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Thomas Congdon, Executive Director, New York State Energy Coordinating Working Group
Deputy Secretary Paul DeCotis, Chairman, New York State Energy Planning Board
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Subject: Comments on the March 2009 Interim Report on the New York State Energy Plan

Dear Mr. Congdon and Mr. DeCotis:

The Institute for Policy Integrity (IPI) at New York University School of Law is a non-partisan advocacy organization and think-tank dedicated to improving the quality of government decision-making in the areas of environmental, public health, and safety regulation. IPI advocates using rational economic analysis as a tool to advance socially-beneficial regulation.

We enthusiastically support New York State in its effort to rethink energy policy to meet the needs and challenges of the twenty-first century. As the Report notes, the basic business model for New York’s energy-based economic development programs dates back over 75 years, even though recent events have “diluted the economic development benefits.”1 Having identified this problem, the New York State Energy Coordinating Working Group and the Energy Planning Board intend to address the significant challenge of restoring these benefits going forward.2

As currently structured, New York State’s energy-based economic development programs do not promote energy efficiency. Unless revised, these programs will in fact continue to undermine the broader goals of the Plan. Presently, the programs:

- Incentivize companies to sustain their present electricity consumption rates, rather than identifying ways to use less power;

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1 NEW YORK STATE ENERGY COORDINATING WORKING GROUP, INTERIM REPORT ON THE 2009 NEW YORK STATE ENERGY PLAN 4-13 (2009) [hereinafter INTERIM REPORT].
2 Id.
- Fail to promote corporate commitments to energy efficiency strategies or goals;
- Fail to reduce state-wide demand for electricity, thus perpetuating the myriad economic, environmental, and health impacts of energy production, including greenhouse gas emissions, an unsustainable load on the electrical grid, and inflated energy prices for many consumers;
- Fail to take advantage of an opportunity to harness market forces to drive state-wide energy efficiency improvements; and
- Fail to maximize economic development benefits by preserving and generating local jobs.

If economic development is to be what state and municipal governments do, they should do it well. New York State's economic development programs are in need of reform if they are to promote clean and green economic development. These comments identify the pitfalls of the current programmatic structure and suggest a solution in the form of tradable energy vouchers.

**Background on Economic Development Programs**

Using public resources to promote private economic development by subsidizing business costs is a part of what state governments do. The average state subsidizes economic development through dozens of efforts, and local governments collectively spend an estimated $50 billion dollars a year to create or support jobs. Promoting economic development through tax, energy, and other subsidies is an entrenched role of state government.

The New York Power Authority (NYPA), the nation's largest state-owned electric utility, is charged with administering at least nine economic development programs. Various statutes require NYPA to sell low-cost power to businesses that meet specified criteria, by utilizing the relatively cheap energy generated at NYPA's Niagara and St. Lawrence-FDR hydroelectric power facilities, and by buying energy on the wholesale market and re-selling it to businesses at a reduced price. Through these efforts, NYPA's economic development projects subsidize the energy costs of many New York businesses, in the hope of preserving and growing the state's economy.

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5 INTERIM REPORT, supra note 1, at 4-12.

6 There are two important institutional players in New York State's use of energy subsidies for economic development: the New York Power Authority and the New York State Economic Development Power Allocation Board. The New York Power Authority (NYPA) is a public benefit corporation, owned by the State of New York—the largest such utility in the country. Its 18 generating facilities, together with the power it purchases on the wholesale market, provide a quarter of the state's energy. Among the 18 facilities producing 6,200 megawatts of power are the state's two hydroelectric plants (the Niagara and St. Lawrence-FDR Power Projects), which provide the state with "the cleanest and least expensive power delivered through the bulk transmission grid." *Id.* The New York State Economic Development Power Allocation Board (EDPAB) was created in conjunction with the Economic Development Power Program by a 1987 state law. The Board's role is to review applications and make allocation recommendations to NYPA for Power for Jobs and Economic Development Power. See Economic Development Power Allocation Board Home Page, http://www.nypa.gov/edpab/index.htm (last visited May 14, 2009).
NYPA’s economic development programs include: Power for Jobs, Replacement and Expansion Power (associated with the Niagara Power Project), Preservation Power (associated with the St. Lawrence-FDR Power Project), Economic Development Power, Industrial Development Power, High Load Factor Power, Municipal Distribution Agency Power, and the World Trade Center Economic Recovery Power. In its recent Report, the Energy Coordinating Working Group claims that these nine programs support over 420,000 jobs in the state. Together, they represent a major component of New York’s efforts to promote economic development.

New York’s energy subsidy programs are justified on the belief that “[t]he price of energy strongly influences the decisions of business firms to invest in new facilities and expand existing operations.” Providing businesses with subsidized power is considered particularly important in New York, which historically has had much higher electricity prices than the national average and neighboring competitor states. For example, in 2005, the average electricity cost for New York industry was 8.2 cents per kilowatt-hour—50 percent more than the national average price and higher than other industrial states like Ohio (5.1 cents/kWh) and Pennsylvania (6.3 cents/kWh).

The programs work in one of two ways. Replacement, Expansion, and Preservation Power work by selling energy from the Niagara and St. Lawrence-FDR Power Projects to companies at a reduced rate that is just slightly higher than the cost of production. The other programs—many of which had relied on cheap power from the Fitzpatrick Nuclear Plant, until NYPA sold that facility in 2000—depend on energy that NYPA buys wholesale and then re-sells to participating businesses below the market rate. Through its various economic development programs, NYPA sells power at rates as low as 75% below average wholesale prices.

The Preservation Power Program provides a notable example of how these economic development projects work. By statute, 490 megawatts (MW) of power generated by the St. Lawrence-FDR hydroelectric facility is earmarked as low-cost electricity for businesses in Jefferson, St. Lawrence, and Franklin counties. Currently, all reduced-rate power goes to two plants: Alcoa Aluminum receives 478 MW of power and GM PowerTrain gets 12 MW. Alcoa’s grant of reduced-rate power is intended to support over 1000 jobs, though prior to a recently renegotiated contract, the company had made no firm commitment to maintain that employment level. Alcoa’s new contract extension gives the company low-cost power through the year 2043. In exchange, Alcoa pledged to maintain approximately 1065 jobs (and no less than 900 jobs), complete a planned $600 million
renovation, and pay higher electric rates if aluminum prices increase above specified levels.15 The contract does not require Alcoa to adopt any energy efficient practices. One study has projected that this contract effectively grants Alcoa an annual subsidy of $220 million.16

The somewhat opaque nature of the contracting and allocation processes involved in the various economic development programs complicates any attempt to calculate a total figure for how much low-cost power New York gives to local businesses. However, any annual total must be on the order of several thousand megawatts of state-subsidized electricity.

Energy Subsidies Encourage Inefficiency

Three principal characteristics of New York’s energy-based economic development programs combine to disincentivize energy efficiency. First, the programs distort price signals that would otherwise motivate reductions in energy use. Second, the contracts that NYPA often employs create a “use-it-or-lose-it” dynamic, in which it is in the company’s interest to make full use of their low-cost power allocations quickly within certain time limits. Third, the programs do not condition electricity allocations on any energy efficiency requirements.

By failing to reduce energy use, these three characteristics cause the economic development programs to undercut the state’s broader goals of efficiency, clean energy, and greenhouse gas reductions. Every kilowatt used by a recipient of cheap economic development power is a kilowatt that must be produced somewhere on the electric grid. That production carries with it all the well-documented environmental and health costs of energy generation. The increased demand for electricity also strains the electric grid and results in higher electricity prices throughout the state, including for many residential customers.

NYPA’s economic development programs work by selling energy to local businesses below market price.17 This structure interrupts market-based and regulatory price signals. Electricity prices normally respond to the increasing energy demand and the decreasing supply of fossil fuels; prices are also beginning to reflect the environmental, health, and climate impacts of energy use, as regulations begin to require energy companies to internalize those costs. In a functioning market, prices act as signals, indicating to industry the extent to which it should minimize energy use. Businesses should have a natural incentive to minimize their electricity consumption, as they do to minimize all costs.

But by selling low-cost energy to local businesses, NYPA undercuts the incentive that recipient businesses have to decrease their energy use. In lowering the price of electricity as set by New York’s deregulated energy market, NYPA distorts the market signal sent to businesses about the value of energy. High energy prices incentivize businesses to become more efficient and consume less energy; low energy prices diminish that incentive, and businesses will instead prioritize other cost-cutting measures and focus less attention on energy efficiency. This is an unfortunate result,

17 Power for Jobs is the exception to this rule. It offers businesses the choice of receiving cash rebates rather than low cost energy.
especially since the New York State Energy Research and Development Authority has reportedly estimated that 1.5 jobs may be created or retained for every gigawatt-hour saved.\textsuperscript{18}

Another component of NYPA's contracting process compounds the problem. For example, under the Replacement Power and Expansion Power Programs, businesses have three years from signing a NYPA contract to use the energy they are allotted.\textsuperscript{19} Until they do, NYPA continues to sell it on the open market.\textsuperscript{20} This creates a "use-it-or-lose-it" dynamic, in which it is in the company's interest to make full use of their low-cost power allocations as quickly as possible. Instead of rewarding companies that conserve energy, consume less energy, or decrease their carbon footprint, New York seems to reward sustaining or speeding up rates of energy consumption.

Finally, NYPA does not require businesses to commit to energy efficiency strategies in order to receive economic development power. For example, Alcoa's recent contract extension did not include any requirement that the company use its NYPA power efficiently.\textsuperscript{21} Not only would energy efficiency strategies save companies money—money that could be used to protect jobs\textsuperscript{22}—but the process of constructing and retrofitting buildings with energy efficiency improvements also creates additional local, green jobs: approximately eight to eleven jobs are directly created for every one million dollars invested in energy efficiency improvements.\textsuperscript{23} The ripple effect is even larger, creating jobs through the new demand for retrofitting and building materials, as well as when workers spend their new income at local businesses.

In short, the current incentive structure directly contravenes the state's energy efficiency, clean energy, and greenhouse gas reduction goals. The State Energy Plan will attempt to support New York businesses and citizens, while lowering the State's greenhouse gas emissions and complying with environmental and health regulations.\textsuperscript{24} Clean energy is clearly a priority, with the Energy Coordinating Working Group's Report stating that "[t]he 2009 Energy Plan will focus the state's efforts on the continued growth of its clean energy sector."\textsuperscript{25} Encouraging energy efficiency is another goal of the Plan\textsuperscript{26}—one on which the state has already spent a significant amount of money. In 2008, for example, New York utilities and energy authorities spent $321 million on energy efficiency programs.\textsuperscript{27} A third relevant goal espoused by New York is to reduce greenhouse gas emissions,\textsuperscript{28} and the state government has also devoted considerable time and resources to tackling that issue. But unless New York revises its economic development programs, many of those goals and effects will continually be undermined.


\textsuperscript{20} See id. (noting NYPA sells such power at a marked up price—a source of about $45 million for NYPA in 2008).


\textsuperscript{22} While some may speculate that more energy-efficient plants need less labor to operate and, thus, that energy efficiency will lead firms to fire their employees, the contracts at the heart of these economic development programs would prevent such a result and preserve those jobs.

\textsuperscript{23} SARAH WHITE & JASON WALSH, supra note 18, at 15.

\textsuperscript{24} INTERIM REPORT, supra note 1, at 2-1.

\textsuperscript{25} Id.

\textsuperscript{26} Id. at 4-2.

\textsuperscript{27} Id.

\textsuperscript{28} Id. at 2-2.
Recommendation: Energy Vouchers

There are two alternative ways that New York State could use its electricity generation capacity and energy policies to support economy development. First, it could give local businesses direct cash subsidies or tax rebates (as a portion of the Power for Jobs program already does). The money would be generated by the sale of hydropower on the wholesale market. Giving businesses money or rebates rather than selling them low-cost energy would resolve the problems of discouraging energy conservation and efficiency, as outlined above. Recipient businesses would have to pay regular industrial energy prices, and thus would experience the market signals to decrease their energy use. Businesses could still be encouraged to spur economic development through the subsidies or rebates.

However, it is possible that this approach may not be politically viable. Direct cash subsidies or tax rebates are more obvious forms of public support for private business and, thus, are likely to face more criticism. Recipient businesses might protest this change as a loss of the energy entitlement upon which many have come to rely.

The second way that New York could correct the perverse incentives created by current energy subsidies would be to provide recipient businesses with energy “vouchers.” An energy voucher would entitle the holder to purchase a certain amount of electricity at a fixed exercise price. The vouchers could be given away to the current recipients of energy subsidies as a perfect substitute: if a firm now receives X kilowatt-hours at Y price, that firm would still receive X vouchers, each with an exercise price of Y. Receipt of vouchers would still be contractually conditioned on the preservation or creation of jobs.29

However, unlike under the current approach, businesses would not be forced to maintain current energy consumption levels in order to realize the full value of the economic benefit. Instead, businesses could sell their vouchers to other recipient or non-recipient businesses. The vouchers would be freely transferable, so that excess vouchers would be sold into the market. The price of the voucher on the market will approach the difference between the spot price on electricity and the exercise price of the voucher.

This strategy delivers several crucial benefits compared to the current structure. First, and most importantly, it encourages efficiency. A business that is able to reduce its energy consumption would be able to sell excess vouchers into the market. The opportunity to sell vouchers creates the correct incentives for businesses to lower their energy use to the point at which the value of selling the voucher is higher than the value of using it.

In addition, an energy voucher system could lower energy prices across the state by creating appropriate incentives for energy efficiency. With a fairly inelastic supply of energy, reductions in demand—resulting from more widespread adoption of energy efficiency measures—will translate into lower prices.

29 Vouchers could also be conditioned upon the adoption of energy efficiency strategies. However, it would be more efficient not to include such conditions and instead allow individual companies to determine their most cost-efficient response under the voucher system. Command-and-control regulations—even in the form of efficiency standards—are generally not as cost-efficient as market-based schemes, which give businesses more flexibility.
Conclusion

The structure of New York’s energy-based economic development programs must be updated to meet twenty-first century needs and challenges. Currently, New York’s programs create the wrong incentives, fail to decrease state-wide energy consumption, and therefore fail to maximize the potential benefits to economic development, public health, and the environment. IPI encourages New York to consider revisions that could help maximize the benefits of its economic development programs while minimizing counterproductive incentives. In particular, IPI suggests that New York should consider incorporating an energy voucher regime into its economic development programs.

Implementing some of these changes may require the Governor’s office to coordinate with the state legislature, but the benefits will be well worth the effort. The benefits of a voucher system are clear: businesses will retain the option of buying low-cost power, but they will also be able to make money by instead selling their vouchers if they are able to reduce their energy use. The state’s goals of promoting economic development are thereby protected, without creating perverse incentives for inefficient energy use.

We hope that this initial set of comments will prove useful, and we hope to continue to play a role in the discussion as New York moves towards its new State Energy Plan. Please feel free to contact us should you like to discuss this proposal further.

Sincerely,

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