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SHADOWOOD HVAC HISTORY

- 1974 Shadowwood originally had a central heating plant with two fuel-oil fired, 350-Horsepower Cleaver-Brooks boilers and a tube-heat exchanger for domestic hot water. Heat and domestic hot water were delivered to the buildings by underground piping. Each unit had an air-handler with both heating and cooling coils and an electric A/C condensing unit; most of this equipment is still in use. Three-way valves were installed so that residents could switch back and forth between heating and cooling at residents' choice. The three-way valves never worked and were haphazardly abandoned in place where they remain today. As such, and despite no apparent reason why the "managers" could not resolve the situation, today the SCA HVAC system operates as if it were a two-pipe system with heating or cooling, but not both, available. This causes enormous comfort problems in the spring and fall of each year.
- 1980 Because the three-way valves were not working, "aquastats" were installed on the heat pipes in each unit in another attempt to allow residents to switch back and forth from heating to cooling, that didn't work either.
- 1981 Due to increasing fuel-oil costs, the boilers were converted to natural gas with oil back-up.
- 1981 Hired an HVAC technician to maintain the boilers and HVAC equipment. (We now have a professional management company running the Association with a staff of one HVAC engineer and one laborer).
- 1984 Installed an energy-management system, still in use, to control peak electric demand charges. The system monitors electric use and during peak use periods randomly shuts down groups of air-conditioning units for short periods of time.
- 1987 SCA has a Dominion Virginia Power master electric meter for which the Association pays the monthly bill. In order to charge each unit owner for their actual electric usage and possibly help reduce electric usage, an ADEC electric sub-metering system was installed. The system failed in 2007 and was decommissioned.
- 1992 Due to improperly installed and deteriorating underground heat and domestic hot water pipes the Cleaver-Brook boilers were removed and small boilers and hot water heaters were installed in each building.
- 2004 ChevronTexaco completed a feasibility energy analysis and the Board of Directors approved an energy audit agreement.
- 2005 ChevronTexaco completed the energy audit.
- 2006 and 2008 Board of Directors requests proposals from HVAC contractors and engineering firms to determine how best to replace the aging and inefficient heating and cooling system now in place.