

Institute *for* Policy Integrity

New York University School of Law

VIA EMAIL

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Thomas Congdon
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New York State Energy Research and Development Authority
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Subject: Comments on the Draft New York State Energy Plan

Dear Mr. Congdon and Members of the Energy Planning Board:

The Institute for Policy Integrity (IPI) at New York University School of Law offers the following comments on New York's 2009 State Energy Plan (Plan). IPI is a non-partisan advocacy organization and think-tank dedicated to improving the quality of government decisionmaking 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 efforts to rethink energy policy to meet the needs and challenges of the twenty-first century. We are especially encouraged by the Draft Plan's recommendation on the state's energy-based economic development programs: "All of NYPA's economic development customers should be incentivized to invest in cost-effective energy efficiency measures."¹ We strongly believe that this core recommendation should be strengthened and expanded in the Final Plan, and these comments explore some principles and considerations that should guide New York as it refocuses its economic development programs on energy efficiency.

Specifically, these comments detail how the current structure and operation of the state's economic development programs disincentivize energy efficiency; offer recommendations for language to include in the Final Plan; and suggest a practical solution to reform the economic development programs through a system of tradable energy vouchers.

Background on Economic Development Program

Over the years, New York has designed several programs that aim to support local businesses by subsidizing their electricity costs. The New York Power Authority (NYPA) is responsible for the operation of nine separate economic development programs: Power for Jobs, Economic Development Power, High Load Factor Power, Municipal Distribution Agency Power, Replacement Power, Expansion Power, Industrial Economic Development Power, Preservation Power, and World Trade Center Recovery Power. The Economic Development Power Allocation Board (EDPAB) was created to help administer the Power for Jobs and Economic Development Power programs.² In total, the nine programs allocate about 2322 megawatts of low-cost power to well over 700

¹ NEW YORK STATE ENERGY PLANNING BOARD, 2009 STATE ENERGY PLAN (DRAFT), at 76 [hereinafter DRAFT PLAN].

² N.Y. ECON. DEV. LAW § 182. Also, individual municipal agencies participate in the administration of the Municipal Distribution Agency Power program.

businesses. Recipient businesses have pledged to create or maintain nearly half a million jobs in exchange for the low-cost power.³

The criteria, administration, and restrictions for each program are different.⁴ However, some important themes emerge from the various statutes and regulations governing the nine programs:

- **Below-Market Prices:** Under the Replacement Power, Expansion Power, Industrial Economic Development Power, and Preservation Power programs, NYPA allocates electricity from its own hydroelectric plants, at a steep discount from market prices. For the remaining five programs, NYPA purchases power on the wholesale electricity market and resells it at below-market prices. Under the Power for Jobs programs, certain recipients have been given the option of selecting a direct cash rebate instead of discounted power; for the remaining Power for Jobs recipients, most of their benefit comes from NYPA paying local utilities to waive transmission surcharges.⁵
- **Minimum Power Requirements:** By statute and regulation, any contract for Economic Development Power, Power for Jobs, Preservation Power, Expansion Power, or Replacement Power “shall include reasonable provisions providing for partial or complete withdrawal of [the power] in the event the recipient fails to *maintain* mutually agreed upon levels of employment and *power utilization*.”⁶ In other words, recipients of low-cost power are not allowed to cut their electricity demand below levels specified by contract. Other statutes actually seek to increase energy usage: “each allocation of economic development power recommended by the board shall be to serve *new electrical demand*,”⁷ and a principal goal of the Industrial Economic Development Power and Municipal Development Agency Power programs is “to encourage *increased* domestic and rural *use of electricity*.”⁸ Finally, applicants for certain programs, like High Load Factor Power, must meet minimum requirements for total electricity usage and for energy intensity (i.e., their electricity costs cannot fall below 7.5% of their total product value).⁹

³ NEW YORK POWER AUTHORITY, ELECTRICITY FOR ECONOMIC DEVELOPMENT: PROGRAM SUMMARY 15 (2006) (prepared for the Commission on the Future of New York State Power Programs for Economic Development); DRAFT PLAN, *supra* note 1, at 75; NEW YORK POWER AUTHORITY, 2008 REPORT TO THE GOVERNOR AND LEGISLATIVE LEADERS ON POWER PROGRAMS FOR ECONOMIC DEVELOPMENT (2008) (listing recipients and jobs pledged for six of the nine programs). Recipient businesses of some programs include non-profit organizations.

⁴ See CITIZENS BUDGET COMMISSION, PROVIDING POWER EFFECTIVELY FOR ECONOMIC DEVELOPMENT 22 (2009) (calling the system “uncoordinated” and noting that “[t]he nine programs each have their own application process and administrative apparatus”).

⁵ See N.Y. ECON. DEV. LAW § 189(a)(5); CITIZENS BUDGET COMMISSION, *supra* note 4, at 10, 13 (noting that 167 participants have selected the rebate as of 2006).

⁶ N.Y. ECON. DEV. LAW §§ 187(d), 189(h)(3) (emphasis added); N.Y. PUB. AUTH. LAW § 1005(13) (emphasis added); *accord* N.Y. Comp. Codes R. & Regs. tit. 21, § 370.4 (2009) (“Applications for allocations of economic development power shall specifically indicate that the proposed recipient intends to commit to maintain specified levels of employment and power usage”); N.Y. Comp. Codes R. & Regs. tit. 21, § 370.6(b) (2009); N.Y. Comp. Codes R. & Regs. tit. 21, § 460.4 (2009) (“All new allocations [of Industrial Power] shall be specifically contingent upon commitments by the recipient to maintain specific levels of employment and power usage . . . provided that consideration will be given to short-term economic fluctuations and/or operational constraints.”).

⁷ N.Y. ECON. DEV. LAW §§ 187(d) (emphasis added).

⁸ N.Y. PUB. AUTH. LAW § 1005(5) (emphasis added).

⁹ See N.Y. PUB. AUTH. LAW § 1005 (“A high load factor manufacturer is one which normally utilizes a minimum electric demand of five thousand kilowatts...and of which the cost of electricity normally represents at least seven and one-half percent of its total product value.”); *see also* N.Y. ECON. DEV. LAW §§ 186(d) (“Allocations of economic development power

- **Restrictions on Transfers:** Generally, NYPA regulations prohibit the voluntary transfer of contract rights (such as the rights granted under economic development program contracts) from one customer to another “without the written approval of the authority,” and further require any transferee to satisfy “all the provisions and conditions” of law and the original contract.¹⁰ This and other similar provisions restrict the flexibility of the economic development programs.¹¹
- **Geographic Constraints:** Five of the economic development programs are restricted to energy customers in highly specific geographic regions.¹² Even the nominally statewide programs, such as the Economic Development Power program, entail certain geographic constraints, such as requirements to allocate a minimum amount of electricity to certain regions and restrictions on allocations within single municipalities.¹³
- **Few (and Temporary) Energy Efficiency Requirements:** The vast majority of allocations of low-cost power are made without regard to the energy-efficient technologies and practices utilized by the recipient. A small subset of allocations made under the Preservation Power, Expansion Power, and Replacement Power programs—those grants made for “revitalization” purposes—are conditioned on demonstration of efforts “to reduce energy costs to the maximum extent practicable, through conservation and load management.”¹⁴ A recently enacted but temporary statutory provision requires NYPA to conduct energy audits on a representative sample of recipients in seven programs, but does not require recipients to take any action based on the results of such surveys.¹⁵ Finally, a temporary statutory provision authorizes—but does not require—NYPA to “finance and design, develop, construct, implement, provide, and administer” energy-efficiency projects and services for recipients of low-cost power under the economic development programs.¹⁶

This snapshot of NYPA’s nine economic development programs leads to one very clear and disheartening conclusion: currently, these programs do not promote energy efficiency.

shall be recommended only to or for the use of businesses which normally utilize a minimum peak electric demand of four hundred kilowatts.”).

¹⁰ N.Y. Comp. Codes R. & Regs. tit. 21, § 454.10 (2009); *see also* N.Y. Comp. Codes R. & Regs. tit. 21, § 454.11 (2009) (generally prohibiting sale of energy by customers); *cf.* N.Y. Comp. Codes R. & Regs. tit. 21, § 460.7 (2009) (“Any transfer of an industrial power allocation . . . from one customer to a new customer shall be specifically subject to written authority approval . . . Consideration shall be given to the effect of any transfer on retention of employment and economic benefits to the State.”).

¹¹ *E.g.* N.Y. ECON. DEV. LAW § 186; N.Y. Comp. Codes R. & Regs. tit. 21, § 370.7 (2009) (restricting transfer of economic development power allocations between facilities of a recipient without approval).

¹² *See* N.Y. PUB. AUTH. LAW §§ 1005(5), (13) (discussing geographic restrictions for Replacement Power (30-mile radius of Niagara Project), Expansion Power (30-mile radius of Niagara Project or Chautauqu County), Preservation Power (three select counties), and Municipal Development Agency Power (downstate New York)); Chapter 383 Laws of 2001 Part A (discussing geographic restrictions of World Trade Center Recovery Power (lower Manhattan Liberty and Resurgence Zones)).

¹³ *See* N.Y. ECON. DEV. LAW § 187(d); N.Y. Comp. Codes R. & Regs. tit. 21, §§ 370.6(c)-(e).

¹⁴ N.Y. PUB. AUTH. LAW § 1005(13)(b)(4).

¹⁵ *See* N.Y. PUB. AUTH. LAW § 1005(16)(a) (requiring energy audits for Economic Development Power, Expansion Power, Replacement Power, Preservation Power, High Load Factor Power, Municipal Distribution Agency Power, and Power for Jobs); Citizens Budget Commission, *supra* note 4, at 17 (discussing temporary provision).

¹⁶ N.Y. PUB. AUTH. LAW § 1005(16)(a) (third of three subsection 16s).

Current Economic Development Programs Encourage Inefficiency

Three principal characteristics of New York's energy-based economic development programs currently combine to disincentivize energy efficiency. First, the programs distort price signals that would otherwise motivate reductions in energy use. Second, statutes, regulations, and contracts lock some recipients into maintaining or increasing their rates of energy consumption. Third, the programs do not generally condition electricity allocation on any energy efficiency requirements. Fortunately, these shortcomings can be remedied.

NYPA's economic development programs work by selling energy at below-market prices.¹⁷ This structure interrupts market-based and regulatory price signals. Electricity prices would normally increase in response to higher energy demand or decreasing supply of cheap fossil fuels. To a certain extent, prices already reflect the environmental, health, and climate impacts of energy use, as regulations require energy companies to internalize those costs. In a functioning market, prices act as signals, indicating to customers the extent to which they should minimize energy use. Businesses would 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.¹⁸ In lowering the price of electricity set by New York's deregulated energy market, NYPA distorts the market signal sent to businesses about the cost of energy consumption. 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.¹⁹

Additionally, as outlined above, the statutes, regulations, and contracts for certain programs prohibit recipients of low-cost power from conserving electricity and dropping below set levels of usage. Some programs are even more explicit about promoting inefficiency: applicants for High Load Factor Power are disqualified if they use energy so efficiently that their normal electricity costs become less than 7.5% of their total product value. This creates a "use-it-or-lose-it" dynamic, in which a company will lose its valuable energy subsidy if it no longer meets a certain threshold for electricity demand. Similarly, the programs are set up to assume that business expansion necessarily entails increased electricity consumption: allocations are not made with the goal of enabling economic development, job creation, and energy conservation all at the same time.

¹⁷ Power for Jobs is a partial exception, as discussed *supra* p. 2.

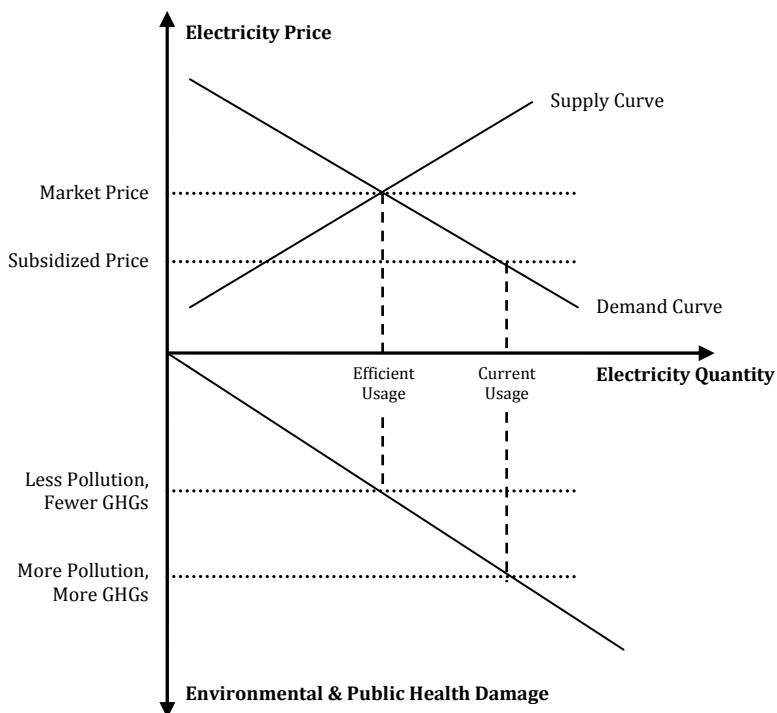
¹⁸ To the extent that allocations of low-cost power do not satisfy a business's entire energy needs, that business will still buy at least some electricity at market prices. Evidence of historic allocations does suggest that the individual economic development programs may not always allocate enough low-cost power to cover a business's full demand. *See, e.g.,* NEW YORK POWER AUTHORITY, 2008 REPORT TO THE GOVERNOR AND LEGISLATIVE LEADERS ON POWER PROGRAMS FOR ECONOMIC DEVELOPMENT ex. II (2008) (listing, for example, Delphi Automotive Systems's Amherst facility as receiving allocations from both Power for Jobs and Expansion Power, suggesting neither allocation was sufficient to cover Delphi's needs). The need to pay market price for at least some electricity would restore some of a business's incentives to identify conservation or efficiency strategies. However, certain energy efficiency projects would potentially reduce demand for subsidized power, meaning that the low-cost power is reducing incentives for energy efficiency. Further, a business's incentives to pursue energy efficiency strategies are also affected by statutory and regulatory requirements to maintain certain power utilization levels or to expand power utilization. Moreover, many businesses may have their full energy needs satisfied by the low-cost allocations, as evident from the fact that some businesses do not use their full allocations and NYPA sells the excess power on the market for a profit. *See* James Heaney, *State Power Authority Reaps a Windfall By Selling Low-Cost Electricity Intended to Help WNY Industry*, THE BUFFALO NEWS, June 9, 2008.

¹⁹ *See* UNITED NATIONS ENVIRONMENT PROGRAMME, REFORMING ENERGY SUBSIDIES: OPPORTUNITIES TO CONTRIBUTE TO THE CLIMATE CHANGE AGENDA 12 (2008) ("By lowering end-use prices, consumption subsidies can lead to higher energy use and reduce incentives to conserve or use energy more efficiently.").

Finally, no economic development program contains a permanent, universal, and mandatory requirement for energy efficiency. Indeed, such a requirement would be fundamentally inconsistent with the current structure and operation of the programs.

This failure to promote energy efficiency carries serious consequences for New York’s environment, public health, and economy. Since the economic development programs increase—or at minimum fail to decrease—energy consumption, they also perpetuate all the airborne emissions of noxious pollutants and greenhouse gases generated by a fossil fuel-based power system.²⁰ Though the hydroelectric power used for four economic development programs creates relatively less pollution, the remaining five programs (representing nearly 50% of the total megawatts allocated by the nine programs) all rely at least in part on electricity purchased on the wholesale market from local power plants, which predominately burn fossil fuels.²¹ Moreover, if demand for hydroelectric power were reduced by the inclusion of efficiency incentives in the economic development programs, the leftover power could be reallocated to other customers, displacing the demand for electricity from dirtier power sources.

A compelling study by the Organization for Economic Cooperation and Development suggests that worldwide energy subsidies could be responsible for as much as 6% of carbon dioxide emissions over a ten-year period.²²



New York’s economy similarly suffers from the failure to promote energy efficiency. The New York State Energy Research and Development Authority has reportedly estimated that 1.5 jobs may be

²⁰ “Higher fossil-fuel production can also damage the environment directly by polluting water supplies and spoiling the landscape.” *Id.* at 15.

²¹ Previously, some of these programs relied on power from NYPA’s nuclear facilities. But “[w]ith the sale of its nuclear plants and the creation of a NYISO market, NYPA relies on power purchased in the market (rather than produced at its own facilities) to meet a significant part of its customers’ needs.” CITIZENS BUDGET COMMISSION, PROVIDING POWER EFFECTIVELY FOR ECONOMIC DEVELOPMENT 6 (2009); *id.* at 8 (calculating that 1083 megawatts for the economic development programs is purchased on the market, out of a total of 2322 megawatts allocated under all economic development programs).

²² UNITED NATIONS ENVIRONMENT PROGRAMME, *supra* note 19, at 16 (“A study by the OECD in 2000, for instance, showed that global [carbon dioxide] emissions would be reduced by more than 6 per cent and real income increased by 0.1 per cent by 2010 if all subsidies that lower the prices of fossil fuels used in industry and the power sector were removed everywhere in the world.”).

created or retained for every gigawatt-hour of electricity conserved.²³ Not only would energy-efficiency strategies save companies money—money that could be used to protect jobs²⁴—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.²⁵ The ripple effect is even larger: as more jobs are created through the increased demand for retrofitting and building materials workers spend their new income at local businesses.

On a larger scale, energy efficiency impacts international trade and national energy security. The United Nations Environmental Program has explored the relationship between energy subsidies and national energy security—the same argument can be applied by analogy to New York’s interstate energy trade and its relationship with Canada’s electricity markets: “By increasing energy use, consumption subsidies boost demand for imports or reduce the amount of energy available for export. This harms the balance of payments and energy supply security by increasing the country’s dependence on imports.”²⁶

The current structure and operation of NYPA’s nine economic development programs fail to promote energy efficiency, and this deficiency carries very profound consequences. As the State Energy Planning Board looks to the future, it should focus on identifying a straightforward solution to this problem that will be more consistent with its broader energy policies.

Current Economic Development Programs Are Inconsistent with State Policy

As currently structured, New York’s energy-based economic development programs are inconsistent with all five of the Plan’s policy objectives:²⁷

- Objective #1: “Assure that New York has reliable energy...systems.” The Plan explains how, “[i]n the long-run, a significant reduction in electricity demand has been shown to...reduce price volatility.”²⁸ By requiring subsidy recipients to maintain power consumption levels, the economic development programs do not help alleviate the demand on an over-burdened power system and do not help smooth price volatility.
- Objective #2: “Support energy...systems that enable the State to significantly reduce greenhouse gas (GHG) emissions....” As already discussed, energy efficiency helps cut greenhouse gas emissions, whereas the current operation of the economic development programs does not support this goal.
- Objective #3: “Address affordability concerns of residents and businesses caused by rising energy bills, and improve the State’s economic competitiveness.” The Plan explains how achieving the state’s “45 by 15” goal for energy efficiency “is expected to

²³ SARAH WHITE & JASON WALSH, CTR. ON WIS. STRATEGY, THE WORKFORCE ALLIANCE, & THE APOLLO ALLIANCE, GREENER PATHWAYS: JOBS AND WORKFORCE DEVELOPMENT IN THE CLEAN ENERGY ECONOMY 15 (2008) (citing personal communications with NYSERDA).

²⁴ 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.

²⁵ WHITE & WALSH, *supra* note 23, at 15.

²⁶ UNITED NATIONS ENVIRONMENT PROGRAMME, *supra* note 19, at 13.

²⁷ DRAFT PLAN, *supra* note 1, at xi.

²⁸ *Id.* at xi.

reduce the net retail cost of electricity paid by all ratepayers by 2015.”²⁹ Energy efficiency also “increas[es] productivity” and “creates jobs,”³⁰ thereby improving the state’s competitiveness. The current economic development programs, however, do not advance these efforts.

- Objective #4: “Reduce health and environmental risks associated with the production and use of energy across all sectors.” As with greenhouse gas emissions, energy efficiency will help reduce all pollutants associated with electricity generation; the current inefficient use of energy by the economic development programs will not.
- Objective #5: “Improve the State’s energy independence and fuel diversity by developing in-state energy supply resources.” The Plan affirms that energy efficiency “increases energy security by reducing exposure to supply disruptions and price volatility associated with reliance on imported fossil fuels.”³¹

The Plan “has identified energy efficiency as the priority resource for meeting its multiple objectives.”³² By discouraging energy efficiency, New York’s economic development programs fail to promote all the Plan’s objectives.

Moreover, the economic development programs do not currently align with New York’s new strategies for energy policy. The Plan takes great pride that “New York has been among the nation’s leaders in implementing market-based programs to help ensure that energy efficiency is recognized as a cost-effective alternative to supply-side energy resources”³³—yet the economic development programs do not harness cutting-edge, market-based regulatory tools. Instead, the programs restrict the free transfer of the low-cost power benefits.

The purpose of the Plan is to design a path towards “a robust and innovative Clean Energy Economy that will stimulate investment, create jobs, protect public health and the environment, and meet the energy needs of businesses and residents over the planning horizon.”³⁴ The Draft Plan took a first step by noting the importance of building energy efficiency goals into the economic development programs. However, unless the Final Plan strengthens and builds on that initial language, it will ultimately fail to articulate how the economic development programs can stop undermining the state’s progress and start supporting its goals for investment, jobs, health, and the environment.

Recommended Language for Final Plan

In the draft text for Chapter Five on the economic development programs, scant attention is given either to identifying the causes of inefficiency or to outlining the principles for a solution. The Plan does state that “[a] reformed program is needed” and that “[c]riteria for the new program should be flexible . . . and must be aligned with the State’s . . . energy efficiency strategies.”³⁵ The Plan also notes that “[s]mart investments in energy efficiency initiatives can be a significant economic

²⁹ DRAFT PLAN, *supra* note 1, at 21. The Plan also explains the importance of using energy efficiency to “mitigate unavoidable price increases associated with replacement of aging infrastructure.” *Id.* at xii.

³⁰ *Id.* at 10.

³¹ *Id.*

³² *Id.* at xi.

³³ *Id.* at xi.

³⁴ *Id.* at xvii.

³⁵ *Id.* at 76.

development tool for New York businesses.”³⁶ However, such language gives NYPA and other decisionmakers little guidance on what concrete steps to take next. IPI encourages the Energy Planning Board to include in the Final Plan a discussion of how the current structure undercuts energy-efficiency incentives by distorting market signals and locking companies into set usage levels.

Furthermore, in addition to the general recommendation that “[a]ll of NYPA’s economic development customers should be incentivized to invest in cost-effective energy efficiency measures,” the Final Plan should include the following recommendations in Section 5.3.1 “Retaining New York’s Existing Base in a Carbon-constrained Economy”:³⁷

- **Economic development programs should always be designed in a way that does not undermine incentives for producers and suppliers to provide a service efficiently, nor for consumers to use energy efficiently.³⁸ Economic development programs should increase incentives to use energy efficiently.**
- **To the extent practical and consistent with law, economic development programs should be designed to harness market forces to identify and incentivize the lowest-cost opportunities for energy-efficient improvements.**
- **Economic development programs should always be designed to maximize net benefits, including but not limited to both economic and environmental benefits. Pursuing energy efficiency is a crucial strategy to promote economic development, economic competitiveness, and job creation, as well as to secure environmental and public health benefits.**
- **Economic development programs should not use levels of energy consumption as a proxy to measure levels of economic development. Rather, the potential of energy efficiency both to promote economic development and simultaneously to limit energy consumption should be recognized.**

The Energy Planning Board might also consider shifting at least some of the language and recommendations on the economic development programs out of Chapter Five (Strategy 4: Stimulate Innovation in the Clean Energy Economy) and into Chapter Two (Strategy 1: Produce, Deliver, and *Use Energy More Efficiency*). This reorganization would symbolically demonstrate the importance of harmonizing the economic development programs with the state’s broader energy efficiency goals. Furthermore, it would highlight the potential to use the economic development programs to help achieve the state’s efficiency targets. Chapter Two does recommend that NYPA should take the “necessary action” to ensure it is contributing to energy efficiency goals,³⁹ but that single, short pronouncement does not offer the principles and details necessary to guide NYPA toward a more energy-efficient future.

Finally, the Energy Planning Board should consider outlining some of the steps necessary to implement a solution that would restore the right incentives to the economic development programs: namely, creating a system of tradable energy vouchers.

³⁶ *Id.* at 77.

³⁷ We do not currently take a position on the Plan’s recommendations for extending and expanding Power for Jobs.

³⁸ This language is adapted from UNITED NATIONS ENVIRONMENT PROGRAMME, *supra* note 19, at 23.

³⁹ DRAFT PLAN, *supra* note 1, at 25.

Tradable Vouchers Would Restore Incentives for Efficiency

New York could correct the perverse incentives of its current energy subsidies by providing recipient businesses with tradable 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 could still receive X vouchers, each with an exercise price of Y. Initial receipt of vouchers by eligible companies could still be contractually conditioned on the preservation or creation of jobs.⁴⁰

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 of the program. 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 of 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 could sell excess vouchers into the market. The opportunity to sell vouchers creates the correct incentives for businesses to lower their energy use whenever the value of selling the voucher is higher than the value of using it. For example, Firm A receives vouchers from one of NYPA’s economic development program to purchase electricity at 2 cents per kilowatt-hour; Firm B receives no such vouchers, and projects its price for electricity to be 9 cents per kilowatt-hour.⁴¹ Firm B would be willing to pay Firm A up to 7 cents per voucher for Firm A to transfer over its rights to the lower-cost power. Firm A could use those proceeds to invest in energy-efficient technologies or operations, thereby reducing its energy consumption and freeing up the vouchers for sale. Overall this would result in reduced demand for electricity, with all of the attendant environmental benefits discussed above.

In addition, the voucher system augments the goals of economic development. Firms selling surplus vouchers could invest their profits from the sale in energy-efficient improvements—thus creating green jobs—or could direct them to another purpose, such as expansion, that could similarly improve their competitiveness. At the same time, firms buying vouchers will also be reducing their overall energy costs, and will also be able to put those savings to work.

Finally, 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. As the Plan itself already states, increasing energy efficiency “is expected to reduce the net retail cost of electricity paid by *all ratepayers*.”⁴² Lower electricity prices have obvious economic benefits for consumers.

⁴⁰ 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.

⁴¹ The Energy Planning Board should consider how the voucher system would interact with fluctuating electricity prices and futures markets.

⁴² DRAFT PLAN, *supra* note 1, at 21 (emphasis added).

Tradable Vouchers Are A Workable Reform

The proposed system of tradable vouchers could be easily integrated into a broader package of reforms, which will likely entail new statutes and new regulations. However, the voucher system could also be implemented under the existing legal structure with only a few changes. The following points highlight some of the legal and practical considerations that should be addressed when designing a voucher system under either existing or reformed statutes and regulations:

- **Switching from Power to Voucher Allocations:** Current statutes on NYPA’s economic development programs require the “allocation” of “power.”⁴³ These terms are not defined by statute, and agencies implementing these statutes should be able to adopt reasonable interpretations when designing regulations.⁴⁴ How to best fit the voucher program into existing statutory authority will depend on the exact statutory text. For example, the statute on Power for Jobs allows allocations for power “to or for the use of” eligible businesses.⁴⁵ “For the use of” seems to contemplate actual consumption of power by the business; “to,” therefore, likely means something else, and could be interpreted to include the grant of a transferable set of rights to low-cost power.
- **Minimum Energy Requirements:** Current statutes on NYPA’s economic development programs often set minimum levels of required energy consumption for eligible customers. But with new statutory interpretations and a new approach to contracting, many of these statutory obstacles to energy efficiency can be overcome. For example, contracts for Power for Jobs must include “reasonable provisions providing for the partial or complete withdrawal of the power . . . in the event that the recipient fails to maintain mutually agreed upon levels of . . . power utilization.” When negotiating individual contracts, the “mutually agreed upon level of power utilization” can define a broad range that would enable the business to conserve and reduce consumption without forfeiting its subsidy. Similarly, “reasonable provisions” for withdrawal could specify that the subsidy will not be cancelled should the power reduction result from energy efficiency improvements (as opposed to resulting from a drop in production and a corresponding drop in jobs).
- **Existing Authority for Energy Efficiency:** When pursuing new statutory interpretations like those discussed above, agencies should seek to implement the legislature’s broad objectives of energy efficiency and economic development, and should take full advantage of all existing statutory authorities. For example, NYPA is authorized to conduct energy audits of recipients of its economic development subsidies, and further is authorized to “finance and design, develop, construct, implement, provide, and administer” energy efficiency projects and services in conjunction with its economic development programs.⁴⁶ By interpreting other statutory requirements in light of this authority to pursue energy efficiency, NYPA may be better able to justify the implementation of a voucher system.

⁴³ Some statutory provisions explicitly contemplate the resale of economic development power by recipients. For example, applicants for Economic Development Power “may also apply for, purchase and receive a bulk allocation of economic development power for the purpose of entering into contracts with eligible businesses.” N.Y. ECON. DEV. LAW § 187(b). NYPA should consider how to use such existing authorities to help implement a voucher system.

⁴⁴ Given their “special competence” and technical expertise, NYPA and EDPAB have earned a degree of judicial deference in making reasonable statutory interpretations. See *In re Claim of Gruber*, 89 N.Y.2d 225, 231 (N.Y. 1996); *Judd v. Constantine*, 153 A.D.2d 270, 272 (N.Y. App. Div. 1990).

⁴⁵ N.Y. ECON. DEV. LAW § 187(f).

⁴⁶ N.Y. PUB. AUTH. LAW § 1005(16)(a).

- **Market Size:** Whether the market for vouchers will be large enough to be efficient and effective depends in part on whether geographic and other eligibility restrictions will apply to the sale of vouchers, as well as the practical challenges of transferring vouchers between different electricity pricing regions.⁴⁷ Currently, NYPA regulations restrict the transfer of contract rights between customers,⁴⁸ and such regulations could require the sale of vouchers only to companies that meet the original geographic and eligibility criteria set for each economic development program. Agencies should consider whether new regulations are required to give more flexibility to an energy voucher system. However, even if such restrictions do apply, the market for vouchers will likely be large enough to be efficient. For example, the Citizens Budget Commission calculated that in Western New York alone, only 148 manufacturing firms received grants from NYPA’s economic development program; 1634 manufacturing firms in this region did not.⁴⁹ That adds up to more than enough potential buyers and sellers of vouchers in a single geographic region.⁵⁰
- **Future versus Existing Contracts:** Implementation of a voucher system could start upon the negotiation or renewal of future economic development contracts. Agencies should think carefully about how to integrate existing, long-term contracts into the new system.
- **Restrictions on Transfers:** Currently, NYPA regulations prohibit the voluntary transfer of contract rights (such as the rights granted under economic development program contracts) from one customer to another “without the written approval of authority,” and further require any transferee to satisfy “all the provisions and conditions” of law and the original contract.⁵¹ Agencies should consider whether new regulations are required to give more flexibility to the transfer of voucher rights. Importantly, conditioning the transfer of rights upon approval from some oversight authority will not necessarily undermine the effectiveness of the tradable voucher system. In fact, some legal experts on cap-and-trade systems have recommended a clearinghouse or approval for all trades in certain circumstances.⁵²

⁴⁷ Jonathan Nash & Richard Revesz, *MARKETS AND GEOGRAPHY: DESIGNING MARKETABLE PERMIT SCHEMES TO CONTROL LOCAL AND REGIONAL POLLUTANTS*, 28 *Ecology L. Q.* 569, 616 (2001) (“In a small market, it is more likely that some participants would have market power. Such participants—whether buyers or sellers—would have the incentive to engage in anticompetitive practices.”).

⁴⁸ N.Y. Comp. Codes R. & Regs. tit. 21, § 454.10 (2009); *see also* N.Y. Comp. Codes R. & Regs. tit. 21, §§ 454.11, 460.7 (2009) (generally prohibiting sale of energy by customers).

⁴⁹ CITIZENS BUDGET COMMISSION, *supra* note 4, at 27, n29.

⁵⁰ Other environmental cap-and-trade programs have operated effectively with as few as a few hundred buyers and sellers. *See* GEN. ACCOUNTABILITY OFFICE, RCED-95-30, *AIR POLLUTION: ALLOWANCE TRADING OFFERS AN OPPORTUNITY TO REDUCE EMISSIONS AT LESS COST* (1994) (noting that the Clean Air Act’s acid rain trading program operated successfully for several years during its first phase with only 110 eligible traders; Los Angeles’s successful RECLAIM program covers about 400 businesses). A market for electricity vouchers could be efficient even with fewer players, given that electricity is the quintessential homogenous product and that a well-developed spot price is readily available. Ian Ayers & F. Miller, “I’LL SELL IT TO YOU AT COST”: LEGAL METHODS TO PROMOTE RETAIL MARKUP DISCLOSURE, 84 *Nw. U. L. Rev.* 1047, 1058 n.43 (1990) (defining a sufficiently “thick” market as “one in which parties publicly trade so many homogenous products that a well-developed spot price is readily available”).

⁵¹ N.Y. Comp. Codes R. & Regs. tit. 21, § 454.10 (2009); *see also* N.Y. Comp. Codes R. & Regs. tit. 21, §§ 454.11, 460.7 (2009) (generally prohibiting sale of energy by customers).

⁵² Nash & Revesz, *supra* note 48, at 624 (recommending that certain cap-and-trade programs for air pollution require clearing all trades through a website that models geographic impacts, to prevent hot spots). Such an approval mechanism could be useful to prevent problems that may emerge if trades are allowed between customers in regions with different electricity spot prices.

- **Size of Allocations:** Agencies will need to think carefully about how many vouchers to allocate to replace previous grants of low-cost power, and should work with stakeholders to reach a consensus. Very likely, it will be possible to build models based on historical usage rates, though for those economic development programs designed to incentivize business expansion, some upward adjustment will be necessary. Also, currently many companies do not use their full power allocations, and NYPA sells the excess. This difference will need to be negotiated during the contracting process, but most recipients will appreciate the flexibility of a voucher system—especially the additional profits it will allow—and should be willing to accept reductions from their current allocations (which are essentially over-allocations).

The voucher system is also a politically viable option: it can help rationalize the economic development programs without threatening the existing geographic balance of allocations achieved through political compromises. There are clearly many crucial legal considerations and design features to work out in the implementation of a voucher system. The best course of action will largely depend on what other reform efforts are undertaken. But importantly, the voucher system can be a workable and beneficial feature of either an ambitious reform agenda or of the continued operation of economic development programs under existing law.

Conclusion

As currently structure and operated, New York’s energy-based economic development programs fail to promote energy efficiency, leading to a host of negative consequences for the state’s environment, public health, and economy. The Institute for Policy Integrity hopes that the Energy Planning Board will build on the first step it took in the Draft Plan to rectify this problem. We believe there is an excellent opportunity to include in the Final Plan more details on the problem of energy efficiency and on potential solutions (like a voucher system). We trust that the Board will take advantage of this opportunity to align the economic development programs with the state’s broader energy goals, policies, and strategies for the twenty-first century. We would be pleased to continue offering the Board assistance on this issue as the planning process moves forward.

Sincerely,

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