

**Table 3. Simulation results: single story new single-story home with heat pump. R-19 ceiling insulation, 0.3 change in roof solar-reflectance (SRI change of 40): annual cooling energy savings, annual heating savings and annual net energy bill savings in 11 cities. A 0.3 change in solar reflectance is presently not achievable in composite shingle homes. Basecase electricity use includes air-handler energy (Konopacki, et.al, 1997).**

| City             | Annual Electricity Savings* |    | Annual Net Bill Energy Savings** |    | Peak Savings           |    |
|------------------|-----------------------------|----|----------------------------------|----|------------------------|----|
|                  | kWh/1000 ft <sup>2</sup>    | %  | \$/1000 ft <sup>2</sup>          | %  | W/1000 ft <sup>2</sup> | %  |
| Atlanta, GA      | 89                          | 3  | 6                                | 2  | 91                     | 6  |
| Chicago, IL      | -12                         | 0  | -2                               | 0  | 52                     | 4  |
| Los Angeles, CA  | 126                         | 7  | 10                               | 8  | 130                    | 9  |
| Fort Worth, TX   | 133                         | 3  | 8                                | 3  | 97                     | 5  |
| Houston, TX      | 151                         | 5  | 12                               | 5  | 110                    | 6  |
| Miami, FL        | 205                         | 5  | 17                               | 6  | 84                     | 5  |
| New Orleans, LA  | 171                         | 6  | 12                               | 6  | 84                     | 6  |
| New York, NY     | 57                          | 0  | 1                                | 0  | 84                     | 6  |
| Philadelphia, PA | 42                          | -1 | -10                              | -1 | 91                     | 10 |
| Phoenix, AZ      | 256                         | 6  | 27                               | 6  | 97                     | 4  |
| Washington, DC   | 101                         | 1  | 3                                | 1  | 84                     | 5  |

Source: Konopacki, et. al, 1997. Simulation tool: DOE 2.1E

\*Negative savings mean that energy use increases.

\*\*Does not include equipment downsizing or utility capacity savings.