



CalCERTS

HERS Rater Certification Training for Solar Home Verification (Session P)

Presented by *Sierra Building Science*

Northern California – Old Sacramento

September 13th & 14th, 2007 (Thursday & Friday)

Class Code: 070913PN

Location: Sierra Building Science Center
133 L Street, Suite C, Old Sacramento, CA 95814
(Bottom floor of the Clarendon Bldg., corner of 2nd and L streets - Directions attached)
Park in city parking garage (\$15/day) or lot behind building (\$12/day)

Times: **Day 1 9:00 am-4:00 pm** work through lunch (provided)
Day 2 9:00 am-4:00 pm (lunch not provided)

This training is intended to train and certify people interested in performing HERS field verification and diagnostic testing for third party inspection of Photovoltaic/Solar systems for NSHP (New Solar Homes Partnership) and CSI (California Solar Initiative). We will also cover Tier I and Tier II energy efficiency. A Manual and reference materials will be provided. On day 2, hands on laboratory instruction will be given on-site at the SMUD Training Center (map will be provided during class). For this part of the class, please wear close-toed shoes and bring a hardhat if you have one. If you have more than one, please bring extras to share with others. We will:

1. See solar panel installations, count modules
2. Do performance testing using pyranometers
3. Verify tilt, azimuth of arrays
4. Learn different inverters and how to read/verify kW output
5. Demonstrate minimal shading verification

The cost is \$500 per person. You can sign up by calling Sierra Building Science Center at 916-446-2239 or register online at: www.sierrabuildingscience.com.

Bring to class a calculator, pen, and notepad. Lunch will be provided Day 1. Due to the large amount of material to be covered, we will eat lunch in the classroom and work through lunch. On Day 2, half the class will go to lunch while the other half goes to the SMUD training center and then we will switch. See "General Training Information" attached.

At the end of Day 2, participants will take a 25 question, open-book, multiple-choice exam. A score of 75% is required to pass the exam to become certified. Applicants only wanting to learn to test their own installation work and not the work of others as a HERS Rater need not be certified and do not need to take the exam.

The instructor will be Charlie Bachand, CalCERTS Trainer. Charlie is an experienced trainer and long-time expert on HERS programs and diagnostic testing. For questions about the training call the SBSC office at 916-446-2239 or e-mail training@calcerts.com.

General Training Information

The training is organized as follows. **Note that times may vary. Refer to the flyer for the specific class for detailed information.**

Session P - Photovoltaic Certification			
	Day 1	Day 2	
7:00 AM			
8:00 AM	Classroom Training	Classroom Training	
9:00 AM		Travel to SMUD T.C.	
10:00 AM		Lunch on their own	Lab
11:00 AM		Lab	Lunch on their own
Noon	Lunch - Provided		
1:00 PM	Classroom Training	Travel to SBSC	
2:00 PM		Review	
3:00 PM		Exam	
4:00 PM			

Directions to the Sierra Building Science Center in Old Sacramento.

It is important to note that Old Town Sacramento is just west of I-5, opposite of Downtown Sacramento. It is sandwiched between I-5 and the Sacramento River. One very visible landmark is the gold-colored bridge. We are about ¼ mile north east of the bridge.

From North bound or South bound I-5

1. Take the J Street Exit.
2. Turn Right on 3rd Street.
3. At L street, veer right. Do **not** take a hard right onto freeway.
4. Merge onto Capitol Mall. Stay in the right lane.
5. Just before the bridge turn right on Neasham Circle. (You can either go into the parking garage here and walk the rest of the way – about 1 block - or try to find a spot in the lot behind our building.)
6. Follow Neasham around, take first left on Front Street.
7. Take next right onto L street. You'll see the parking lot on the left.
8. The Clarendon Building is the building just to the east of the lot. Go down the steps on the south side of the building.

From East Bound I-80

1. Take Capital City Fwy/Hwy 50 E toward Sacramento/South Lake Tahoe
2. Take the Jefferson Blvd exit toward Downtown Sacramento.
3. Merge onto CA-275 N via the exit on the LEFT toward Downtown Sacramento.
4. You'll go across the gold colored bridge. Just on the other side of the bridge, on your left you will see your future turn, but you can't turn here.
5. Make a U-TURN at the next available opportunity (a few blocks down) and come back toward the bridge.
6. Just before the bridge turn right on Neasham Circle. (You can either go into the parking garage here and walk the rest of the way – about 1 block - or try to find a spot in the lot behind our building.)
7. Follow Neasham around, take first left on Front Street.
8. Take next right onto L street. You'll see the parking lot on the left.
9. The Clarendon Building is the building just to the east of the lot. Go down the steps on the south side of the building.