SUNSOURCE® HOME ENERGY SYSTEM PLANNING CHECKLIST

507157-01
3/2013
Supersedes 506546-01

LENNOX

SUNSOURCE® HOME ENERGY SYSTEM PLANNING CHECKLIST

CUSTOMER NAME:		**DATE:**	
CUSTOMER ADDRESS (STREET, CITY, STATE AND ZIP CODE)		**ELECTRIC UTILITY:**	

SECTION I – SITE AND CUSTOMER

1.	Does site have 240VAC split-phase power?	The utility-interactive SunSource® Home Energy System is for split-phase power (typical residential service) and will only interconnect and supply power if the grid power meets the following specifications: *L1 - L2 voltage measures between 211 Volts and 264 Volts* *Line to neutral/ground voltage measures between 106 and 132 Volts* *Frequency measures between 59.3 Hz and 60.5 Hz*	YES □ NO □
2.	A. Does site have good southern exposure?	Perform a solar site survey using a *Solar Pathfinder*™ or other survey tool to assess the solar resource available. Next, use the web-based program, PVWatts (version 1), from the National Renewable Energy Lab, to estimate the monthly and annual solar energy generation potential *NOTE: For more information concerning Solar Pathfinder, see Lennox Corp 1312-L2, Application and Design Guidelines for more information.*	YES □ NO □
	B. Is it free of shading?		YES □ NO □
3.	Is the roof suitable for mounting solar modules?	1. Is there enough area for the solar modules? *One solar module requires about 15 to 20 square feet.* 2. What type of roof is it? *There are four different types of roof flashings to accommodate the more common styles of roofs. (Since the solar modules must be removed during a re-roof, it is best not to install the solar modules on a roof in poor condition. Take note of the pitch of the roof and the height of the eaves. OSHA has fall protection compliance guidelines. For example, see OSHA Directive STD 03-00-001.*	YES □ NO □
4.	Is the home's electrical distribution panel adequate?	Generally, the distribution panel should be rated 100 AMP or more for one SunSource® Home Energy System installation. (For two systems, the panel should be 200 AMP or larger. (See also ***Code Compliance*** *section*)	YES □ NO □
5.	Will the solar modules be closer to HVAC (outdoor unit) or distribution panel?	There are two different ways to wire-in the solar power system. This step in the planning phase helps determine which method will be faster and easier to use. If the HVAC outdoor unit is nearest to the solar modules it is probably easier to use the Lennox® Solar Subpanel and bring the solar power circuit to the unit. If the electrical distribution panel is closer to the solar modules than the outdoor unit, then it may be easier to bring the solar power circuit to the panel.	HVAC □ PANEL □

LENNOX

SUNSOURCE® HOME ENERGY SYSTEM PLANNING CHECKLIST

6.	Check for ease of modifications to distribution panel.	If the solar power circuit connects to the HVAC outdoor unit, the HVAC branch circuit breaker (in the distribution panel) will need to be relocated to a slot that is at the opposite end from the main breaker. If the solar power circuit is run directly to the distribution panel, a new 20 AMP, 2-pole breaker will need to be installed in one of the slots that is at the opposite end from the main breaker. This step is to get an early view of issues such as no available slots or difficulty relocating the HVAC branch circuit breaker. In addition, the back feed breaker, whether it is the HVAC branch circuit breaker or a separate 20 AMP breaker, is suitable if it is a conventional breaker and the terminals are NOT marked **Line** and **Load**. It should not be a GFCI or arc-fault type circuit breaker.	EASY □ HARD □
7.	Does the customer have an “always on” Internet connection?	An Internet connection, with broadband router is required for the *Envoy Communications Gateway* to connect to the monitoring service. While use of the Envoy and the service are highly recommended, they are not required for the solar power system to operate. *NOTE: There are some instances when a Communications Booster may be required to insure reliable data communication.*	YES □ NO □
8.	Are there HOA restrictions?	Home Owners Associations (HOA) may require a plan to be submitted for approval	YES □ NO □
SECTION II – INTERCONNECTION AND NET-METERING			
9.	Does the electric utility have a net-metering program?	It is necessary to notify the electric utility of the customer's intention to install a utility-interactive solar power generation system. Most utilities are familiar with these systems and will already have a policy and rules for "net-metering".	YES □ NO □
9.	Does the utility program have any special requirements?	Some utilities will require an indicating, lockable disconnect switch on the solar power system. If the utility has some form of incentive program, they may require the solar power system to be sub-metered. When the utility has requirements like this, they sometimes provides the required hardware.	YES □ NO □
11.	If there is an incentive program, is there a minimum kW threshold?	For example, some utilities require a 1kW and 2kW threshold for some rebate /incentive programs.	YES □ NO □
12.	Does customer understand this is not a grid independent system?	It is important to make sure the customer understands that this is a utility-interactive PV system and <u>WILL NOT</u> generate power when the grid is down. In addition the SunSource® Home Energy System will not produce power concurrently with a back-up generator.	YES □ NO □
13	Have all the local electrical code requirements been identified?	In almost all US jurisdictions, the National Electric Code (NEC) will be cited as the authority for electrical inspections and in Canada, it is the Canadian Electric Code (CE Code). There may be additional local requirements. NEC section 690 gives the requirements for solar PV installations. Wind load calculations are sometimes requested by code officials. If this is the first time to install a SunSource® Home Energy System in this jurisdiction, it is advisable to meet with the local inspection department to find out what requirements exist. This will save time in the long run since the permit submission can address any special requirements.	YES □ NO □

SUNSOURCE® HOME ENERGY SYSTEM PLANNING CHECKLIST

14	Is grounding electrode required for the solar PV systems?	Solar PV AC modules are not required by the NEC to have a separate grounding electrode but the local jurisdiction may require one to be installed.	YES □ NO □

This checklist is to be used as an aid in assessing the conditions that prevail at a particular site. A **NO** check box answer does not necessarily mean a system cannot be installed. Rather, it means that there may be special activities, such as extra electrical work required.

FOR MORE DETAILED INFORMATION, SEE LENNOX CORP. 1312-L2, SUNSOURCE® HOME ENERGY SYSTEM APPLICATION AND DESIGN GUIDELINES.

NOTES: