





September 9, 2011

Dear Elected Official,

Many Long Islanders have installed renewable energy systems for their homes and businesses with the help of Long Island Power Authority (LIPA) rebates and local, state and federal tax incentives. However, varying permitting processes across Long Island's more than 100 municipalities hamper a more rapid scaling of solar energy installations. Our region is not alone in grappling with this issue as the U.S. Department of Energy has identified variability in solar permitting processes as a nationwide problem.

In 2009, the Suffolk County Planning Commission and the Nassau County Planning Commission along with LIPA launched a collaborative effort called the *Long Island Unified Solar Permitting Initiative* (LIUSPI). LIUSPI has brought together stakeholders and municipal officials from across Long Island to develop a model process that could be used by all municipalities throughout Long Island to handle the application for and approval of residential solar electric and solar hot water systems in each respective jurisdiction. Most recently, the New York Department of State has contributed its expertise to the effort and has helped shape the final LIUSPI process.

# The collaborative working group has developed the attached "Solar Energy System Fast Track Permit Application" process and explanatory memo for your municipality's consideration.

LIUSPI's application process allows your municipality to meet all regulatory requirements and gather critical information while reducing jurisdictional differences in processes as well as the time and costs to your residents seeking to install solar energy systems. Importantly, what is proposed is an expedited and more uniform process for "standard" residential solar energy systems. A municipality need not apply this process to commercial installations or to residential installations that do not meet the criteria defined in the attached memo.

The LIUSPI application process calls for municipalities to adopt a plan for "standard" residential solar electric and solar hot water systems which will (a) require waived or minimal application fees, (b) provide permit determinations within 14 days of submittal of a completed application, and (c) utilize the "Solar Energy System Fast Track Permit Application" as an alternative to existing building permit forms. The Fast Track Application gathers targeted information about the proposed installation including a Professional Engineer or Registered Architect certified drawing of panel location and layout while not requiring a new property survey or other information not relevant to the solar energy system installation.

In addition, in order to aid first responders, for all solar installations (including commercial and "non-standard" residential installations) each municipality will (d) create a central registry of solar installations and (e) require warning labels on the utility meter and any AC disconnect switch.

LIUSPI also encourages municipalities to accept third-party (i.e. non-municipal) inspections and certification and to ensure that all inspectors involved in the application process have been trained in evaluating solar installations based on nationally recognized guidelines.

The Long Island Power Authority has committed to provide implementation assistance of \$15,000 to each township and \$5,000 to each of the first ten villages in Nassau and in Suffolk that adopt authorizing legislation sufficient to accomplish the five key components of the LIUSPI plan by December 31, 2011.

An informational session regarding this effort will take place on September 23, 2011 from 2pm to 3:30pm at Molloy College at Republic Airport in Farmingdale. A light lunch will be served beginning at 1:45pm. Municipalities intending to send a representative should RSVP to either Beth Fiteni (efiteni@si.molloy.edu) or Leigh Musarra (516-678-5000, ext: 7562) from the Molloy College Sustainability Institute's Clean Energy Leadership Taskforce.

This effort at local solar permitting consistency is one of the first of its kind in the country and — with the participation of Long Island's municipalities — can be another strong step in establishing Long Island as a national leader in creating a clean energy economy.

To advise the collaborative of your municipality's interest or for more information, please contact Sarah Lansdale from the Suffolk County Planning Department at 631-853-5190 or planning@suffolkcountyny.gov; or Sean Sallie from the Nassau County Planning Department at 516-571-9342 or seansallie@nassaucountyny.gov. For information on LIPA's implementation assistance, please contact Todd Stebbins at 516-719-9227 or tstebbins@lipower.org.

Sincerely,

David L. Calone

Chairman

Suffolk County Planning Commission Jeffrey Greenfield Chairman Nassau County

Planning Commission

Michael Hervey

Chief Operating Officer

Long Island Power Authority

**Enclosures** 

# **Long Island Unified Solar Permit Initiative (LIUSPI)**

Suffolk County Planning Commission Nassau County Planning Commission Long Island Power Authority

The global demand for residential solar energy systems is projected to triple over the next few years. As consumer awareness of solar energy grows, panel and installation costs come down, and environmental and economic benefits become more pronounced, municipalities across Long Island need to prepare for the likely increase in solar installation applications by ensuring that the permitting approval process is tailored to provide the municipality with all relevant information while being swift and predictable for applicants.

The installation of solar energy systems on homes in your jurisdiction and throughout Long Island will reduce carbon emissions, help your neighbors reduce their energy costs, create new on-Island green jobs and reduce the load on our electric grid. While the number of Long Islanders who have installed solar panels on their roofs continues to increase – with the help of LIPA's rebates and local, state and federal tax incentives – this momentum is swimming against the strong tide of "present bias," the behavioral economics principal that each of us places more weight on the present hassle of change than we do on the long-term benefit of that change. For that reason, it is incumbent upon municipalities to remove the complexity and hassle of installation approvals by instituting a streamlined application process that is at once more relevant and more targeted than current building permit processes. Such a new process will save time, eliminate paperwork, reduce expenses, protect public safety and speed approvals.

#### Streamlined Application Process for Residential Rooftop Solar Energy System Installations

The new LIUSPI plan is meant to apply to "standard" proposed solar electric panel and solar hot water installations where the installation is designed for a "typical equipment load," is to be flush mounted on a single-layer residential roof, and is to be installed by a pre-screened installer using "approved equipment." It is expected that this description will cover approximately 90% of proposed solar panel and solar hot water installations on Long Island.

### The new solar permit streamlining plan has two components:

- 1. Municipal Solar Approval and Certification Process Policies including the "Solar Energy System Fast Track Permit Application" (comprised of a Requirements Checklist, Project Information Sheet, and Diagram)
- 2. LIPA technical and financial support for each township and the first ten villages in Nassau and in Suffolk that adopt authorizing legislation by December 31, 2011 incorporating the principles and policies sufficient to accomplish the five key components of the LIUSPI plan including usage of the permit application attached herein.

### Municipal Solar Energy System Application and Certification Process Policies

In order to streamline and standardize the solar installation application process, municipalities will adopt the following policies:

- A. For installations that meet the "Fast Track" requirements, the permit application fee will be waived or be no more than \$50.
- B. Provide permit determinations within 14 days of submittal of a completed application
- C. For "standard" installations, utilize the "Solar Energy System Fast Track Permit Application" (Attached) as an alternative to existing building permit forms.

A standard installation is defined by the "Requirements Checklist." Critical attributes include that the installation must:

- Not be subject to review by an Architectural or Historical Review Board,
- be on a residential building or legal accessory structure
- be on a roof with a single layer of roof covering (waivable by the municipality)
- be flush-mounted parallel to the roof surface and no more than 6" above the surface
- have an 18" clearing at the roof ridge and an 18' clearing path to the ridge
- create a roof load of no more than 5 pounds per square foot for photovoltaic (PV) and 6 pounds per square foot for residential solar hot water (RSHW)
- be installed by pre-screened contractors
- use PV panels that have been certified by a nationally-recognized testing laboratory as meeting the requirements of the Underwriters Laboratory (UL) Standard 1703 and inverters must be on a list of NYS Public Service Commission type-tested inverters which are tested by UL or other nationally-recognized laboratories to conform with UL 1741: http://www.dps.state.ny.us/08E1018/SIRDevices.pdf
- use RSHW equipment that has been certified by the Solar Rating and Certification
  Corporation under its OG-100 standard for solar collectors:
   <a href="http://securedb.fsec.ucf.edu/srcc/collector-search?action=search&msrcc\_id=&mstatus=A-wmoptic-type=0&mstart\_date=&mend\_date=&results\_per\_page=400&submit=Summary</a>
   y
- use other equipment such as modules, combiner boxes and a mounting system that have been approved for public use as described in the "Solar Energy System Fast Track Permit Application Requirements Checklist"
- be in full compliance with all current National Electrical Code (NEC) requirements.

### Highlights of the Application:

- The new application will provide the municipality with more targeted information about the solar energy system installations in its jurisdiction.
- A <u>new</u> property survey is not required, but if the solar energy system is proposed for an
  accessory structure on the residential property, the property owner will have to provide an
  existing survey and demonstrate that the accessory structure is legal.
- A Professional Engineer (PE) or Registered Architect (RA) certified drawing (hand-drawn or better) of the solar panel location and layout on the roof as well as an equipment location diagram and a one line electrical diagram are required.
- A PE or RA is required to certify the load bearing and wind load sufficiency of the proposed solar installation.

#### In order to assist first responders, municipalities will also:

- D. Maintain a list by address of all solar energy installations to be shared with relevant first responder organizations.
- E. Require a sign on the utility meter and at any Alternating Current (AC) disconnect switch indicating that there is an operating solar electric co-generation system on site.

### In addition, municipalities are encouraged to:

- Institute and accept third-party inspections and/or certifications of solar energy system. Like a municipal
  inspection, third-party inspection would ensure that the project is consistent with the applicable municipal
  codes and the submitted application documents. Third-party inspections often have the benefit of allowing
  a more detailed review than municipal inspections.
- Ensure that inspectors (municipal or third-party) have been trained in evaluating solar installations based on nationally recognized guidelines. For PV see: http://irecusa.org/wp-content/uploads/2010/07/PV-Field-Inspection-Guide-June-2010-F-1.pdf

#### LIPA's Support of the LIUSPI Plan

LIPA has committed to provide financial implementation assistance to each township and the first ten villages in Nassau and in Suffolk that adopt authorizing legislation by December 31, 2011 incorporating the principles and policies sufficient to accomplish the five key components of the LIUSPI plan including usage of the permit application attached herein. Specifically, LIPA will provide \$15,000 to each town and \$5,000 to the first ten villages in each of Nassau and Suffolk.

LIPA will ensure that its website provides access to third-party maintained lists of pre-screened solar installers at: http://www.lipower.org/residential/efficiency/renewables/solar-installers.html

LIPA will continue to support PV/RSHW inspector training (municipal and third-party) in its service territory.

### Long Island Unified Solar Permit Initiative

### Solar Energy System Fast Track Permit Application

### **Requirements for Application Submittal**

Before approval and issuance of permit(s) for a grid-tied Photovoltaic system (PV) or Residential Solar Hot Water system (RSHW), the applicant shall submit:

### 1. Solar Energy System Fast Track Permit Application Requirements Checklist

### 2. Three (3) sets of plans which include:

- Cover Sheet must include the following: (a) Project address, map, section, block and lot # of the property; (b) Owner's name, address, phone number, (c) Name, address and phone number of the person preparing the plans;
- Sheet index indicating each sheet title and number;
- Legend for symbols, abbreviations and notations used in the drawings;
- Configuration diagrams prepared by a Professional Engineer or Registered Architect which are sketched (hand-drawn or better) as follows:
  - Roof Diagram depicting modules or collectors and racking configuration on designated surface(s) to scale and dimensioned. The diagram should include any 18" clearance/access required as noted in the Fast Track Permit Requirements Checklist criteria
  - Equipment Location Diagram indicating the location(s) of the (1) modules or collectors; (2) main electrical service; (3) inverter(s); (4) the location of all equipment disconnects on the outside of the structure (i.e. A/C disconnect); (5) any interior equipment locations
  - One line standard electrical diagram
- Property Survey (only if system is proposed for an accessory structure)

### 3. Solar Energy System Fast Track Permit Application Information Sheet

# **Solar Energy System Fast Track Permit Application Information Sheet**

1. Property A	ddress:		<del></del>			
<b>2.</b> Is this □ a	grid-tied phot	ovoltaic (PV)	or □ a Residentia	l Solar Hot Water	(RSHW) system? (	Check One)
3. Provide the	total system	capacity rating	(sum of all pane	ls)		
PV System: _ RSHW Syster			ea; kBTU/o	day (Clear C) per S	SRCC OG-100 labe	el(s).
4. Solar Instal	llation Contrac	ctor:				
Business Nan	ne & Address					
Contact Name	e			· · · · · · · · · · · · · · · · · · ·		
Phone Numbe	er					
5. What is the	existing roof	ing material?_				·· <del>······</del>
			gineer or Register ads of the solar e		ying that the existir	ng structure can
7. Provide an	installation m	anual (or the ir	iternet address of	a web-based versi	on) for the mountir	ng system.
8. Indicate typ	e, brand and	model size and	weight including	g manufacturer's sp	pecification sheets	of the:
Mounting Sys	tem:					
	Make	Model	Mounting M	lethod		<del></del>
Inverters:						
Modules:						
	Quantity	Make	Model			
					_	
Property Owner's Signature				Date		
Solar Installation Contractor Signature				Date	<del>-</del>	

## Solar Energy System Fast Track Permit Application Requirements Checklist

This form may be used for planned Photovoltaic (PV) & Residential Solar Hot Water Panel (RSHW) installations that meet the following criteria (check one for each criterion):

Lies Lino	Solar histaliation is <u>not</u> subject to review by all Architectural of Aistorical Review Board.					
□Yes □No	Solar installation is to be mounted on a permitted roof structure of a residential building, or on a legal accessory structure. If on a legal accessory structure, a survey showing said ture is attached.					
□Yes □No	The roof will have no more than a single layer of roof covering in addition to the solar equipment. [At its discretion, a municipality way waive this requirement.]					
□Yes □No	Installation will be flush-mounted, parallel to and no more than 6" above the roof surface.					
□Yes □No	An 18" wide clearing (free of solar equipment) will be provided along at least one side of the root ridge either on the same side as the solar equipment or on another side of the ridge that does not have solar equipment on it. In addition, an 18" wide pathway (free of solar equipment) will be provided from at least one eave or gutter connecting to that 18" roof ridge clearing.					
□Yes □No	Weight of the installed system will not exceed more than 5 lbs per square foot for photovoltaics and no more than 6 lbs per square foot for residential solar hot water.					
□Yes □No	The Solar Installation Contractor complies with all licensing and other requirements of the jurisdiction and is named on the pre-screened installer lists on the LIPA website.					
□Yes □No	The proposed equipment is certified under UL 1703 (PV) or has an OG-100 (RSHW) rating from the Solar Rating and Certification Corporation. Inverters used are listed on the NYS Public Service Commission list of type-tested certified interconnection equipment.					
□Yes □No	PV modules and combiner boxes are identified by the manufacturer for use in grid-tied PV systems.					
□Yes □No	The project will comply with current NEC requirements including Article 690 Solar Photovoltaic (PV) Systems.					
□Yes □No	The mounting system has been approved for use in New York State by a licensed professional engineer or registered architect.					
Property Ow	ner's Signature Date					
Solor Installa	ation Contractor Signature Data					