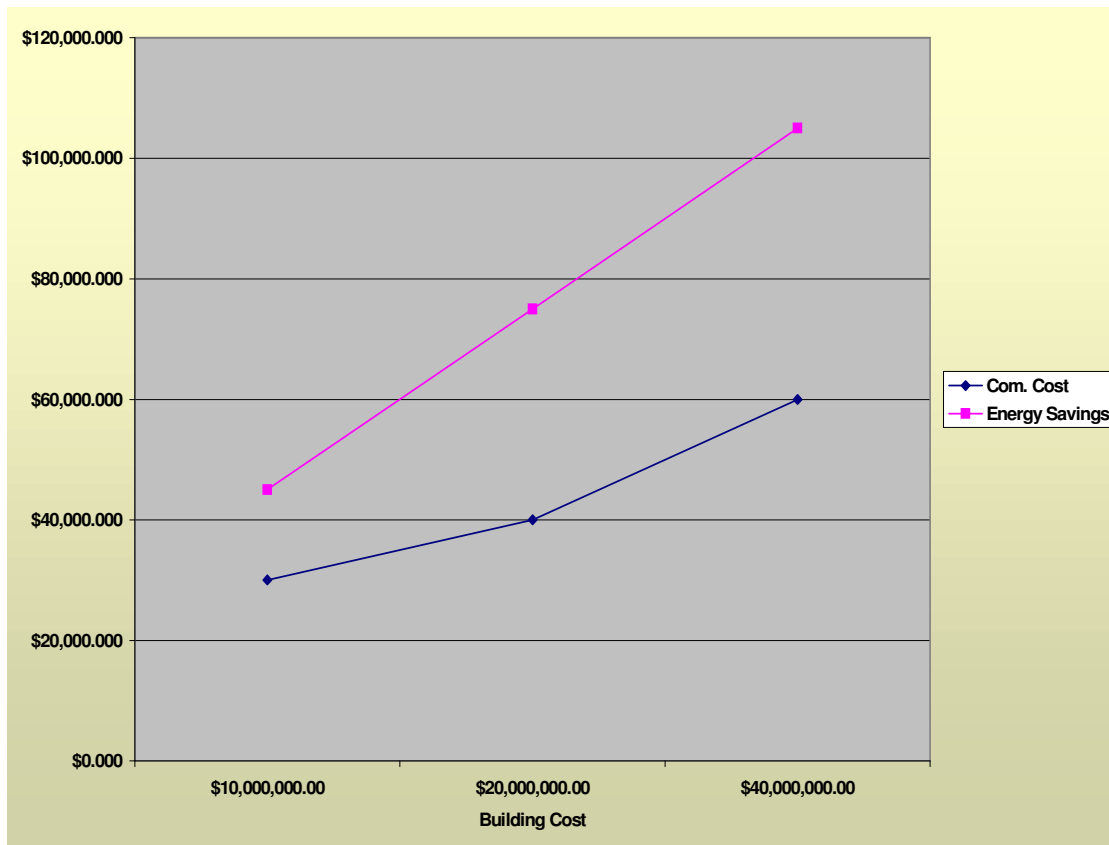


Cost Effectiveness of Envelope Commissioning

According to the “National Institute of Building Sciences” and the “National Institute of Standards and Technology”, a good rule of thumb for budgeting both Envelope and systems commissioning is \$0.30/sf and \$0.70/sf respectively or 0.2 % and 0.4%. (These figures deviate based on many factors, the size of the project, facility type and location, etc.) In a study conducted by Evans Mills, PhD, of the “Lawrence Berkeley National Laboratory” in Berkeley, CA, they reviewed the impacts of commissioning on a total of 643 buildings in 26 states which included both existing facilities and new. They found an average of 15% in energy savings, with a potential payback of less than 1 year on the commissioning cost. Further findings showed that non-energy related savings were realized and in many cases the payback of the commissioning cost was realized by the completion of the project with ongoing savings realized annually. These non-energy related saving included: reduction in Change Order cost, reduction in ongoing maintenance and operation cost and building life cycle cost. The following is a graphical representation of potential energy savings verse commissioning cost based on interpolate data from the Mills study; as can be seen potential energy savings alone shows commissioning to be a worthwhile investment.



The authors of the report concluded, “Commissioning is one of the most cost-effective means of improving energy efficiency in commercial building.”