

Appalachian State University  
Campus Renewable Energy Systems

**Renewable Energy Project:** Raley Hall Photovoltaic System

<b>System description</b> (Include brief description of system with location info)	4.0 kW ground mounted, direct grid tied photovoltaic system with custom mountain-scape design. 416 Howard St., Boone, NC near Raley Hall			
<b>Equipment manufacturer(s)</b> (With list of all critical components in system m/u that each is associated with)	Modules – (18) Sharp ND-72ELUF (72 w), (19) Sharp ND-N2ECUF (142 w) Inverter – (1) Fronius IG 4000			
<b>Date placed in service</b>	June 2008			
<b>Account information</b>	Meter NRLP 35 607 471	Account # n/a		
<b>Installation contractor</b> (Include address & contact info)	Southern Energy Management 101 Kitty Hawk Dr. Morrisville, NC 27560		Contact – J.R. Whitley Phone – 919-836-0330	
<b>Rated output</b> (Nameplate capacity & anticipated yearly output)	4.0 kw with an anticipated annual output of 5,782 kwh			
<b>System monitoring</b> (Remote available / certifiable)	Unknown / Yes			
<b>Warranty</b> (List any warranties for equipment and time period)	Modules – 25 year limited warranty ( <a href="http://www.sharppusa.com">www.sharppusa.com</a> ) Inverter – 10 year warranty ( <a href="http://www.Fronius.com">www.Fronius.com</a> )			
<b>Interconnect Agreement</b> (Req'd / in place / date / with)	Yes	Yes	5-6-2011	NRLP
<b>Power Purchase Agreement</b> (Req'd / in place / date / with)	Yes	Unknown		NRLP
<b>RECs available</b> (Are RECs available to sell / how many)	Yes / 5,782 kwh annually through NC GreenPower			
<b>NC GreenPower</b> (Sellable to NCGP / price / contract)	*Yes	\$0.06 per kwh	No	
<b>Documentation</b> (Owner's manual, individual responsible for control)	Documentation requested from Southern Energy Management			
<b>System maintenance</b> (Primary for system maintenance)	ASU Physical Plant personnel			
<b>Maintenance contract</b> (In place / terms)	No			
<b>Cost / Funding participants</b>	~\$65,000	ASU REI funded		
<b>Other comments</b>	*Eligible but ASU is retaining the RECs for carbon emissions reduction.			

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