

Appalachian State University
Campus Renewable Energy Systems

Renewable Energy Project: Plemmons Student Union Solar Thermal System

System description (Include brief description of system with location info)	Drainback system used to preheat domestic water with 42 collectors on the roof, storage tanks and system controls in mechanical room at the entrance to Hawksbill Game Room (connected with water heater on opposite side of building) located at 263 Locust St., Boone NC on roof of Plemmons Student Union			
Equipment manufacturer(s) (With list of all critical components in system m/u that each is associated with)	Panels – (35) Solar Development Inc. model SD8-40 (4'x10') glass glazed collectors (7) Sunquest Fresource (4'x10') lightweight prototype Tefzel glazed collectors Tank(s) – (3) Trendsetter (400 gal each) w/ 3 SS coil HXs/tank Pumps – (1) Grundfos (solar loop) Controller – (1) Eagle 2 pump controller			
Date placed in service	October 2009			
Installation contractor (Include address & contact info)	Sunquest Inc. 1555 Rankin Ave. Newton, NC 28658		Contact – Greg Baer Phone – 828-465-6805	
Rated output (Nameplate capacity & anticipated yearly output)	242,170 Btu/hour nameplate capacity			
System monitoring (Remote available / certified)	Yes - Metasys / Yes (Onicon System 10)			
Warranty (List any warranties for equipment and time period)	1 year on system Collectors – 10 years (SD8-40), 5 years (Sunquest) Pump – 2 years Controller – 2 years			
Interconnect Agreement (Req'd / In place / date / with)	No	n/a	n/a	n/a
Power Purchase Agreement (Req'd / in place / date / with)	No	n/a	n/a	n/a
RECs available (Are RECs available to sell / how many)	Yes / Unknown			
NC GreenPower (Sellable to NCGP / price / contract)	No	n/a	n/a	
Documentation (Owner's manual, individual responsible for control)	M Drive, Office of Sustainability			
System maintenance (Primary for system maintenance)	Plemmons maintenance personnel			
Maintenance contact (In place / terms)	No			
Cost / Funding participants	\$153,000	ASUREI funded		
Other comments				