

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the
Commission Regarding an Energy
Efficiency Portfolio Standard

Case 07-M-0548

**COMMENTS OF ENERNOC, INC. REGARDING PERFORMANCE
INCENTIVES FOR REGULATED UTILITIES**

Introduction

EnerNOC is a leading demand response resources and energy management services provider in the United States and Canada. As of December 31, 2007, EnerNOC had more than 1,112 MW of demand response resources under management across approximately 2,189 sites across the continent. We actively participate in a range of reliability-based demand response programs, price response programs, and ancillary services markets both in centralized markets New York and elsewhere. We also provide demand response and energy management products and services directly to utilities and utility customers in bilateral markets elsewhere in the United States and Canada.

EnerNOC has been involved in the instant proceeding since its inception last year, and we expect to play a prominent role in assisting the state in meeting its ambitious “15 x 15” goals, at the very least, as a contractor to program administrators such as NYSERDA and the state’s investor- and publicly-owned utilities. As such we have a

direct interest in the incentives that will guide those entities under the Commission's jurisdiction.

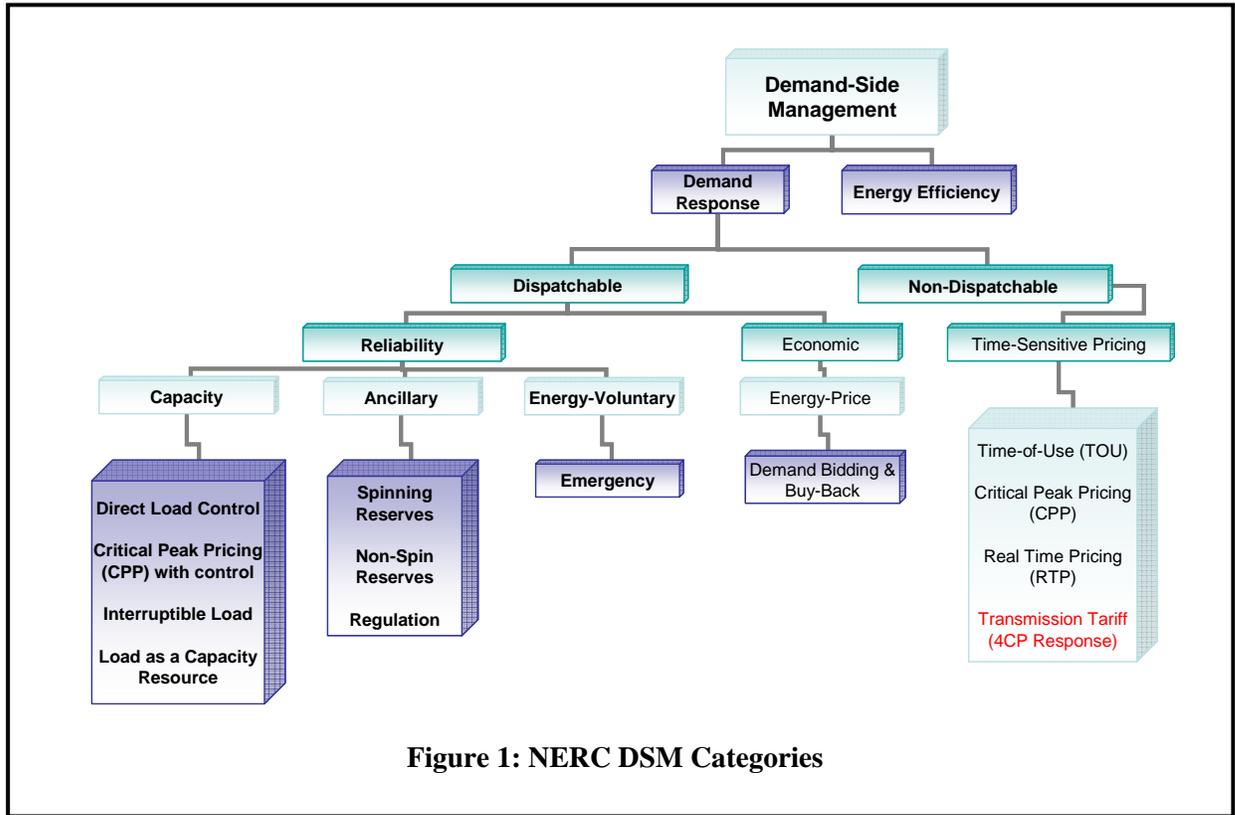
1. Incentive Guidelines

EnerNOC supports the Advisory Staff incentive guidelines, with one critical caveat: **each instance in which the term “energy efficiency” is used should be replaced either with the phrase “demand-side management (DSM)” or “energy efficiency and demand response.”**

Energy efficiency is not demand response and the term is not commonly understood to encompass demand response or load management. DSM, though still burdened with a certain amount of historical baggage, is still a much more inclusive term. Developed by the New York Independent System Operator for use by the North American Electric Reliability Corporation (NERC), the Figure 1, below, is widely viewed as a very useful tool for distinguishing between and among demand-side initiatives¹.

As we stated in our Initial Brief in this proceeding, it will be no more feasible to construct a new, sustainable, conservation-based energy infrastructure utilizing only energy efficiency measures than it will be to build a generation infrastructure consisting solely of wind plants. Some of the new sustainable demand-side infrastructure will have to take the place of intermediate and peaking power plants. That is it will only need to be there some of the time.

¹ / Data Collection for Demand Side Management, North American Electric Reliability Corporation, Dec., 2007, p. 9.



We recommend that the Commission not simply overlook the entire left hand side of Figure 1 by focusing its attention and incentives solely on energy efficiency. Though some parties may argue that the Commission may not or should not expand its consideration to anything more than pure energy efficiency. Neither contention is correct.

Whether it is MW or MWh savings that are sought, utilities should be rewarded for procuring or providing the largest amount of quality resources at the minimum cost, subject to whatever non-price constraints the Commission deems appropriate. Past experience shows that competitive procurements from third parties with rigorous performance guarantees is the best way to accomplish this goal.

As then-Governor Eliot Spitzer stated in announcing the “15 x 15” initiative:

“..the cheapest and cleanest power plant in the world is the one you never have to build.”²”

While it is true that the Commission’s initial focus in the Order Instituting this proceeding and the focus of the Administrative Law Judges over the last year has been on consumption (energy) savings, power plants are also justified on the basis of the demand for energy, in other words to meet peak load.

The issue of peak load reduction and demand response was discussed extensively, especially in working groups III and IV. Working group IV concluded:

Over the longer term, sustained and targeted demand response and peak load reduction lowers the need to build new generating, transmission, and distribution capacity. In addition, reliability benefits accrue because demand response lowers the likelihood and consequences of forced outages on the electric grid.

Aggressive DR programs are necessary to save millions of dollars by deferring some of the expensive additions to generation, transmission and distribution resources. Delay in proceeding with an effort to increase activity in demand response programs will result in the forfeit of benefits that could otherwise accrue to New York customers.³

Further, Working Group IV recommended that the Commission “include peak demand reduction goals to reduce the environmental impact of inefficient peaking capacity.”⁴

An economically as well as energy efficient electricity supply infrastructure will need to include demand response and price-responsive load reduction, as well as more

² / “15 by 15” A Clean Energy Strategy for New York, Governor Eliot Spitzer, Hilton Hotel, New York, NY April 19, 2007 (a copy of this speech, with text related to the need to also focus on demand highlighted by EnerNOC, is attached.)

³ / Case 07-M-0548, Final Report of Working Group IV, p. 3.

⁴ / *ibid*, at 46.

fully integrate demand resources into the ancillary services markets. The Guidelines and Incentives must be amended in such a way as to make it clear that utilities are expected to balance investment in demand response (peaking) and energy efficiency (baseload) investments.

We submit that providing utilities with incentives for efficiency investments and not providing such incentives for demand reduction guarantees that EEPs funds will be spent inefficiently. Parties that recommend depriving demand response of incentives simply because they oppose incentives generally are myopically recommending that the Commission “cut off its nose to spite its face.”

The Commission should decline the invitation to do so.

2. Advisory Staff’s Proposal

Advisory Staff provides a model that embodies its proposed Guidelines and EnerNOC supports that model, with the same caveat that incentives should not be keyed solely to energy savings. Peak load reduction goals should also be established, including Trial Staff’s recommendation concerning the degradation of system load factors.

Obviously, each utility’s targets should be consistent with the need to maintain its trajectory toward meeting its share of the annual MW and MWh targets set by the Commission. If statewide MW targets are not established, utility-specific targets should be, based upon each company’s circumstances. Peak load is likely to be more of a concern for some utilities than others. As such, the targets for some utilities may need to be more aggressive.

3. Deferral of T&D Investments by Demand Response

An issue exists, both in New York and elsewhere, that has hampered the enthusiastic embrace of demand response by some utilities. That issue is whether and to what extent demand response, that is load reduction that requires some affirmative action on the part of a customer or aggregator, can truly be relied upon when activated. Time and again, but most recently in the Consolidated Edison Rider U program update, DR providers have been told informally that they should not be eligible for T&D avoided costs because they cannot, in effect, be trusted enough to be there when called.⁵ ConEd has taken a similar position in its recent rate case, as well as in its business plan.

That DR cannot be there when called upon is simply an article of faith. No utility in New York has ever made the case that DR cannot be as reliable as any generation, transmission, or distribution investment, when subject to appropriate monitoring, verification and performance standards. EnerNOC participates in several programs around the country in which our resources are required to respond on short notice, in some cases as short as ten minutes. Where these programs are being justified partly on the basis of T&D deferrals, the performance guarantees are such that we have always provided exemplary performance. In 2007 EnerNOC's portfolio average performance was over 102%, even though most of the programs did not presume (or provide payment for) any T&D deferrals.

Companies such as EnerNOC maintain continuous communication both to and from all of our customers' sites and, where possible, are able to remotely trigger load

⁵ / Case 08-E-0176, Tariff Filing of Consolidated Edison Company of New York, Inc to Modify Rider U – Distribution Load Relief Program.

reduction routines or remotely start customer-owned generation. Further, we can monitor customer performance in real time and take actions where necessary to “coach” customers or otherwise maximize performance. We are able to report to the utility or system operator in near real-time what is happening (in some cases faster than they may be aware of the status of other aspects of their distribution networks.) Systems such as this are often referred to as “auto-DR” because it happens automatically when triggered.

Coupled with strong contractual performance guarantees and penalty clauses, such advanced control, monitoring and verification systems enable DR providers that use them to assure utilities that they will get what they have paid for when they ask for it.

We ask simply that the Commission ensure that utilities are obligated to at least give DR a fair chance to prove that it can be the valuable asset to the system that we know it can be, outside the limited confines of the reliability-based emergency programs sponsored by the NYISO.

Conclusion

For the reasons expressed above, the Commission should approve Advisory Staff's proposed Guidelines, as well as Staff's incentive proposal, with the clarifications recommended above:

- (1) Incentives should not tilt the playing field against demand response investments and should, in fact, encourage DR where reducing peak load is the most reasonable goal.
- (2) Incentives should not tilt the playing field against third-party suppliers, but rather should reward utilities for performance achieved, regardless of whether they or third-parties implement the measures.

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Respectfully Submitted,



Aaron Breidenbaugh
Senior Manager, Regulatory Affairs and
Public Policy, New York

EnerNOC, Inc.
75 Federal Street Suite 300
Boston, MA 02110
(617) 913-9054

"15 by 15" A Clean Energy Strategy for New York

**Crains Business Breakfast Forum
Hilton Hotel
New York, NY
April 19, 2007**

[As prepared for delivery]

Good morning and thank you for having me here to discuss our clean energy strategy for New York.

In our first 100 days, we have tried to get at the root of some of the chronic problems that have plagued Albany and New York State for years.

Sometimes this means bringing people together to address immediate problems. Workers' compensation in New York is a perfect example. For years, businesses rightly complained about high premiums, and workers rightly complained about low benefits. The system was broken, but gridlock stood in the way of reform. So on day one, we brought business and labor together and hammered out a solution to finally reform the system – which will reduce premiums by 15 percent while increasing benefits for injured workers for the first time in more than a decade.

Sometimes this means tackling budget problems that are politically uncomfortable for much of Albany. In this year's budget, we were able to cut \$1 billion from Medicaid, reducing the Medicaid growth rate from an average of 8 percent over the past five years to less than 1 percent.

And sometimes this means addressing long-term problems that have been ignored for years. The lack of a long-term strategy to address global climate change is a perfect example of this.

Here in New York, we face three seemingly intractable challenges: rising energy bills, rising global temperatures, and a rising tide of young people leaving New York for opportunity elsewhere – each of which can be addressed by a long-term clean energy strategy.

New York's rising energy prices have put us in the wrong kind of company. We have the second-highest electricity prices in the nation, ranking us just behind Hawaii – the effect of which has stunted economic growth and burdened hard-working families.

New York's rising temperatures have forced us to confront what 2,000 of the world's leading scientists and a mountain of irrefutable evidence have made crystal clear – that climate change is real and has become this generation's greatest environmental challenge.

And a rising tide of young people leaving New York for opportunity elsewhere – particularly from Upstate and on Long Island – has signaled a wake-up call that New York must take aggressive steps to meet.

Today, I want to discuss ways that we can address all three of these challenges.

First, by 2015, we will decrease the demand for power by 15 percent from forecasted levels through efforts to increase energy efficiency. Second, we will increase the supply of power in an environmentally sustainable way by implementing a clean power plant siting law and investing in clean energy production.

The result will be lower energy bills, a cleaner environment that addresses climate change and thousands of new jobs fueled by a new industry born from clean power.

I want to be clear that this clean energy strategy, as critical as it is, represents only part of our broader energy policy. There are several additional actions we must take to increase investment in our energy infrastructure – including a focus on investment in transmission and gas supply – that will help drive down New Yorkers' energy bills.

But today, I want to focus on our clean energy strategy, which addresses both the supply side and the demand side of the energy equation. Let me start by explaining some of the things we will do on the demand side.

Decreasing Demand: "15 by 15"

In early 2001, the Bush Administration released its energy plan, which largely dismissed the importance of energy efficiency. When questioned about this, Vice President Cheney replied: "Conservation may be a sign of personal virtue, but it is not a sufficient basis for a sound, comprehensive energy policy."

Look around at our nation's energy market and you will see where this logic has led us: an ever-increasing demand for energy that has caused high energy prices, brownouts and blackouts, an increasing dependence on foreign oil, and global climate change.

I will admit that the Vice President's skepticism about the benefits of efficiency may have made sense in 1970, when most people believed energy efficiency meant nothing more than wearing more sweaters in the winter. But technology has marched on and, in the intervening years, the marginal cost of energy efficiency has plummeted while the marginal cost of energy generation has shot up.

In terms of dollars 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. The fact is that energy efficiency now makes economic sense.

This is the logic that the Vice President misses – **the simple idea that the cheapest and cleanest power plant in the world is the one you never have to build.**

But New York has a problem. Experts predict that, **at our current pace of consumption, our state will require at least another 10 to 15 percent of additional power generating capacity over the next 10 years just to meet growing demand,** and even more will be needed to drive down our energy bills.

Therefore, we are faced with a choice. We can spend billions of dollars to build every single one of the power plants needed to meet this demand. Or we can invest far less money to cut the **demand** for energy by 15 percent – and, on top of that, increase our power-generating capacity to lower energy bills. Common sense says we should take the second approach – that we should both build *and* conserve.

We will start with a framework called "15 by 15," which will reduce electricity consumption by 15 percent below the forecasted level in 2015. This will be the most aggressive target in the nation.

Now let me describe our roadmap for getting us there.

Request PSC Proceeding to Engage the Utilities

Ultimately, the PSC – through a public process that will include all stakeholders – will determine the complete menu of efficiency programs that will allow us to reach 15 by 15. But let me describe a few of the actions that will help us get there.

Revenue Decoupling

First, we must eliminate a perverse incentive in the marketplace that discourages utilities from conserving energy. The problem is that we want utilities to encourage their customers to conserve – but right now, when their customers conserve energy, the utility loses money. Obviously, this incentive structure is upside down if our goal is to increase energy efficiency.

Yesterday, we successfully began the process of removing this perverse incentive when the PSC announced a plan to decouple a utility's profits from the amount of energy being consumed. It does this by requiring annual adjustments to rates to make utilities whole for lost revenues caused by energy efficiency programs.

This action means that the stage has been set for future rate cases, where it will be possible to consider further action to actually reward utilities for achieving verified energy savings.

Other states have done this. It works. Now, let's implement it.

Strengthening Efficiency Standards

Second, we will do more to cut plain-old-fashion waste. How do we do this? As Willie Sutton famously said when asked why he robbed banks: "That's where the money is."

In energy, much of the "money" – that is, much of the waste – comes from inefficient appliances and buildings.

This point hit home for me when I was Attorney General. We won a lawsuit against the Bush Administration forcing them to promulgate efficiency standards for central air conditioners. By 2020, the standard that resulted from this litigation will reduce peak electricity demand in the United States by 14,500 megawatts – equivalent to the output of one moderate-sized power plant in all 50 states.

While we were successful in implementing standards for central air conditioners, there are still many energy-intensive appliances still lacking standards. In the coming weeks, we will introduce legislation to set standards for the most inefficient of them – including residential furnaces and boilers and walk-in refrigerators and freezers. There will, of course, be reasonable phase-in time to allow manufacturers to comply.

Another way we can cut waste is to make buildings more efficient. We will explore adopting the most current version of the International Energy Construction Code, which is regularly updated to reflect best technology and building practices in the world.

Addressing New York's #1 Energy Consumer: State Government

The third way we will achieve our 15 by 15 target is by making New York's number-one energy consumer more efficient. By addressing state government's sky-high energy bill – \$700 million in last year alone – we will not only save tax dollars, but we will use state government's market share to help drive a new clean power industry.

If government buys fighter planes, we drive the military industrial complex. Likewise, if government buys wind power, we drive the technology market for wind generators. By embracing ambitious energy efficiency standards and renewable energy goals throughout state government, we will catalyze the growth of the clean power industry.

Increasing Supply

Each of these efforts will have a significant effect on the demand side of our energy strategy. Taken together, these efforts will completely eliminate the expected increase in our energy demand by 2015 and then some.

However, as I mentioned earlier, energy experts estimate that we already will require at least another 10 to 15 percent of additional power generating capacity over the next 10 years to meet growing demand and drive down energy bills. Therefore, to meet this demand – and to lower energy bills for consumers – we must also address the supply side of the equation.

New Power Plant Siting Law: Replacing Article X

The fact is, we're going to have to build more power plants. But we want to build clean plants, and we want to build them fast.

As taxpayers, businesses and energy experts alike have said for years, the state has lacked an expedited power plant siting process ever since the Article X law expired in June 2003. Since then, just 250 additional megawatts of energy capacity net have been created by traditional power plants, with only one new power plant scheduled to be built before 2010. To give you a sense for how little generating capacity has been created, these 250 megawatts represent just three-quarters of one percent of New York State's average peak power demand.

To address this problem, we will propose a new power plant siting law that will replace the long-expired Article X. But this law will have a clean twist.

Our proposed legislation will establish an expedited process that fast-tracks only clean power plant proposals, those with low or no emissions. This process will apply both to the repowering of older, less efficient plants and the siting

of new clean ones.

The legislation effectively provides developers with a one-stop shop – the new Clean Power Supply Board – to coordinate all relevant state agency reviews in order to speed up the process.

With this new law, we will finally have the process in place to accelerate the transformation of New York's power supply into one that is cleaner and more efficient.

Long-Term Contracts

But a new process to construct power plants will be useless without financing. And in today's market, financing depends on long-term contracts between power plant owners and utilities or state authorities.

Long-term contracts have become so necessary because, with energy prices so unstable, long-term contracts provide power plant developers, including existing owners, with predictable and stable revenue – essential to limit risk and gain the confidence of investors.

Unfortunately, the prior Administration believed that utilities and state authorities should intervene as little as possible to provide long-term contracts. This led to very few power plants being built. So we're left with a backlog of approved power plant projects that are sitting on the shelf because they cannot get financed.

Yesterday, we successfully began the process of encouraging long-term contracts. The PSC has started a process to consider how to encourage these types of contracts between utilities and power plant developers and existing power plant owners – a critically important step toward our goal of bringing additional clean supply online as soon as possible.

Investing in Renewables

Streamlined siting is vital. Harnessing the full potential of the market by permitting long-term contracts is also critical. But we must do more. We must continue to make the investments needed to attract clean, renewable power plants to New York.

In the coming weeks, Lieutenant Governor Paterson will tour the state promoting the use of clean, renewable energy technology. He has done enormously important work on our energy strategy so far, and he will continue to play a major role going forward.

David makes the point that New York presents an ideal environment for developers of clean, renewable power plants. We're not coal country, like West Virginia. And we may not have the oil fields of Texas and Alaska. But we have an abundance of wind, water and solar, positioning us to develop clean renewables as a greater part of our domestic energy supply.

Investing in a new generation of cleaner, more efficient power plants will also allow us to phase out the use of older, less secure, and less environmentally sound power plants, including Indian Point.

To that end, today, NYSERDA and the PSC will announce the approval of 21 contract awards for clean, renewable power plants in New York. These contract awards total approximately \$295 million and will attract private investment of approximately \$1.4 billion – all of it Upstate. Best of all, in terms of immediate returns on economic development and energy bills, construction of all these facilities is expected to be completed as soon as 2008.

Benefits for New Yorkers

Now, for those of you who are like me – who don't speak in megawatts, BTUs or barrels of oil – let me put this agenda in perspective to illustrate how the clean energy strategy I just outlined will address the three chronic problems I mentioned earlier: rising energy bills, rising global temperatures and a rising tide of young people leaving New York for opportunity elsewhere.

Reducing Energy Bills

First, 15 by 15 will address rising energy bills by completely eliminating the expected increase in our energy

demand by 2015. The laws of economics follow that this dramatic reduction in demand, coupled with our investments to increase the supply of clean energy will translate into eventual reductions of our energy bills.

History confirms this. Experts say that a 1 percent reduction in demand during peak periods can reduce electricity prices by 10 percent.

Creating Jobs

Second, 15 by 15 will address the rising tide of young people leaving New York by fueling a job-rich clean power industry that is driven by the race to meet our target.

Think of all the high-paying jobs that will be needed to retrofit power plants, homes and office buildings so they can be more efficient; the jobs that will be needed to develop innovative efficiency and clean energy technologies; or the jobs that will be needed to manufacture the products at the scale that will be necessary to reach our goals.

Not to mention that lower energy bills will allow New York's businesses to spend less on energy and more on innovation – helping us both to retain the jobs we've got and attract new ones.

Experience confirms this. NYSERDA has determined that current efficiency programs create or retain an average of 1.5 jobs per year per gigawatt-hour saved. These figures correlate with findings in other states. Given that our 15 by 15 initiative will save 27,300 gigawatt-hours by 2015, NYSERDA estimates that our strategy could create or retain 41,000 jobs in New York State. To give you a sense of the potential impact, that's about the same number of unemployed people in Buffalo and Rochester combined.

Of course, clean energy does not represent a silver bullet for all of New York's economic challenges. But these new jobs will undeniably play a significant role in turning our economy around.

Addressing Climate Change

Finally, let me return to the need to address global climate change.

In terms of removing pollutants from the atmosphere, including CO₂, the impact of our proposals will be dramatic. It is estimated that 15 by 15 alone would result in an annual carbon dioxide reduction of about 12.8 million tons. That's the equivalent to removing 2.5 million cars from the road. And if we are able to increase the amount of energy we get from clean, renewable sources, we will remove even more climate change-causing pollutants from the atmosphere.

We are also attacking the climate change threat on other fronts. The newly formed Climate Change Office in the Department of Environmental Conservation will oversee the implementation of the Regional Greenhouse Gas Initiative – a multi-state effort to reduce carbon dioxide emissions from power plants.

Even still, I am sometimes asked, why should New York go to the trouble of reducing its carbon emissions? It's an important question that deserves a thoughtful answer.

First, compared with other states and even other nations, New York is a relatively major contributor to global climate change. Most people don't realize that New York's economy alone is the 11th largest in the world. Thus, while New York is only home to 0.3 percent of the world's population, it emits about 1 percent of the world's carbon emissions – comparable to that of entire industrialized nations such as Sweden and the Netherlands. So just as we have contributed to climate change, we must now contribute to stopping it.

Our core proposal – to completely eliminate growth in our forecasted electricity demand by 2015 – is the most aggressive in the nation, making us the only state to commit to actually lowering electricity consumption below current levels. Indeed, this strategy will make New York a national leader in addressing climate change – even a global leader, when you consider that New York is the 11th largest economy in the world.

And in a time of federal inaction, states must take the lead. We plan to work with Governor Schwarzenegger and other governors across the country to lead a national movement on climate change.

But at the end of the day, what I care about most is how this strategy will benefit New Yorkers. By implementing

this clean, efficient energy strategy, we are not only changing the status quo and addressing a chronic issue that has plagued Albany for years; we are implementing a practical strategy that will lower energy bills, address climate change, and create jobs.

Thank you.