

Appendix C  
Energy Analyst Qualifications

## **I. GENERAL**

The services of an Energy Analyst are required for all Class 1 building projects. The Office of Energy can provide the agency with names of firms that have experience and expertise in energy analyses.

The Energy Analyst shall be an individual who prepares the building energy analysis and the Energy Analysis Report under the direction of a professional engineer or licensed architect who reports to the project architect or Agency. The Energy Analyst shall be approved or jointly agreed upon by the Agency and the Office of Energy.

The Energy Analyst qualifications under the SEED Program may be satisfied by more than one person, provided that the analysts' combined skills and experiences meet all Energy Analyst requirements. The Energy Analyst may encounter a complicated building configuration, feature, or conservation measure with which he or she has no previous experience. In such a case, a professional whose experience includes modeling of this configuration, feature, or conservation measure shall review the work.

## **II. QUALIFICATIONS**

The Energy Analyst or Energy Analysis Team should have the following experience:

1. Broad experience with commercial and institutional building energy systems and operating characteristics that are similar to those in the building being evaluated by the Agency. Experience with life cycle cost analysis and value-engineering methods that identify opportunities to lower long-term operating costs through incorporation of energy conservation measures. Experience in determining accurate cost estimates for evaluating the cost effectiveness of energy-efficiency measures. Experience with life-cycle methods that reflect equipment operation and maintenance costs and take into account the useful life of measures.
2. Three (3) or more years of full-time modeling experience with a computerized building model tool for energy analysis that is on the list of programs approved for use under the SEED Program. Two years of modeling experience in addition to a certificate of completion from the ODOE Modeling Training course is considered equivalent. Demonstrated ability to perform energy studies evaluating innovative energy-efficient designs that have been implemented and successfully operated.
3. Demonstrated capability to model basic building features such as internal gains, multiple zones with central HVAC systems, envelope measures that affect thermal transmission, and architectural shading effects. Experience with complex energy conservation measures such as system heat recovery, fan and pump ASD applications, and enhanced direct digital control strategies. Experience in modeling mechanical systems and central plant partial-load operating efficiencies. Experience with photometric calculations in estimating light levels.