**APPENDIX D**

Cycling Rate and Thermostat
Parameters From the Literature

TABLE D-1

| Cycling Rate Parameters From Literature | | | |
|---|---|---|---|
| Source | $N_{max}$ (cycles/hr) | $t_{ON,min}$ (minutes) | Comments |
| Murphy & Goldschmidt (1979) | 2.83 | 5.3 | Cooling mode in mobile home |
| Goldschmidt et al. (1980) | 2.8-3.3 | 4.6-5.3 | Cooling, Mobile home with and without metal chairs |
| Parken et al. (1985) | 2.00 | 7.5 | Cooling, Brick house w/basement |
| | 2.28 | 6.6 | Cooling, Frame house w/ walk-out basement |
| | 1.64 | 9.1 | Cooling, Frame house w/ walk-out basement |
| Miller & Jaster (1985) | 0.6-2.1 | 7.1-25 | Heating mode for 9 heat pumps |
| Hart & Goldschmidt (1980) | 3.1 | 4.8 | Heating mode |
| ARI (1984) | 3.125 | 4.8 | Inferred from cyclic test 6 min ON, 24 min OFF |
| Given data is bold, other value calculated from equation (A-6) $N_{max} = 60/(4t_{ON,min})$. See Appendix A for definition of $N_{max}$ and $t_{ON,min}$ | | | |


TABLE D-2

| Measured Thermostat Deadbands ($\Delta T_{spt}$) from the Literature | | |
|---|---|---|
| Source | Switch Deadband ($\Delta T_{spt}$) | Comments |
| McBride (1979) | 0.8°F | Measured in laboratory |
| Miller & Jaster (1985) | 2.5°F | Measured in field tests |