest price)

Price (cents) per kilowatt hour			Price (cents) per kilowatt hour		
1	Hawaii	20.87	26	Georgia	8.09
2	Connecticut	15.75	27	Ohio	8.04
3	New York	15.73	28	Oklahoma	8.03
4	Massachusetts	15.50	29	Alabama	7.66
5	New Jersey	14.72	30	Montana	7.65
6	Rhode Island	14.54	31	Colorado	7.55
7	California	13.78	32	New Mexico	7.48
8	New Hampshire	13.64	33	South Carolina	7.47
9	Maine	13.18	34	Virginia	7.37
10	Alaska	13.05	35	Arkansas	7.29
11	District of Columbia	12.55	36	Minnesota	7.27
12	Maryland	12.18	37	South Dakota	7.20
13	Vermont	12.01	38	Oregon	7.17
14	Delaware	11.7	39	Iowa	7.14
15	Nevada	10.62	40	Kansas	7.06
16	Texas	10.47	41	Tennessee	7.00
17	Florida	10.37	42	Utah	6.91
United States Average		9.44	(tie) 43	Nebraska	6.86
18	Pennsylvania	9.15	(tie) 43	North Dakota	6.86
19	Arizona	9.12	45	Indiana	6.77
20	Illinois	8.72	46	Missouri	6.69
21	Wisconsin	8.55	47	Washington	6.43
22	Louisiana	8.26	48	Kentucky	5.73
23	Michigan	8.25	49	West Virginia	5.40
(tie) 24	Mississippi	8.19	50	Idaho	5.36
(tie) 24	North Carolina	8.19	51	Wyoming	5.28

Source: U.S. Energy Information Administration

Figure I. Electricity Prices by Service Region (cents per kilowatt hour)



Source: New York Department of Public Service, *Five Year Book Index of Files, Combination Electric and Gas Industry Balance Sheet 2002-2006*. LIPA rates for 2006 provided by Long Island Power Authority.

for operating the state’s bulk electricity grid, issued a grave warning about New York’s electricity system in its *Power Trends 2007* report.⁶ According to the NYISO, the condition of the bulk electricity grid is adequate to meet near-term reliability requirements only through 2010. The NYISO analysis predicted “a change for the worse” in the next several years unless significant infrastructure additions were made.

The NYISO slightly updated that projection of near-term reliability requirements in its more recent *Power Trends 2008* report⁷ —it says generation and transmission resources in New York State are now expected to be adequate through 2011—but repeats its warnings about the need to add more capacity over the next decade.

The NYISO has identified a particular vulnerability in the downstate region. There will need to be an additional 500 megawatts (MW) of resources added in New York City, or fully 750

MW in the Hudson Valley, in order to meet reliability needs in 2012, it said.⁸

To meet statewide energy by 2017, according to the NYISO, New York will need the equivalent of 2,750 MW added to the bulk electricity grid, some portion of which must be located in New York City and Long Island. This includes replacement of 1,300 MW due to the planned retirement of several generating plants by 2010.

Top state officials have acknowledged the challenge posed by burdensome electricity prices and an aging, overtaxed energy infrastructure. As Governor Eliot Spitzer said in an April 2007 speech introducing his energy proposals, priorities must include “implementing a practical strategy that will lower energy bills.”⁹

Notwithstanding this rhetoric, high prices and an unreliable power grid are largely a consequence of Albany’s own policies.

Table 2. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector
(Cents per kilowatt-hour, 2007)

	Residential	Commercial	Industrial	All		Residential	Commercial	Industrial	All
New England	16.55	14.69	12.46	14.95	North Carolina	9.37	7.42	5.44	7.8
Connecticut	18.76	15.31	12.69	16.21	South Carolina	9.19	7.74	4.85	7.17
Maine	15.14	13.12	10.6	13.17	Virginia	8.77	6.39	4.98	7.11
Massachusetts	16.43	15.17	13.61	15.29	West Virginia	6.63	5.78	3.89	5.25
New Hampshire	14.88	13.88	12.53	14.02	East South Central	8.29	8	5.12	6.99
Rhode Island	13.96	12.76	12.29	13.16	Alabama	9.26	8.7	5.29	7.54
Vermont	14.15	12.27	8.76	11.99	Kentucky	7.17	6.63	4.5	5.77
Middle Atlantic	14.07	13.17	8.07	12.48	Mississippi	9.41	8.94	5.86	8.09
New Jersey	14.48	13.27	11.17	13.45	Tennessee	7.77	7.96	5.39	7.08
New York	17.09	15.46	9.8	15.38	West South Central	11.24	9.38	7.08	9.39
Pennsylvania	11	9.21	6.88	9.09	Arkansas	8.75	6.89	5.21	6.93
East North Central	9.8	8.66	5.79	8	Louisiana	9.39	9.16	6.76	8.41
Illinois	10.44	9.17	5.98	8.56	Oklahoma	8.65	7.33	5.39	7.32
Indiana	8.16	7.18	4.98	6.49	Texas	12.45	10.01	7.8	10.3
Michigan	10.28	8.96	6.45	8.61	Mountain	9.33	7.77	5.73	7.74
Ohio	9.58	8.65	5.77	7.91	Arizona	9.72	8.29	6.09	8.59
Wisconsin	10.74	8.63	6.17	8.41	Colorado	9.2	7.62	5.9	7.73
West North Central	8.28	6.77	5.1	6.81	Idaho	6.36	5.13	3.9	5.05
Iowa	9.4	7.1	4.79	6.84	Montana	8.74	7.97	5.69	7.5
Kansas	8.34	6.96	5.2	6.94	Nevada	11.78	10.09	8.34	10.01
Minnesota	9.02	7.39	5.7	7.36	New Mexico	9.04	7.63	5.56	7.39
Missouri	7.65	6.31	4.77	6.54	Utah	8.2	6.59	4.6	6.47
Nebraska	7.62	6.32	4.73	6.25	Wyoming	7.77	6.22	4.1	5.27
North Dakota	7.32	6.53	5.26	6.42	Pacific Contiguous	11.81	11.26	7.95	10.77
South Dakota	8.05	6.56	5.08	6.85	California	14.38	12.89	10.01	12.84
South Atlantic	10.02	8.64	5.65	8.66	Oregon	8.1	7.24	4.97	6.97
Delaware	13.19	11.22	8.84	11.34	Washington	7.21	6.53	NM	6.38
District of Columbia	11.14	12.33	10.16	12.06	Pacific Noncontiguous	20.33	17.29	16.54	18.01
Florida	11.21	9.69	7.78	10.31	Alaska	15.08	11.9	12.28	13.04
Georgia	9.13	8.05	5.5	7.84	Hawaii	23.75	21.59	18.04	20.94
Maryland	11.67	11.52	9.36	11.37	U.S. Total	10.66	9.69	6.37	9.16

2. Two Steps Forward, Three Steps Back

New York policymakers *have* taken several positive steps in recent years to address the problem of high electricity prices.

In 1992, the Legislature and then-governor Mario Cuomo enacted an acclaimed siting law – Article X – to streamline the permitting process and facilitate the construction of needed energy projects. They scrapped the notorious “six-cent law,” initially enacted in 1980, which set a minimum price for independently produced power. Those costs – which turned out to be above the market rates, once oil and natural-gas prices fell – were passed on to consumers by the then-regulated electrical utility companies.

among types of facility or the fuels used to generate power.

The new rules had two elements that would prove beneficial over the next decade. First, under the new one-stop permitting process, proposed projects could win approval within 14 months. This was substantially less time than it took under the previous regime. Second, the Article X process assumed responsibility for considering local concerns and objections, and it removed the need for projects to get local permits. As a result, the law preempted the ability of localities to stymie locally unpopular projects through regulatory delay and litigation.

The expiration of Article X makes it more difficult to build generating plants.

Lawmakers in the 1990s undertook a reasonably successful restructuring of the state’s electricity markets to provide for more competition and to encourage infrastructure investment that would ease congestion costs. In a major reform spearheaded by then-governor George Pataki, they also agreed to phase out the state Gross Receipts Tax on energy, returning \$400 million each year to taxpayers. The GRT was a particularly onerous levy that had climbed as high as 4.25 percent of utilities’ total sales by 1997.¹⁰

However, state officials have squandered many of the gains from those reforms.

The Plant Siting Law’s Expiration

Article X of the Public Service Law streamlined the power-plant siting process for projects of 80 MW or larger. The law made no distinctions

The law contained a sunset provision, however. Despite widespread agreement that the siting law worked well and despite evidence that Article X was regarded as a model by other states,¹¹ persistent opposition by environmental groups prevented the Legislature from coming to agreement on how or whether to extend the law. Article X expired at the end of 2002, and subsequent attempts to reenact its provisions have fallen short.

Permits for large generating facilities now must be obtained through the lengthy State Environmental Quality Review Act process. Moreover, developers seeking to build power plants must get permission not only at the state level but at the local level as well, adding uncertainty and costs to proposed projects at a time when the state needs generating capacity expanded.

The result can be seen in the recent history of new generating plant siting and construction activity in New York. The late 1990s saw the initiation of six new plants with a combined

Table 3. Large Scale Power Plants Built in New York Before and After Article X

● <u>From 1997 until Article X expiration at end of 2002</u>				
Projects initiated and built through expedited, streamlined siting process				
Year Initiated	Project	MW	Developer	In-Service Date
1997	Bethlehem Energy Center (Bethlehem/ Albany)	750	PSEG	2005
1997	Athens Generating Plant (Athens/Greene)	1080	Athens Generating Co.	2004
1999	Astoria Energy (Queens)	500	Consolidated Edison	2006
1999	East River Repowering Project (Manhattan)	360	Consolidated Edison	2005
1999	Poletti Station Expansion (Queens)	500	New York Power Authority	2005
1999	Ravenswood Cogeneration (Queens)	250	KeySpan	2004
		3440		
● <u>After Article X expiration, 2003-present</u>				
Projects initiated and built through State Environmental Quality Review Act process				
Year Initiated	Project	MW	Developer	In-Service Date
2004	Caithness Long Island Energy Center	350	Caithness Long Island LLC	2009 (projected)

Source: State of New York, Public Service Commission and department of Environmental Conservation

generating capacity of 3,400 MW. Since Article X expired, only a single large-scale power plant has been initiated – the 350-MW Caithness Long Island Energy Center, a combined natural-gas and oil-fired facility, due to go online in 2009 (see Table 3).

Renewable Portfolio Standard

New York State gets its electricity from a varied fuel mix, as illustrated in Figure 2. Nuclear energy is the state’s number-one power source, accounting for nearly one-third of the total, followed by natural gas, hydropower, and coal-fired generating plants. Oil accounts for less than 5 percent of the total. Renewable energy technologies like wind, solar, and biomass account for just 2.4 percent of the electricity used by Empire State consumers.

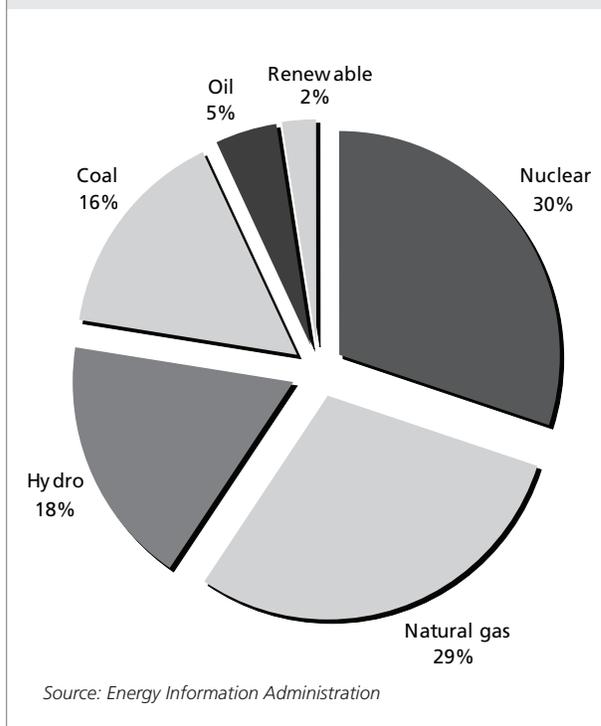
In September 2004, the New York State Public Service Commission (PSC) ordered the implementation of a Renewable Portfolio Standard (RPS) as a means to increase the percentage of New Yorkers’ electricity derived from these

“clean” sources. At the time the mandate was issued, just over 19 percent of New York’s electricity came from sources classified as renewable, a category that includes large-scale hydropower. Today, that mix is 20.4 percent (with hydropower providing the bulk of the total).

The PSC’s order calls for increasing renewable energy use to 25 percent by 2013.¹² The commission determined that New York would need to add approximately 3,500 MW of renewable energy resource generation capacity to meet this target. This is a very tall order, considering that there are virtually no large-scale hydropower resources left to exploit in New York.

In most of the other states with renewable portfolio standards, utilities are simply directed to purchase a certain percentage of their electricity from renewable sources, which are typically more expensive than traditional sources like coal, natural gas, and nuclear power. The New York RPS contains no such direct requirement to purchase a percentage of power from renewables. Instead, the PSC has set up a complicated system by which utilities collect a surcharge on

Figure 2. Electricity Generation Sources in New York



ratepayers' bills, with the money going to the New York State Energy Research and Development Authority (NYSERDA).

The PSC has forecast that the levy, which varies depending on several factors, could increase costs by up to 2 percent.¹³ NYSERDA, in turn, uses the money to subsidize renewable energy production for the New York wholesale market. Wind, hydroelectric, biomass, hydroelectric, and solar technologies are all identified by regulators as potential recipients of these funds.

Initial PSC projections estimated the cost to New Yorkers of reaching the 2013 RPS goal as \$741.3 million. State budget officials have also estimated that collections from ratepayers will earn \$40.7 million in interest, giving NYSERDA \$782 million in funding for the RPS. According to the February 2008 performance report by the

state's Renewable Energy Task Force, that won't be enough. The report warned that "the current RPS funding of \$782 million will not be sufficient to meet New York's targeted 2013 goal," meaning additional funding will be required.¹⁴ At this point, the cost and goals of the RPS program appear to have nowhere to go but up.

Governor George Pataki, whose administration first proposed the RPS, cited the need to "clean up our environment for the benefit of future generations" as a chief reason for the program.¹⁵ That goal certainly sounds desirable. But the one technology capable of generating large quantities of reliable and inexpensive base-load power without producing any emissions or pollutants – nuclear energy – is *not* included among the technologies in New York's RPS. Nuclear power is not a favored technology among those who hold the purse strings and dictate energy policy in Albany.

Environmental Regulations

In 2003, New York implemented stringent regulations on power-plant emissions in a bid to control acid rain. The rules imposed on power-plant operators go far beyond those promulgated by the federal government. They require power plants to reduce emissions of sulfur dioxide (SO₂) to half of what federal emissions caps allow. They also require nitrogen oxide (NO_x) limits, which had applied only during the summer, to apply year-round. The regulatory structure revolves around a cap-and-trade scheme. At the time the regulations took effect, state Environmental Conservation Commissioner Erin Crotty proudly called them "the toughest acid-rain regulations in the country."¹⁶

Not only are they the toughest; they might just be the least effective. The New York Department of Environmental Conservation (DEC) acknowl-

edges that the sources of the state's acid-rain problem are located chiefly outside of New York. "Emissions of SO₂ and NO_x from the heavily industrialized Midwest have been identified as significant contributors to New York State's deteriorating air quality," says DEC's website. "Tall smokestacks spew emissions high into the atmosphere, and prevailing westerly winds then carry them eastward. The EPA's acid-rain data for 2000 show that Ohio's emissions of sulfur dioxide and nitrogen oxides are four times greater than New York State's level."¹⁷

The state's acid-rain regulations don't effectively address the sort of pollution that is harming sensitive areas throughout New York, particularly the Adirondacks, the Catskills, and the Hudson Highlands. Yet they are anything but impotent when measured in terms of their negative economic impact. In the regulatory impact statement submitted before implementation of the new rules, the DEC projected that wholesale electricity costs would climb by an average of 5.4 percent as a consequence of the stricter emissions caps. Because wholesale costs are generally half of a consumer's electric bill, ratepayers' bills could be hiked about 2.7 percent — no small price for regulations that provide little discernible environmental benefit.

A New Tax

In the late 1990s, at roughly the same time policymakers were working to lower electricity costs by phasing out the Gross Receipts Tax — saving ratepayers \$400 million annually — they were implementing a new levy that would eliminate a portion of those savings. The state Public Ser-

vice Commission instituted the System Benefits Charge (SBC) in 1998, ostensibly to fund energy-efficiency programs, which, at least in theory, aim at reducing costs. It has been updated and extended several times, and now is used to fund all programs of the New York State Energy Research and Development Authority, including the Renewable Portfolio Standard, which will certainly increase costs.

In its first few years, the SBC cost taxpayers an average of about \$60 million per year. The latest regulations from the Public Service Commission require taxpayers to pay almost three times that amount — \$175 million — each year through 2011. By that time, it's been estimated, the SBC will have cost New York electricity users a whopping \$1.85 billion in charges.¹⁸ This de facto tax is included in ratepayers' bills by the state's six investor-owned utilities, which are required to collect a sum equal to 1.42 percent of their revenue.¹⁹ For most ratepayers, the SBC represents a charge of 1.5 to 2.5 percent of their monthly electricity bill.²⁰

The governor's 2008–09 budget proposal would add roughly \$40 million to energy costs through a combination of corporate tax increases on energy generators and increases in fees charged to energy companies, including a \$2.4 million increase in fees paid to NYSERDA by gas and electric utilities for purposes of updating the state energy plan; a share of a \$19 million increase in fees paid by all industries for operating permits granted by the state under the Clean Air Act; and an \$11 million fee to cover state National Guard costs for providing security at nuclear facilities.

3. Worse Yet to Come?

For New York residents and businesses beleaguered by the high cost of electricity, there may be worse to come. Despite rhetoric about combating high prices, Governor Spitzer is continuing his predecessors' tradition of pushing policies that would increase costs for New York ratepayers. The Spitzer administration's proposals will almost certainly make electricity more expensive for New York consumers and businesses and will make the power grid less reliable.

In his April 2007 energy address, Governor Spitzer discussed some of "the chronic problems that have plagued Albany and New York State for years."²¹ He cited "rising energy bills, rising

quite likely will be reinforced by the steps Governor Spitzer advocates.

"15 by 15"

One of the two major initiatives launched by Governor Spitzer in his April 2007 energy address was a pledge to decrease the demand for power in New York by 15 percent from forecasted levels by the year 2015. Spitzer noted that most projections suggested that New York would need an additional 10-15 percent of power-generating capacity over the next decade, so his proposal aimed at keeping consumption roughly at present levels.

Governor Spitzer's proposals for lowering energy bills will actually push costs higher.

Instead of depending on new power plants to meet that demand, the governor said, New York should focus on energy efficiency and conservation. His resulting "15 by 15" proposal is embodied in

global temperatures, and a rising tide of young people leaving New York for opportunity elsewhere" as the seemingly intractable challenges that his administration was poised to address.

In laying out his long-term energy strategy for New York, the governor pledged to substantially decrease power consumption statewide by 2015, and he vowed to promote "clean energy" production. "The result," Spitzer said, "will be lower energy bills."

A closer look at the proposals outlined in that speech, along with subsequent actions taken by his administration, suggests that the cost of power will actually continue to rise. The key roadblocks to economic growth and development not only are unlikely to be removed; they

the Energy Efficiency Portfolio Standard being crafted by the Public Service Commission. The ongoing EEPS proceeding seeks to identify ways to achieve greater levels of energy efficiency, particularly with regard to lowering natural-gas usage.

Sources say that one proposal likely to emerge from the Public Service Commission sometime in 2008 is a special charge for natural-gas usage, which was hinted at by PSC staff last August. Also suggested last August was a further increase in the System Benefits Charge.²²

While Governor Spitzer's "15 by 15" proposal initially sounds appealing, a look at the historical statistics suggests that such a dramatic cut in energy demand is incompatible with economic

growth. Since 1960, electricity consumption in New York has increased by nearly two and a half times.²³ In recent years, the trend in power consumption has remained one of increasing and inexorable upward movement (see Figure 3). In the last half-century, aggregate electric power consumption has decreased in New York only during times of economic distress. During the recession of the early 1990s, for instance, state electricity demand dipped 9 percent.

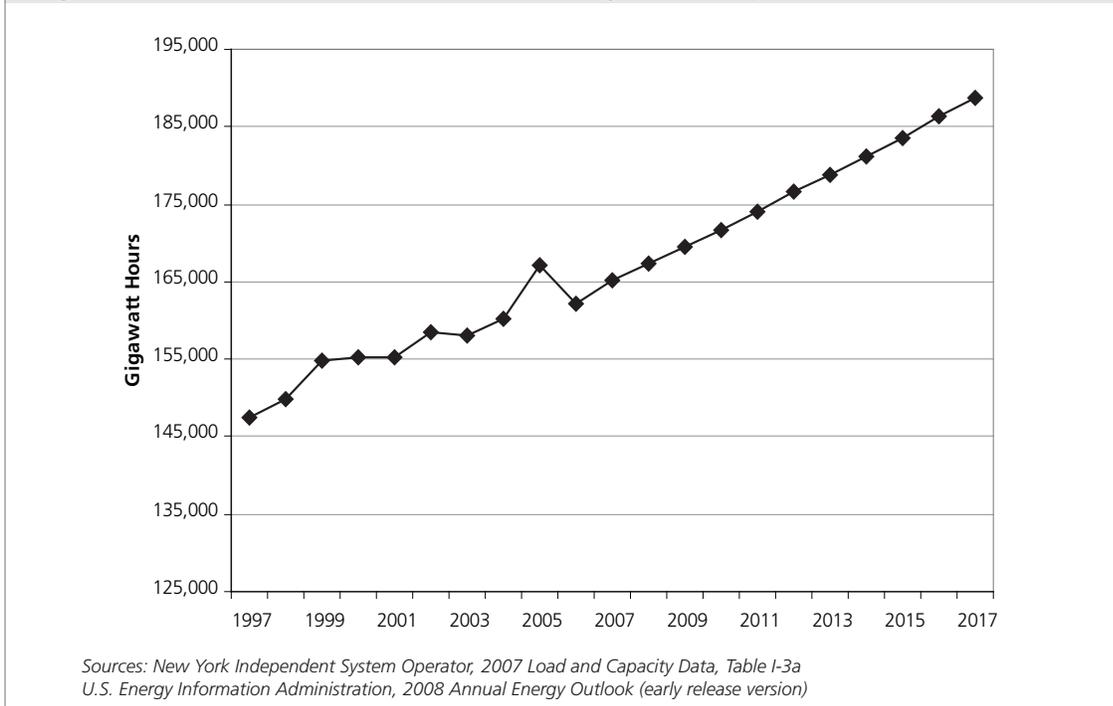
Comparing the governor’s numbers with demand projections forecast by the Independent System Operator, energy consultant Glenn Schleede concluded: “Fifteen-percent reductions would be extremely aggressive and are probably unattainable unless New York experiences a very substantial economic downturn.”²⁴

Compounding the problem of using efficiency and conservation to meet future demand is that, compared with many other states, New York is already very energy-efficient. (Indeed, by some

estimates, it is the most energy-efficient large state in the U.S.)²⁵ Between 1981 and 2001, the state’s economy saw efficiency improvements on the order of 67 percent. In 1981, it took 15,000 British Thermal Units (BTU) of energy to produce one dollar of economic output; by 2001, it required just 5,000 BTU.²⁶

Those numbers speak to the very real energy-efficiency gains in the American economy over several decades, but they also hint at the peculiar nature of New York’s demography and economy. A much higher percentage of New Yorkers than residents of other states live in apartments and either walk or take public transportation to work. Those activities drastically cut down on energy consumption. More tellingly, the flight of energy-intensive heavy manufacturing from the state (in part due to high energy costs), coupled with the growth of industries such as finance, insurance, and real estate that consume far less energy, has created the impression that New York is far more efficient than it actu-

Figure 3. New York State Annual Electricity Consumption, 1997-2017 (projected)



ally is. Nevertheless, the peculiarities of New York's situation cast real doubt on its ability to squeeze sufficient additional efficiency out of the economy to meet the governor's targets. The low-hanging fruit is gone.

Still, Governor Spitzer is enamored of the simple idea that, as he said last April, "the cheapest and cleanest power plant in the world is the one you never have to build." An energy plan rooted in using efficiency to meet projected demand makes economic sense, he said, since "in terms of dol-

Wind and solar are much more costly energy sources than the nuclear plant the governor aims to shutter.

lars and cents, it now costs one-third as much to save a given amount of energy through efficiency programs as it does to produce the same amount of energy by building a new power plant."

None of that matters, however, if there isn't enough power available to meet demand because political leaders have discouraged the building of generating capacity. That was a lesson that Californians learned the hard way in 2000–2001, when the Golden State was roiled by devastating rolling blackouts and power outages. "In California, they used to speculate that the least expensive kilowatt is the one that is not used," observed National Mining Association president Jack Gerard in 2001. "Now events are proving that the most expensive kilowatt is the one that's not there when needed."²⁷

How Green Is My Power Plant?

The other major initiative unveiled in Governor Spitzer's April 2007 speech was a proposal to

pass an updated power-plant siting law to fill the void left by the 2003 expiration of Article X.

The need for a rational permitting process is magnified by the Independent System Operator's warning that the state will need to add the equivalent of 2,750 MW to the bulk electricity grid to meet statewide reliability needs by 2017.²⁸

The ISO noted the particular challenge in the absence of Article X: "It can take more than five years for a private developer to permit, site and build a new generating plant in New York. The state once had a streamlined siting process for large power plants but that law (Article X of the Public Service Law) expired at the end of 2002. The state Legislature has failed either to renew that law or enact a new one in its place, thus leaving power plant development to the vagaries of local zoning."²⁹

While Governor Spitzer's call for the Legislature to pass a power-plant siting law was a welcome gesture, the particulars of his proposal were not. Calling it a plan with "a green twist," the governor's plan would streamline only "green" power plants. Whereas Article X was considered fuel- and technology-neutral—any kind of electricity-generating plant of more than 80 MW, regardless of type, was eligible—the Spitzer plan would exclude coal and nuclear power plants from streamlined permitting. By allowing certain technologies but not others to be considered, Governor Spitzer would effectively ensure that the kinds of plants that provide two of the most cost-effective and reliable sources of base-load power could not be built in New York.

The governor's power-plant siting proposal languished in the Legislature during last summer's legislative showdown. So did more

sensible proposals to reauthorize a siting law similar in detail to Article X. The Spitzer administration has promised to continue its push for its green siting law. Just how this plays out could have significant consequences for the state's economic future.

Threatening Indian Point

In November 2007, Governor Spitzer and Attorney General Cuomo announced their opposition to license extensions for the two commercial nuclear reactors at Indian Point, a nuclear plant located about 30 miles north of Manhattan.

The plant, now run by Entergy, has operated safely and without serious incident since its 1974 opening, and the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency approved a post-9/11 evacuation plan in 2003.³⁰ The final say on relicensing rests with the NRC, which will take two years to decide.

The governor claims that the facility is vulnerable to terrorist attack and incapable of withstanding earthquakes. Moreover, despite assertions by federal authorities, Governor Spitzer says that there is no feasible evacuation plan for the millions of residents who live nearby.

Closing Indian Point would remove 2,000 MW from the bulk electricity grid, even though the ISO says that *more* power is needed in the next few years just to keep the lights on. The Spitzer administration has not proposed any way of making up the shortfall, other than by fast-tracking the permitting process for wind and solar power plants. But the direct costs of generating electricity from wind and solar sources are far higher than they are for nuclear power, which is why they make up a negligible 2.4 percent of the state's electricity mix.³¹

Worse, those technologies are not very reliable. Lacking a manner to store electricity, solar panels and wind turbines don't do much good when the sun isn't shining or the wind isn't blowing. And wind power is practically nonexistent during the most stultifying heat waves. California has a much more developed wind industry than New York does. During the hottest days of summer in 2006, its wind turbines operated at just 5 percent of capacity, which is to say, practically not at all.³² Indian Point's two reactors, on the other hand, typically operate around the clock at over 90 percent capacity and generate more than five times as much electricity as all 390 of New York's windmills can on the best day.

Spitzer's Article X proposal favors "green" power over more reliable and cost-effective sources.

A 2006 National Research Council report on the options for replacing the 2,000 MW generated by Indian Point in the event it closed down was doubtful they could be.³³ It concluded that "some costs could be offset by demand-management practices, but new generation, and perhaps new transmission, will likely increase wholesale electric costs, especially in the New York City metropolitan area."

More Clean Air Regulations

As discussed above, efforts by New York regulators to address the acid-rain problem ultimately do little good because the most harmful pollution is generated out of state. Washington is better positioned than Albany to combat the acid rain plaguing sensitive New York areas such as the Adirondacks, the Catskills, and the Hudson Highlands.

New York and most other states east of the Mississippi River are in the process of implementing pollution controls called for under the U.S. Environmental Protection Agency's Clean Air Interstate Rule (CAIR). The 2005 EPA rule aims at making significant reductions in SO₂ and NO_x through an emissions credit trading scheme. Successfully controlling such emissions from power plants in Ohio, Pennsylvania, and West Virginia should significantly reduce the acidity of lakes and streams in New York. Federal officials claim that CAIR will produce significant results as soon as 2015.

However, not content to move at the federal government's pace, New York regulators have decided to adopt restrictions on NO_x even more stringent than EPA's CAIR requires. They have also decided to implement restrictions on power plants' mercury emissions far more stringent than the federal government's.

Washington is better positioned than Albany to combat the acid rain plaguing sensitive areas of New York.

It remains to be seen whether a vigorous crack-down on in-state power-plant emissions will improve New York air quality. But it seems clear that this policy will raise the expense of operating coal-fired plants—which, as noted, now provide nearly 16 percent of the state's electricity. The long-term economic viability of these plants under the state's clean-air regs will be very much in doubt.

Regional Greenhouse Gas Initiative

In October 2007, Governor Spitzer's administration issued new draft regulations for cutting

greenhouse-gas emissions from New York power plants. The regulations are New York's contribution to the Regional Greenhouse Gas Initiative (RGGI), a compact to reduce GHG emissions among ten northeastern and mid-Atlantic states. The RGGI was first proposed by Governor George Pataki in 2003. The goals of the initiative are to cap emissions at current levels and to bring them 10 percent below those levels by 2020. Each member of the RGGI is given wide latitude to set up its own system.

Under New York's plan, power plants will have to buy emissions allowances at an auction. All the credits are to be auctioned off and to be eligible for sale or trade. Proceeds from the auction are supposed to subsidize renewable energy projects that currently cannot generate electricity as economically as coal- or natural-gas-fired power plants.³⁴

The RGGI targets only electricity-generating power plants, despite the fact that these sources are responsible for only one-quarter of the state's greenhouse-gas emissions, according to the New York State Energy Research and Development Authority.

The ostensible reason for imposing curbs on power-plant emissions is to combat global warming. However, it is doubtful that the RGGI will have anything more than a negligible effect, even if the RGGI members hit their emissions-reduction targets. Its supporters at times acknowledge as much. An attorney with the Natural Resources Defense Council told the *New York Times* in 2005, "We're not going to solve the problem of global warming in the Northeastern states.... But we're showing that we have the American ingenuity to do this and we're setting a precedent in terms of the design of the program."³⁵

While it is doubtful that the regulations and implementation of the RGGI cap-and-trade scheme will actually affect global warming, there can be little doubt that saddling power producers with increased operating costs will add to the price that New Yorkers pay for electricity.

RGGI clearly has the potential to impose significant new costs on power generators and ratepayers. Indeed, the plan's advocates acknowledge as much.

Raising costs appears to be the idea. "By design, this plan creates winners and losers," said Governor Spitzer when unveiling the regulations. "Older, less efficient power plants with higher emission levels will pay more to comply with RGGI than newer, more efficient units. Dirty generators will be at a competitive disadvantage."³⁶

The decision to go forward with the RGGI makes Governor Spitzer's call for closing the Indian Point nuclear power plant even more puzzling. All told, New York's six nuclear reactors avoid the release of over 30 million metric tons of carbon dioxide (while generating 30 percent of the state's electricity). Indian Point accounts for roughly 40 percent of that amount, or 12 million metric tons of carbon dioxide. Shutting Indian Point would make it considerably harder to reduce emissions levels as part of the RGGI.

"High Demand Day" Initiative

Another proposal likely to be officially introduced in 2008 is the High Electric Demand Day (HEDD) initiative. In a joint effort with other northeastern states to curb ground ozone levels, New York will pledge to reduce its power-plant emissions on the hottest summer days, when electricity demand is at its peak. Doing so would entail reducing NOx

emissions from peaking power plants. "Peakers" are facilities that provide a cushion on those rare occasions when demand peaks. The DEC has suggested that it will issue its proposed HEDD rules in June. The new regulations are scheduled to go into effect in June 2009.³⁷

This proposal to clean the air could very well lead to power outages not unlike those that roiled Queens for nearly two weeks in the summer of 2006. The HEDD regulations will effectively require the installation of expensive scrubbers. But peakers, which may operate only a handful of days out of the year, do not operate consistently enough to justify the cost of the expensive equipment. The likelihood is that peaking facilities would close, thus making it even more difficult

New state regs may lead to a reduction in plants needed to generate "peak" power.

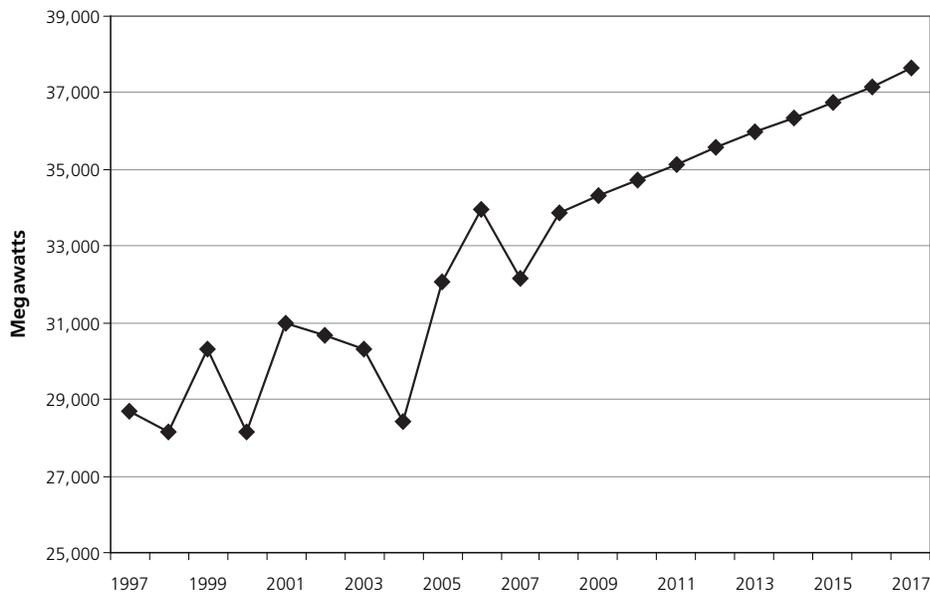
to provide power on precisely those days when New Yorkers need it most (see Figure 4 for past and projected peak power trends).

Congestion Costs

Not only is New York facing an electricity-generation capacity shortage within less than a decade; it is also threatened by a lack of transmission capacity. Like much of the nation's energy infrastructure, New York's transmission system is old, overstretched, and insufficient to meet the needs of a twenty-first-century economy. Inadequate transmission capacity leads to congestion charges that drive up the price of power.

Grid limitations are a problem in many parts of the country, but particularly so in New York. The

Figure 4. New York State Peak Summer Electricity Demand, 1997-2017 (projected)



Sources: New York Independent System Operator, 2007 Load and Capacity Data, Table I-3a.
NYISO, "Summer 2007 Electricity Review" press release

U.S. Department of Energy (DOE) estimates that congestion charges in 2008 will cost customers on the eastern grid – which covers the area east of the Rocky Mountains, except for Texas – \$8 billion in 2008.³⁸ That works out to about \$40 per person. However, the costs are not evenly spread out, and New Yorkers pay a lot more. DOE figures that New York City area residents paid \$90 per person in congestion charges in 2005.

It's not hard to see why. The Energy Association of New York notes that it has been two decades since the last major transmission line was approved and sited in New York. Local opposition and not-in-my-backyard objections have been the principal factors in scaring off investment capital for large-scale transmission projects.

Congress sought to avoid situations where parochial objections could sink proposed transmission projects offering interstate commercial benefits. A measure included in the Energy Policy Act of

2005 gave the federal government limited authority to override local objections to transmission projects in certain instances. In April 2007, DOE took steps to designate the first two National Interest Electric Transmission Corridors.³⁹ One of these – the proposed Mid-Atlantic Area National Corridor – includes parts of Ohio, West Virginia, Pennsylvania, Maryland, Virginia, the District of Columbia, Delaware, and New York.

Under this National Transmission Corridor designation, New York Regional Interconnect, Inc. proposed building a 1,200-MW, 190-mile transmission line to bring power from Utica to the suburbs north of New York City.

Governor Spitzer opposes this plan, citing environmental concerns. His administration petitioned the federal government to reconsider its decision designating the National Transmission Corridor. In December 2007, acceding to this request (though it was not legally obligated

to do so), DOE announced that it would revisit the transmission corridor designations, making it less likely that the needed transmission line will get built.

Power for Jobs

Power for Jobs is a program administered by the New York Power Authority (NYPA) that was begun in 1997 to provide relief to energy-intensive businesses hammered by high energy prices. The program offers either a cash rebate from NYPA to offset electricity costs or a discount on utility delivery rates. Since 1997, it has been expanded to include small businesses and nonprofit organizations.

Governor Spitzer signed Legislation in July 2007 to extend Power for Jobs for one year. However, the legislature did not enact the improvements recommended by a temporary commission in 2006, which noted that the routine one-year extensions of the program did not provide “any reasonable assurance to businesses that the competitively priced power will continue to be available and does not provide any reasonable incentive for a business to remain, expand or locate in the state.”⁴⁰ Absent this assurance, the program would be relatively ineffective in keeping jobs in the Empire State, particularly in upstate regions battered by a weak economy.

CONCLUSION

The promise of lower energy bills laid out in Governor Spitzer's 2007 energy address seems unlikely to be fulfilled, given the current policy prescriptions being pursued by his administration as well as the state Legislature. Consequently, the New York economy will continue to be hampered by unnecessarily high power costs coupled with an increasingly fragile transmission and delivery system.

It doesn't have to be that way. There are a number of straightforward steps that Governor Spitzer, legislative leaders, and top regulators can take to help relieve the burden of high costs and unreliability:

- The Legislature should reauthorize the Article X siting law that expired at the beginning of 2003. Any siting law passed by the Legislature should not discriminate on the basis of fuel source or type of energy technology. Power plants already must comply with a host of environmental regulations and requirements; as long as a proposed plant meets those criteria, the siting process should be neutral.
- Policymakers should implement a moratorium on further increases to the System Benefits Charge.
- The Spitzer administration should conduct a full-scale audit and cost-benefit analysis of the state's environmental and energy regulations that take into account the collective weight of those rules. Any particular program or regulation can be defended on the grounds that it imposes a small economic cost. Evaluating the cumulative economic burden that these regulations and programs place on New York residents and business owners is overdue.
- The DEC should reconsider acid-rain regulations that add to New Yorkers' costs while doing nothing to stop acid rain caused by emissions from out-of-state power plants.
- The Spitzer administration should refashion the Renewable Portfolio Standard to allow energy companies, not state bureaucrats, to decide how to reach clean energy goals. The current RPS allows NYSERDA to dole out millions of dollars to favored and politically connected businesses of its choosing. A better RPS would set targets for clean energy production and allow utilities latitude to decide what mix of fuels could best meet those targets.
- The Spitzer administration should refashion the Renewable Portfolio Standard to embrace any technology that produces no emissions. Currently, the RPS does not recognize the benefits of nuclear power in avoiding emissions, preferring instead to lavish subsidies on uneconomical, unreliable, unproven technologies.
- Governor Spitzer should encourage development of additional nuclear capacity and withdraw opposition to the relicensing of Indian Point.
- In negotiating the 2008-09 state budget, the governor and Legislature should rule out tax and fee increases that would raise energy costs even further.
- The Spitzer administration should suspend its involvement in RGGI until feasible carbon-capture technologies are available. If, however, it decides to move forward with RGGI, it should apply RGGI's strictures across the economy, instead of only to power-plant operators, which are responsible for only one-quarter of the state's greenhouse-gas emissions.
- The Legislature should restructure and extend the Power for Jobs program set to expire this year.
- The state should cancel plans for High Electric Demand Day regulations, which will likely shut down the very power plants that exist to provide electricity on the days when demand peaks.

ENDNOTES

1. Eliot Spitzer, "New York's Perfect Storm: State Can Beat Affordability," *New York Post*, January 9, 2007.
2. United States Energy Information Administration, *Electric Power Monthly*, December 2007, Table 5.6.A. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, September 2007 and 2006.
3. Ibid.
4. Rates paid by industrial consumers are closer to the national average in most upstate New York regions, reflecting state policies that set aside low-cost public hydropower production for economic development purposes and efforts by the Pataki administration in the late 1990s to dampen industrial rates as a way of stanching the loss of manufacturing jobs. By any measure, however, industrial rates are still not competitive enough to offset other high business costs in New York.
5. Excluding taxes paid by out-of-state residents, New York's state and local taxes per \$1,000 of income ranked third out of 50 states in 2007, according to the Tax Foundation.
6. New York Independent System Operator, *Power Trends 2007*, http://www.nyiso.com/public/webdocs/newsroom/press_releases/2007/nyiso_ptrends07_final.pdf.
7. New York Independent System Operator, *Power Trends 2008*, http://www.nyiso.com/public/webdocs/newsroom/press_releases/2008/nyiso_ptrendsfinal08.pdf
8. One megawatt is typically enough electricity to power 800–1,000 homes.
9. Statement of Governor Eliot Spitzer, Crain's Business Breakfast Forum, New York, April 19, 2007, http://www.ny.gov/governor/keydocs/0419071_speech.html.
10. This was a tax on utilities' gross receipts, as opposed to a more conventional tax on net income or profits, which meant that utility customers were paying taxes *on* taxes. But ratepayers also ultimately pay the hundreds of millions of dollars in local property taxes on utility property. Because the *total* receipts from those bills were subject to the GRT, customers ended up paying tax on every dollar of property tax the utilities paid.
11. Susan F. Tierney and Paul J. Hubbard, "Siting Power Plants in the New Electric Industry Infrastructure: Lessons from California and Best Practices for Other States," *Electricity Journal*, June 2002.
12. New York Department of Public Service, "Status Report on Implementation of Renewable Portfolio Standard Program," August 9, 2007, [http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/ArticlesByCategory/258B6461547DBA0685257348006C9618/\\$File/303_03e0188_RPS_Status_Report.pdf?OpenElement](http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/ArticlesByCategory/258B6461547DBA0685257348006C9618/$File/303_03e0188_RPS_Status_Report.pdf?OpenElement).
13. According to the August 2007 PSC *Status Report on Implementation of the Renewable Portfolio Standard Program*, staffers' highest projected increases were 1.68 percent for residential ratepayers, 1.79 percent for commercial ratepayers, and 2.2 percent for industrial ratepayers.
14. New York State Renewable Energy Task Force, *Clean, Secure Energy and Economic Growth: A Commitment to Renewable Energy and Enhanced Energy Independence: The First Report of the Renewable Energy Task Force to Lieutenant Governor David A. Paterson*, February 2008, p. 3.

15. Ian Urbina, "State Regulators Are Backing Pataki's Clean-Energy Goals," *New York Times*, September 23, 2004, <http://www.nytimes.com/2004/09/23/nyregion/23energy.html>.
16. Associated Press/CNN.com, "New York Passes Nation's Toughest Acid Rain Rules," March 27, 2003, <http://www.cnn.com/2003/ALLPOLITICS/03/27/acid.rain.ap>.
17. New York Department of Environmental Conservation, "Acid Rain Questions & Answers," <http://www.dec.ny.gov/chemical/8418.html>.
18. Glenn R. Schleede, *A Critical Evaluation of the Energy Plans and Actions Announced in April 2007 by New York's Governor NYSEDA and New York PSC*, June 12, 2007, <http://www.windaction.org/?module=uploads&func=download&fileId=1260>.
19. North Carolina State University, North Carolina Solar Center, Database of State Incentives for Renewables and Efficiency, "New York Incentives for Renewables and Efficiency: System Benefits Charge," August 1, 2007, http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=NY07R&state=ny&CurrentPageID=1&RE=1&EE=1.
20. The SBC applies to all ratepayers except customers of the Long Island Power Authority and the New York Power Authority.
21. Statement of Governor Eliot Spitzer (see above, n. 8).
22. New York Department of Public Service, *Staff Preliminary Proposal for Energy Efficiency Program Design and Delivery*, August 28, 2007, p. 6: "Funding of expanded energy efficiency efforts could come from, among other sources, increasing the SBC, introducing a volumetric surcharge on firm gas and/or electricity consumption, increasing private sector interest in providing funding for energy efficiency projects, and increasing funding for tax-supported programs, such as green building credits," http://www.dps.state.ny.us/07M0548/07M0548_Staff_Proposal_initial.pdf.
23. U.S. Energy Information Administration, "Electric Power Consumption Estimates, Selected Years, 1960–2004, New York," http://www.eia.doe.gov/emeu/states/sep_use/eu/use_eu_ny.html.
24. Schleede, *A Critical Evaluation*.
25. Allen Chen, Lawrence Berkeley National Laboratory, "Myth: California Is an Energy Hog Ranking Low in Energy Efficiency," <http://www.lbl.gov/Science-Articles/Archive/energy-myths1.html>.
26. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, New York Energy Statistics, "New York Energy per Dollar of Gross State Product 1980–2003," http://www.eere.energy.gov/states/state_specific_statistics.cfm/state=NY.
27. Statement of National Mining Association president Jack N. Gerard, Ohio Society of Mining Engineers 2001 Annual Meeting, Columbus, Ohio, February 5, 2001, http://www.nma.org/newsroom/speeches_pop/020501.html.
28. New York Independent System Operator (see above, n. 7), p. 16.

29. New York Independent System Operator (see above, n. 6), p. 2.
30. United States Nuclear Regulatory Commission press release, "NRC Finds Indian Point Meets Reasonable Assurance Criteria for Emergency Preparedness," July 25, 2003, <http://www.nrc.gov/reading-rm/doc-collections/news/2003/03-099.html>.
31. Determining relative electricity-generating costs for various energy technologies is a matter of some debate, depending on a number of variables, including the pricing of externalities such as pollution as well as the role of government policies and production incentives in the tax code. In a 2006 report, *Federal Tax Policy Toward Energy*, Tufts professor Gilbert E. Metcalf estimated that in the current policy environment, electricity-generating costs from nuclear power are 4.32 cents/kWh; generating costs from wind power are 5.7 cents/kWh; and costs for generating electricity from solar power range from 12.25 to 22.99 cents/kWh. Removing subsidies, production incentives, and other market-distorting federal government policies—i.e., placing all technologies on a level playing field—would set nuclear power's generating costs at 5.94 cents/kWh; wind power's costs at 6.64 cents/kWh; and solar power's costs at 8.82–37.39 cents/kWh. The Nuclear Energy Institute, meanwhile, disputes these figures and cites research showing that the direct cost of generating electricity from nuclear power is under 2 cents/kWh.
32. David Dixon, "Wind Generation's Performance During the July 2006 Heat Storm," *Energy Pulse*, September 8, 2006, http://www.energypulse.net/centers/article/article_print.cfm?a_id=1332.
33. *Alternatives to the Indian Point Energy Center for Meeting New York Electric Power Needs*, Committee on Alternatives to Indian Point for Meeting Energy Needs, National Research Council, National Academies Press, June 2006, http://www.nap.edu/catalog.php?record_id=11666.
34. Press release from Governor Spitzer's office, "Governor Spitzer Unveils Cutting-Edge Global Warming Regulations: New York to Be Part of First 'Cap and Trade' Program in the Nation," October 24, 2007, <http://www.ny.gov/governor/press/1024071.html>.
35. Anthony DePalma, "9 States in Plan to Cut Emissions by Power Plants," *New York Times*, August 24, 2005, <http://query.nytimes.com/gst/fullpage.html?res=9C0DE4DE1E3EF937A1575BC0A9639C8B63&sec=&spon=&pagewanted=all>.
36. Press release from Governor Spitzer's office (see above, n. 32).
37. New York Department of Environmental Conservation, "State Implementation Plan for Ozone Attainment," Section 9.0, New Stationary Source Measures, <http://www.dec.ny.gov/chemical/37107.html>.
38. David Cay Johnston, "Grid Limitations Increase Prices for Electricity," *New York Times*, December 13, 2006, <http://www.nytimes.com/2006/12/13/business/13power.html?pagewanted=1>.
39. United States Department of Energy press release, "DOE Issues Two Draft National Interest Electric Transmission Corridor Designations," April 26, 2007, <http://www.energy.gov/news/4997.htm>.
40. Temporary Commission on the Future of New York State Power Programs, report to Governor Pataki and the state Legislature, December 1, 2006, <http://www.nylovesbiz.com/pdf/PowerCommission/FinalReportIntro.pdf>.

The Empire Center for New York State Policy, a project of the Manhattan Institute for Policy Research, is dedicated to fostering greater economic growth, opportunity and individual responsibility in the Empire State.

Through research papers, policy briefings, commentaries and conferences, the Empire Center seeks to educate and inform New York State policymakers, news media and the general public. Nothing in this report is to be construed as necessarily reflecting the views of the Empire Center or of the Manhattan Institute, or as an attempt to influence the passage, defeat, approval or disapproval of any legislation or other matter before the State Legislature, the Governor, or any other state or local agency or official.

The Manhattan Institute is a 501(C)(3) nonprofit organization. Contributions are tax-deductible to the fullest extent of the law. EIN #13-2912529.

EMPIRE  CENTER
FOR NEW YORK STATE POLICY
A project of the Manhattan Institute for Policy Research

P.O. Box 7113 Albany, New York 12224 • PH: 518-434-3100 • FAX: 518-434-3130 • info@empirecenter.org

www.empirecenter.org