

Appalachian State University
Campus Renewable Energy Systems

Renewable Energy Project: Varsity Gym Solar Thermal

System description (Include brief description of system with location info)	The Varsity Gym Solar Thermal system is a drain back solar thermal system consisting of 12, 4'X10' solar thermal collectors. 530 Rivers St., Boone, NC 28608			
Equipment manufacturer(s) (With list of all critical components in system m/u that each is associated with)	Collectors – (12) Advanced Energy Technology AE-40 flat plate collectors Pumps – (1) Grundfos UPS15-55SFC, (1) Taco 2400-50S Storage Tanks – (1) 900 gallon custom manufactured (FLS Energy) steel tank Heat Exchanger – (1) Graham GB105-70			
Date placed in service	August 2010			
Installation contractor (Include address & contact info)	FLS Energy 130 Roberts St. Asheville, NC 28801		Contact – Phone – 828 350-3993	
Rated output (Nameplate capacity & anticipated yearly output)	11,850 Btu/hour nameplate capacity			
System monitoring (Remote available / certifiable)	Yes - Metasys / Yes (Onicon System 10)			
Warranty (List any warranties for equipment and time period)	Solar Thermal Collectors – 10 years Pumps – Grundfos – 2 years, Taco – 3 years Heat Exchanger – 1 year from date of shipment			
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)	Yes, located in the mechanical room of Varsity Gym, Unknown			
System maintenance (Primary for system maintenance)				
Maintenance contract (In place / terms)				
Cost / Funding participants	\$	Who		
Other comments				