

time steps and not just the end of the century. Also in the San Francisco office, the lighting demands fluctuate from increasing to decreasing (or vice versa) in almost every simulation set. Table 1 shows the total site and source energy for the TMY3 ‘baseline’ simulation, the 50th percentile WeatherShift™ morphed simulations (both RCP 4.5 and 8.5) and the TMY3 morphing using CCWorldWeatherGen (HadCM3 A2).

CONCLUSIONS

The results discussed here are several examples of unique findings in this investigation. This is not a complete representation of the analysis, and supplemental information is in the process of being generated (at the time of this writing) to provide more comprehensive and detailed information. This analysis serves as a strong testimony for the need to understand the elements behind future climate projections and weather file morphing. The impacts can be profound and any inaccuracies can become exaggerated. As with any simulation, there is not a universally correct answer, but future climate projections and the integration of climate and building science is a necessity for the development of our built environment and the future of energy simulation.

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