Town of Amherst Energy Conservation Committee 5583 Main Street Williamsville, NY 14221 September 7, 2007

Amherst Town Board 5583 Main Street Williamsville, NY 14221

RE: Citizens Energy Conservation Committee Status

The Amherst Citizens Energy Conservation Committee was established by resolution to support the Town in reaching the goal of a 5% reduction in energy savings annually. The committee has been meeting on a regular basis and continues to evolve. At this time, the committee would like to offer a number of suggestions that will support progress towards the important goal of energy conservation.

Energy conservation is an important goal for many reasons. Besides the positive effects on the environment and the improvement on energy security, investments in energy conservation make sense financially and operationally for the Town. It is for these reasons we make the following recommendations:

- 1. The Town has several large contracts with Siemens Building Technologies. These contracts include a number of projects that were designed to conserve energy and lower operational costs. The contracts come with performance guarantees for large amounts of savings. It is unknown at this time if the value of the energy savings from these contracts is in excess of the debt service. These contracts are highly technical in nature and fairly complicated to understand. The committee recommends that the appropriate resources be dedicated to a full audit and analysis of these contracts to determine if Siemens is performing as promised, and if not what remedies are available to the Town. This audit should be performed by a third party consulting firm under the oversight of a Town engineer.
- 2. Two specific Siemens projects have been brought to the attention of the committee. The first involves the lighting at the Pepsi Center. Siemens installed a system that was supposed to provide energy savings but still provide adequate light. Reportedly, the system did not perform as specified. The committee recommends that the appropriate departments in the Town are empowered

to unwind this part of the agreement with Siemens and install new lighting systems that will provide adequate light levels and also conserve energy.

The second Siemens project that needs immediate attention is in the wastewater plant. In 2002, Siemens proposed replacing a 600 HP electric motor in the water treatment facility with a gas powered reciprocating engine. This proposal was accepted by the Town even though a review by a third party consulting engineer advised against it. It was then installed and apparently paid for by the Town. Since the installation, it has not been consistently operational and has not provided any kind of benefit to the facility. Because this was installed under a performance contract and the energy savings provided by the operation were to be used to pay the debt service on the project, this situation is troubling on many Siemens promised the Town \$137,908 in annual savings from this measure. It has also left the treatment plant oxygen system without redundancy. This increases the exposure to outages, which are extremely costly and can affect public health. The committee recommends that the Town immediately retain a third party consulting firm to review the design and analyze the system performance. The deliverable from this firm would be a report containing an opinion about the quality of the design and also a recommendation to either recommission the system or to have it removed and replaced. This report would represent a major step forward in the resolution of this complicated problem. In addition to being able to identify a forward strategy, it will also give the Town more power in negotiations with Siemens if it is found that the design is not up to standard industry practice.

- 3. The goal to reach a 5% reduction in energy costs annually will not be met without investment. With an annual energy budget in the neighborhood of approximately \$4 million, a 5% reduction would represent \$200,000 in savings per year. Securing these savings requires an investment. Without having funds earmarked, Town department heads will not dedicate the time to develop the projects. To develop projects with three year simple paybacks generating \$200,000 in annual savings, a \$600,000 investment would be required annually. The committee recommends that this amount of capital be set aside in the budget and specifically earmarked for energy conservation projects.
- 4. The Association of Energy Engineers (AEE) is a nonprofit professional society. The mission of AEE is to promote the scientific and educational interests of those engaged in the energy industry. This organization offers a network of nearly 9,000 energy industry professionals worldwide and also offers some excellent training as well as industry recognized credentials. One of the certifications offered by the AEE is the "Certified Energy Manager" or CEM. This certification recognizes individuals who have demonstrated high levels of experience, competence, proficiency, and ethical fitness in the energy management profession. The committee recommends that funding be set aside for the training and certification of at least one individual from the Town's engineering staff. This training will help support the development of energy

conservation projects and will underscore the Town's commitment to conservation and energy best practices. The cost for the training, certification and travel would be approximately \$3,500 for each individual. More details on the training be found https://www.aeecenter.org/store/detail.cfm?id=745&category_id=4 and more details the CEM certification found on can be at http://www.aeecenter.org/certification/.

The Amherst Citizens Energy Conservation Committee takes its role seriously and stands ready to support the Town in all energy conservation efforts. The committee offers service to the Town and the members of the Town Board in the evaluation of energy conservation project proposals offered by vendors and business partners. We do not propose this review replace the current procurement and due diligence process, but it would offer another look and perspective from industry professionals who have a strong interest in the success of the Town.

We appreciate the commitment and efforts of the Town Board and all the Town employees and we believe a concerted effort to address the issues above will yield substantial benefits to the entire community.

Town of Amherst Citizens Energy Conservation Committee Scott Ernst Jack Thompson Paul Gilden Aaron Stanley Mary Burke