

RE: ENERGY EFFICIENCY CERTIFICATES – A VIABLE OPTION

By: Green Energy Consultants LLC – Principals: Alan Zox, Eugene Garcia, Andy Young –

Tel.401.741.7459

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Incorporating Energy Efficiency Certificates (“EECs”) into the implementation of Governor Spitzer’s Clean Energy Strategy for New York is a cost effective way to achieve the plan’s aggressive “15 by 15” goals. EECs, through a market based program allow supply and demand economics and the existing administrative infrastructure, to positively affect climate change, create jobs, and demonstrate New York State’s Leadership.

Energy Efficiency Certificates, also known as Energy Savings Certificates or White Tags, “are documents certifying that a certain reduction of energy consumption has been attained”.

(Wikipedia). From an outcome perspective, EECs are theoretically equivalent to Renewable Energy Certificates (“RECs”). They represent the environmental benefit of eliminating Green House Gas Emissions (“GHGE”) and provide additional financial incentives making GHGE reduction viable. While both RECs and EECs are used to assist in elimination of GHGE, RECs assist in the creation of renewable power, while EECs assist in the creation of energy efficiency projects, arguably a preferred method of reducing GHGE.

Once the concept of EEC and REC equivalency is grasped, the benefits of a market based EEC program within New York State is readily apparent, especially when combined with the current supply/demand side economics of the State’s present REC situation. There are not enough

reasonably priced RECs to meet the demand coming from end users within the State. Supply is limited and prices for New York State RECs are rising. Typical in-state RECs generated from wind generation are priced at approximately \$30 per MegaWatt- hour (“MWh”). Some out-of-state RECs can be obtained for \$5/MWh or less.. The result is that Voluntary End Users and REC brokers are securing most of their REC requirements outside the State. A New York State backed EEC program would provide the private sector another option for meeting their GHGE reduction goals. Increasing the supply of RECs or their equivalent EECs will naturally bring down the price and provide a cost savings for end users. In addition, out of state RECs could be replaced with in-state EECs, accelerating the obtainment of the State’s energy efficiency goals and keeping the flow of funds in New York, i.e. job growth.

EEC programs have been successfully implemented abroad in the United Kingdom, Italy, France, and New South Wales, Australia. In the United States, Connecticut, Pennsylvania, and Nevada have enacted renewable portfolio standard legislation creating the use of market based EEC’s; and five other states have enacted legislation mandating energy efficiency using differing formats.

Although growing numbers of states are requiring EEC’s be part of their Renewable Portfolio Standard, New York State still has an opportunity to be a leader with this type of program. With New York State’s existing infrastructure, the New York State Energy and Research Development Authority (“NYSERDA”) and the New York Independent System Operator, New York has relatively low barriers to entry into the market. As opposed to other states, that have taken an incremental approach to EECs, New York can take “Lessons Learned” from abroad and within the United States, combine the knowledge with their existing infrastructure, and quickly ramp up

operations to make EECs in New York the premier global location for affecting climate change through a combined Demand Side and Supply Side Strategy.

PROGRAM ELEMENTS

The key program elements are listed below. They incorporate the experiences from other countries and states that are utilizing EEC programs. These elements address actual or perceived hurdles for a successful EEC program.

1. Equivalency – EECs are to be perceived as equivalent to RECs. If two separate standards are desired, Renewable Portfolio and Energy Efficiency still require the GHGE of both certificates to be equivalent and allow EECs be used to meet Renewable Portfolio Standard requirements.
2. Additionality – EECs can be used to provide incentives for projects that would otherwise not be implemented. EECs, for example, can be used for payback / buy down or above baseline standards.
3. Target Market – Initially focus on Commercial and Industrial customers providing the ability for speed to market. Residential can be rolled out in a second phase.
4. Certification, Measurement & Verification – Credible and independent entity using proven and cost effective techniques (prescriptive), deemed methods (engineering calculations), and software (similar to EPACT), if applicable.
5. Tracking & Clearinghouse – Reputable and independent entity, preferably with existing tracking software/systems. Ensures lack of double sales/trades. Initially set-up simple bilateral contracts and expand into regular trading of EECs.

6. Preferred Energy Conservation Measures (“ECM”) – Projects that provide large volumes of EECs or that are Prescriptive in nature. Addresses need for minimizing transaction costs by reducing the Measurement & Verification complexities.
7. EECs Life Cycle – Equivalent to standardized Life Cycle Benefit of ECM.

IMPLEMENTATION

Successful implementation of an EEC program will focus on the Credibility of the EECs created, the actual and perceived equivalency to RECs, and the ability to minimize transaction cost. New York, with its existing infrastructure and focus on energy efficiency, is well positioned to take advantage of an EEC program.

1. Certification, Measurement & Verification – Utilize NYSERDA’s existing capabilities and independent status.
2. Tracking and Clearinghouse – NYISO can expand their existing software to include EECs. They already handle bilateral contracts in the energy marketplace. A NYISO based system could easily be integrated with other regional ISOs. If existing legislative hurdles exist, initiate an EEC program using either NYSERDA or other independent state agency.
3. Outreach and Marketing – Use a three pronged approach implemented via Governor’s office, NYSERDA, and Utilities, creating an awareness in the market and communicating the equivalency of EECs to RECs.
4. Responsibility for achieving Goals – Instead of putting the entire responsibility on NYSERDA, as is the case with the RPS, spread the burden among Load Serving Entities, inclusive of 3rd

Party suppliers and the Utility. Increased market participation should enable more creative solutions that will expedite the process and keep cost down.

COSTS AND BENEFITS CALCULATION

We expect the cost to implement an EEC program will be incremental. The existing administrative infrastructure is already in place. Cost of expanding NYSERDA and/or the NYISO's roles can be considered incremental variable costs. Metrics such as \$/kWh saved can be estimated with relatively good accuracy based on existing program success and estimated increased cost. It is expected that these figures would be a fraction of the existing \$/kWh energy efficiency plan cost. In addition, the ability to secure voluntary contributions that would normally go to out-of-state RECS, will also improve the cost/benefit ratio.

FUNDING

Funding may initially come from the existing RPS fund. This may provide the fastest implementation process. However, future funding would be expected to come from the responsible parties involved with achieving the goals. These entities would pass on the cost directly to end users. We would expect competition to provide incentive for driving down the cost to secure EECs. Finally, voluntary purchasers of Carbon Offsets, more specifically out-of-state RECs, would provide another source of funding by switching over to purchasers of in-state EECs.

Green Energy Consultants LLC looks forward to discussing these ideas at future hearings held by Judge Stein. If interested in contacting us directly please call Alan Zox at 401.741.7459

