

This is an Action Alert

Please contact* State Senator Antoine M. Thompson (D- Buffalo), Chair of the Senate's Standing on Environmental Conservation about his sponsored bill S2715A "NY renewable energy sources act"

and

Assemblyman Andrew Hevesi (D- Queens), Chair, Subcommittee on Renewable Energy about his bill A187.

Continue to contact the PSC and all your elected officials. Watch the Public Hearing Calendar for relevant hearings.

*For all your legislative contact information go to: www.lwvny.org

Talking Points for NYSES Members and Allies

A Made-in-NY Renewable Energy Feed-In Tariff: A Mechanism to Secure Long-term, Private Investment in the Grid and the Renewable Power Industry November 3, 2009

A feed-in tariff (FiT) is a government policy that supports the development of new, renewable power generation. Around the world, and increasingly in the U.S., FIT policies have emerged as the **quickest, most affordable** method for creating sustainable markets for both distributed and large scale deployments of renewable power systems. FiT policies require utilities to purchase electricity produced by renewable generators. The FiT contract **guarantees** that all energy produced by the renewable generator will be purchased by the utility for a guaranteed period of time (15+ years).

FIT policies work to support the unique value each clean technology (solar, wind, biomass, etc.) delivers to the grid and the ratepayers who support the grid. By offering different tariffs based on system size and project location, a properly designed FiT offers true and verifiable value to ratepayers and the utility stockholders. A separate meter verifies the output of each system, assuring ratepayers **pay only for power delivered**. Feed-in tariffs can be structured to support



systems that deliver power directly to the grid or to net metered systems, with or without a standard power purchase contract.

A well designed FIT policy imposes few, if any, limits on who can participate in selling renewable power to the grid making them a powerful vehicle for leveraging both local and global capital toward RE development.

In NYS a FiT would allow multiple, renewable-fuel technologies to deliver clean power to the grid and pay the investors a guaranteed amount.

- 1. **A NY FIT Puts NY'ers to Work in Clean Energy Jobs:** By definition, most renewable energy jobs are local jobs. Barclays' Capital Research, among others, has shown that if NYS were to implement a renewable technology FiT, we will create tens of thousands of high-wage, high-skill jobs from manufacturing, system design, sales and installation each year. A NY FiT offers the Empire State an opportunity to be a leader in green job growth. It creates a level playing field where both small and large projects can be leveraged while those new NY businesses interested in entering the market can easily do so with a guaranteed rate of return.
- 2. A NY FiT Makes the Grid Smarter, Stronger: Our nation's electrical grid (the web of transmission and distribution wires that carry electric power) is almost 100 years old. Renewable generation systems distributed throughout our grid will make our grid smarter, stronger and more resilient. In particular, solar systems in NYS will generate their greatest output at the time of the daily peak exactly when our grid is most vulnerable to a black out. In fact, research by Dr. Richard Perez, et. al., has proven that many distributed solar systems 1 to 100 kW in size would have prevented every major, summertime blackout that has occurred in North America including both the massive outage of August, 2003, as well as the one in August, 2007, that left over 100,000 Queens' residents in the dark for 9 days.
- 3. A NY FiT Protects NY Ratepayers: By moving away from existing rebate funds to a FiT-based payment based on production, a FiT will actually deliver value to the grid and allow NYS ratepayers to control and reduce their energy costs. For example, by dramatically reducing our vulnerability to expensive peak power purchases (which can exceed \$.52/kWh), a FIT reduces both the volatility of electricity costs as well as the relentless increase in the cost of electric power, averaging 3%+ per year. Further, since a FiT payment is only made when power is actually produced, it avoids the front loaded balloon payments ratepayers must make for the rebate paid upon installation. These



payments fluctuate and are not bankable. Additionally, a FIT can be designed so that ratepayers qualifying for HEAP at their local utility can opt out funding the program if they choose.

- 4. A NY FiT Promotes Credit Flow, Leverages Private Sector Investments: Banks, credit markets and Wall Street all take risk. Uncertainty is the worst form of risk that financial markets face. Investors are waiting for NYS to proved a secure, predictable revenue stream. History has shown that ratepayer-supported FiT payments effectively leverage private sector financing for solar projects. Over 10 years, NYS would realize direct, construction investments totaling over \$15 billion. In addition, the guaranteed contract terms enable project developers to finance a larger portion of the project with debt financing, as opposed to equity. In today's banking environment, this is the best option for opening up credit to project developers and customers of solar power.
- 5. **FiT to Diversify NY's Power Portfolio:** NY's grid is overly dependant on aging coal, natural gas and nuclear power plants. In conjunction with energy efficiency, a properly designed FiT policy offers different rates for different technologies and project sizes. By encouraging deployments in the downstate load pockets, a FiT enhances reliability and peak power purchases. By encouraging deployments on schools, churches and government buildings (Japan's FiT pays extra for these location), a FIT serves as a community power resource. A sound NYS FIT policy will encourage projects that deploy building-integrated technologies.
- 6. A NY FiT Cleans NY's Air and Water: By encouraging clean power in air quality nonattainment zones, the NYS FiT will tackle the need to fire up our most polluting smokestacks and generators on a hot summer's day right in the middle of our cities. Less soot from transporting and burning coal means a cleaner environment and provides multiple long term public health benefits for all. Mercury from coal fired powered plants has polluted our lakes and eating our local fish poses a risk. Indian Point nuclear reactor sucks in 1.2 million little fish every day. It must cool itself with Hudson River water and in turn warms the water near the plant. Warmer water doesn't cool as efficiently and it disrupts natural river ecosystems.
- The NYS FiT Is Not Your Grandfather's PURPA Law: Referred to in NYS as the "6 cent law" because it requires utilities to pay 6 cents per kWh for conventional, polluting power. The NYS FiT will deliver more value to ratepayers than it costs a notable distinction from the "6 cent law" failure.



- 8. FiT vs. Renewable Portfolio Standard vs. Selected Renewable Energy Companies and Renewable Energy Credits: Around the world FiT policies support new supply development by providing investor certainty. A Renewable Portfolio Standard mandates the percentage of customer demand that must be met with renewable supply and by when. (15% by 2020, 30 by 2030, 50 by 2050, for example.) FIT policies can be used to help meet RPS goals quickly as they guarantee interest to the investor over a long period of time. While Selected Renewable Energy Companies incentive delivery models have launched a market for larger projects, they have proven to be very difficult for smaller companies and projects to monetize rendering their value for these jobs at, essentially, zero. SREC's kill the smaller systems that most promote grid stability and local job growth. Renewable Energy Credits can't be taken to the bank like FiT's can. Most companies and investors have not made money and can't take the tax credit.
- 9. Everybody Plays: One of the most important elements of FiT design is the guarantee of reliable revenue streams (Klein et. al. 2008). This has helped catalyze renewable energy development in countries such as Germany where both small and large developers can invest for a profit in renewable energy technology. NY's FiT would be open to solar, wind and run-of-river hydro systems of virtually all sizes. A variable renewable like solar and wind could be located next to a completely constant renewable such as ground source heat transfer.
- 10. We are Not Alone and We Are Not the Leaders: As stated in a recent FiT Analysis by DOE's National Renewable Energy Lab:

"FiT policies are implemented in more than 40 countries...cited as the primary reason for the success of the German and Spanish renewable energy markets (Grace 2008, Stern 2006). As a result, FiT proposals are starting to gain traction in several U.S. states and municipalities..."

The longer we NY'ers wait to act, the further behind we will be. If we wait too long, the renewable industry will establish itself without us. Experience in Europe demonstrates that with a stable investment environment created by well-designed FIT policies, renewable energy development and financing can happen more quickly and more cost-effectively than under competitive solicitations.

11. Climate Change Leadership: Even if our planet can survive 390 parts (and climbing faster than predicted) per million, scientists have long said there will be reactions. What have you heard or seen? Carbon Tax asks the fossil fuel industry to give back in order to future renewables but perhaps more effectively finance energy efficiency like



weatherization of most of the homes of 18 million New Yorkers. **Cap and Trade** is a Wall Street dream requiring a huge bureaucracy to maintain records and manage trading schemes dependent on satellites monitoring smokestack pollution even in the night.

Insurance companies will determine levels of insurance based on climate change and the progress the USA makes towards reducing emissions. Sea level rise and cataclysmic weather change needs to be factored into insurance formulas.

- 12. Jobs: A NYS FiT will quickly reward New Yorkers with jobs in manufacturing, installation and service. In the 50's our country built the Interstate Highway System. In the 70's we rolled out digital telecommunications and the internet. Now is the time to finance solar, wind, ground source ("geo"), biogas from farms and garbage, biomass from fast growing plants like willow.
- 13. **Invest in the USA:** Currently the USA sends \$1Billion per day out of this country to buy fossil fuels. As we lessen our dependence on fossil fuels we lessen our dependence on foreign oil. In turn fossil fuels are burned inefficiently in engines and generators causing more asthma. Clean energy made in America keeps the jobs here and invests in our national health. Almost 7500 companies are the biggest polluters and they buy pollution allowances. Let's buy renewables instead. Utilities are compensated wildly in the current legislation for our country's migration from dirty to clean energy. They can buy renewables, too.
- 14. **Partners:** Connect with your local organizations. Get the message about Feed-in-Tariffs to elected officials.
- 15. Reduce the need for more long distance power lines: One of the most distinct differences between old power generators and renewable energy sources will be the decentralized locations. From rooftops to fields, mountain slopes to farms renewable power can be located right where the power is utilized. Long lines of coal cars feeding giant coal power plants, the line loss of 18% and all the unnecessary pollution from power that is wasted won't go away anytime soon. But, the plans for more belching behemoths might be squelched along with additional power lines to feed this power to needy locations like inner cities. On November 8 60 Minutes did a segment on the vulnerability of the electric grid to hackers and worse. Apparently utilities haven't been guarding their networks. The segment showed paid hackers going to sensitive points of 500 -1000 Megawatt power generators. Decentralized power generation makes sense. The money spent to build extra power lines often sited through private property and sensitive natural areas could better be spent building solar factories right here in NY. The



case for nuclear energy includes the same vulnerabilities as coal with meltdowns. If we choose more centralized power plants, they have to come up with more feeder lines into cities.

16. FiT's Vs. Stored Waste: Coal sludge and spent fuel cost millions and are prone to accidents.

Further Sources:

NREL FIT Analysis – http://www.nrel.gov/docs/fy09osti/45549.pdf Dr. Richard Perez Website – http://www.asrc.cestm.albany.edu/perez/ ASES has two reports on their website: "Tackling Climate Change" and the "Jobs Report" – www.ases.org

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