

Appendix 2

Guidelines for Recruiting and Contracting Energy-related Services

This appendix outlines 1) a list of the basic types of contractors used in energy efficiency and water use efficiency projects and the services they perform, 2) tips useful for evaluating contractors bidding on a project, and 3) tips useful when negotiating contracts for energy-related services.

Types of Contractors

NOTE: this is a basic list of the most common type of contractors used in energy efficiency and water use efficiency projects, but is by no means comprehensive. Building owners and managers may find that other types of service providers are more appropriate or better suited for their individual project. Please contact success@fypower.org if you would like to comment on or contribute to the information listed here.

Owners and managers interested in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system should make sure that contractors have the LEED Professional Accreditation. Another way to research professionals committed to energy efficiency is to search ENERGY STAR's list of partners in your area.

<http://www.usgbc.org/LEED/AP/ViewAll.aspx?CMSPageID=50&CategoryID=19&>

http://www.energystar.gov/index.cfm?fuseaction=estar_partner_list.showPartnerSearch

Energy Services Company (ESCO) – a single firm that manages and coordinates all phases of an energy project. ESCOs typically provide many types of services, including energy audits, equipment maintenance, project financing, and performance guarantees. At this time, there are no certifying or accreditation bodies governing ESCOs.

- California Energy Commission's publication, "Summary of Energy Services Companies: Summary of Responses," includes a recent list of ESCOs operating in California. <http://www.energy.ca.gov/2005publications/CEC-400-2005-001/CEC-400-2005-001.PDF>
- The California Department of General Services, Energy Assessments maintains a list of qualified ESCOs for public agency projects. This list is available at www.resd.dgs.ca.gov/Energy/escoservices.asp.

Architectural and Engineering (A&E) firm – provides only technical analysis, engineering design, and sometimes construction management services.

- The California Architects Board (CAB), which is part of the State's Department of Consumer Affairs, licenses and regulates the state's 24,000 architects. Contact CAB for current information on licensed architects as well as those who have had complaints filed against them. CAB also offers an online guidebook to help consumers hire qualified architects. <http://www.cab.ca.gov/pdf/consumer2002.pdf>
- Since 1857, the American Institute of Architects (AIA) has represented the professional interests of America's architects. AIA offers more than 80 Standard Contracts that can be purchased for a small fee. http://www.aia.org/docs_about&defPr=1.
- California's Board for Professional Engineers and Land Surveyors, which is part of the State's Department of Consumer Affairs, licenses and regulates all professional engineers in California. Like CAB, the Board provides a listing of all current licensees as well as a consumer guidebook. http://www.dca.ca.gov/pels/consumer_guide.pdf The Board also handles consumer complaints against professional engineers.

Interior Design firms – interior design firms can assist with a number of energy-efficiency and water-use efficiency projects.

- The California Council for Interior Design (CCID) is the State's qualifying body for certified interior designers. Although anyone may call himself or herself an interior designer, a *Certified* Interior Designer prepare and submit nonstructural, nonseismic construction documents and specifications to local building departments for the purposes of plan check. The CCID also provides extensive consumer information, including a guidebook on how to hire a certified interior designer. <http://www.ccidc.org/consumers.html>

Energy Consultant – focuses on evaluating and recommending projects to improve energy efficiency. Some energy consultants can provide help with hiring other energy contractors and evaluating their project proposals.

HVAC Engineers and Contractors – HVAC Contractors install, maintain, and service heating, ventilation, and air-conditioning equipment for both residential and non-residential properties.

- The State's Board for Professional Engineers and Land Surveyors (see above) licenses HVAC professional engineers (PEs) and mechanical and electrical engineers who work on HVAC equipment. However, not all employees of HVAC contractors will be.
- The Air Conditioning Contractors of America (ACCA) offers consumer information as well as an online, searchable database to help you locate qualified contractors in your area. <http://www.acca.org/consumer/>
- North American Technician Excellence, Inc. (NATE) certifies HVAC contractors. Although certification is not required, certification is becoming more prevalent and provides third-party verification of a contractor's qualifications. <http://www.natex.org/consumer.htm>

Lighting Specialists – specialists, whether electrical engineers, contractors, designers, or vendors, can all assist property owners with their lighting design, installation, and maintenance needs. A&E firms usually have lighting specialists on staff, too. Remember that vendors representing manufacturers may be limited in their product offerings; be sure to check with a company's competitors to ensure you are getting the best products and services.

- The State's Board for Professional Engineers and Land Surveyors (see above) licenses all electrical engineers in California. Electrical engineers are required for all major lighting installations.
- The National Council on Qualifications for Lighting Professionals (NCQLP) establishes the education, experience and examination requirements for baseline certification across the lighting professions. Although the Lighting Certified (LC) qualification is not required, it is a useful source of third-party verification of a contractor's excellence. The NCQLP website has an online, searchable database to help locate LC professionals in your area. <http://www.ncqlp.org/registry/>.
- The International Association of Lighting Designers (IALD) is a membership-based, voluntary organization of experienced lighting designers. The IALD provides extensive consumer information online and investigates consumer complaints of its members. <http://www.iald.org/Menu/consumerinfo.htm>.

Solar Contractors – licensed by the California State License Board, solar contractors install, modify, maintain, and repair active solar energy systems, such as photovoltaic systems, radiant systems, and solar assisted absorption cooling systems.

- The California State License Board (CSLB) licenses all solar contractors. The CSLB website provides online resources to check a on a licensed contractor, file a complaint, or find useful guidelines for hiring a contractor. <http://www.cslb.ca.gov/consumers/default.asp>
- Solar Energy Industries Association (SEIA) is the national trade association of solar energy manufacturers, dealers, distributors, contractors, installers, architects, consultants, and

marketers. SEIA maintains an online, searchable database of member contractors as well as general information about solar energy. <http://www.seia.org>

Landscape and Interiorscape firms –can install and maintain plant and design features, including irrigation and outdoor lighting systems. A firm may employ landscape contractors and architects, who must be licensed by the State, as well as designers, and maintenance staff, who do not require licensing or certification. Look for professionals who specialize in xeriscaping and other methods that minimize the use of potable water. Increasingly, specialized companies are developing grey water and rain catchment systems that can be used for irrigation purposes.

- The California Landscape Architects Technical Committee (CLATC) advises the California Architects Boards on licensing landscape architects. The CLATC offers an online list of licensed landscape architects and manages consumer complaints. The CLATC also provides a group of consumer guidebooks on how to hire a landscape architect. <http://www.latc.ca.gov/publicinfo/index.html>
- The California State License Board (CSLB) licenses all landscape contractors. The CSLB website provides online resources to check a on a licensed contractor, file a complaint, or find useful guidelines for hiring a contractor. <http://www.cslb.ca.gov/consumers/default.asp>
- The California Landscape Contractors Association (CLCA) is a membership-based, voluntary organization that serves and protects the interests of its members, promotes professionalism, and advances public awareness of the landscape industry. The CLCA offers an online, searchable list of qualified contractors as well as consumer information on how to hire a landscape contractor. <http://www.clca.org/>

Plumbing Specialists – cities and other localities have a licensing exam for plumbers, who can then service existing plumbing pipes and fixtures. Installing a new plumbing system, however, requires a State licensed plumbing contractor. Plumbing engineers, licensed by the State as a professional engineer, design plumbing systems.

- The California State License Board (CSLB) licenses all plumbing contractors. The CSLB website provides online resources to check a on a licensed contractor, file a complaint, or find useful guidelines for hiring a contractor. <http://www.cslb.ca.gov/consumers/default.asp>

Tips for Evaluating a Contractor's Qualifications

Take time to investigate a company's background before entering into a contract for energy-related services. The following tips can help you evaluate a contractor's experience and qualifications.

Develop a standard screening process for interviewing potential contractors.

1. Ask contractors to cite current peak energy rates for your local area, as appropriate for your facility size – know the correct answer ahead of time!
2. Ask contractors about incentive programs that apply to your project and what success they have had in the past applying to these programs.
3. Ask about completed projects that are similar to yours.
 - a. Ask what percentage of the contractor's business is devoted to similar projects.
 - b. If possible, visit a project site to see how suggested project solutions and technologies work in practice.

- c. Request an example of a project report developed for a real client, such as an energy audit – be sure this is clear, simple to read, and contains useful information.
 - d. Request case studies on past projects, if available, especially those that quantify project results in terms of cost savings and kilowatt savings.
 - e. Contact a contractor's references and past clients.
4. Request financial statements that demonstrate a firm's financial solvency and long-term stability. This is especially important if entering into a guaranteed savings or performance-based contract.

Contact your local utility to ask for advice and assistance.

Utilities have long experience working with energy contractors and can make useful recommendations. Utilities also offer technical and financial assistance for energy-related projects; become familiar with program restrictions and criteria *before* initiating a project.

Issue a Request for Qualifications (RFQ) and then a Request for Proposals (RFP) to facilitate the collection of company information.

An RFQ documents a contractor's past experience, qualifications, and the general ways they propose to meet a project's objectives. An RFP asks more detailed information about the energy efficiency measures a contractor proposes.

1. Select top candidates based on the RFQ results and issue an RFP to them.
2. Include in the RFP a clear statement of company goals and objectives.
3. Provide access to relevant building documentation, such as engineering drawings and the energy use profile.
4. Focus on improvements to energy use intensity, not on capital investment in equipment systems. Look for contractors who seek the most cost-effective solutions, and be cautious of those who make commission selling expensive equipment.

Hire an Owner's Representative and include them on the Energy Team.

Owner's representatives, also referred to as construction monitoring or construction management, can establish sound measurement and verification plans as part of any contract and then make ongoing reports on a project's progress. Typically, the owner's representative manages the work of the A&E firm and the general contractor. While this adds another layer of cost and management, it helps a less experienced owner ensure that contractors' work meets expectations and stays within the budget.

Tips for Negotiating Contracts for Energy-Related Services

Carefully align contracts with your energy policy's goals and objectives.

The winning bid should be responsive to company values.

Work with the contractor to develop a measurement and verification (M&V) plan and incorporate this into the final contract.

Vet the M&V plan with your Energy Team to look for ways to enhance it.

Bring together in-house purchasing and financial expertise to assist in negotiating the payment structure.

Look for opportunities to base payment for services on actual energy savings. For example, schedule partial payments each quarter based on estimated energy cost savings.

Seek performance guarantees as part of the final contract, but remember that contractors increase project costs for these guarantees.

Energy Savings Performance Guarantee – this is an innovative arrangement made with an ESCO. This option is particularly suited for owners that do not have easy access to capital for investment in energy efficiency.

- All energy services are bundled into a single package, for which the ESCO is accountable even if the actual work is completed by subcontractors. Services include engineering, equipment purchases, installation, and commissioning.
- The ESCO finances or arranges financing for the entire project, including equipment purchases. There is no upfront cost. The financing is repaid through actual energy savings.
- Remember that ESCOs make their money this way; the ESCO retains cost savings above those guaranteed as well as finance charges that are included as part of the project costs.
- Performance is clearly specified and guaranteed. If actual energy savings and cost savings fall below the guarantee, the ESCO makes up the difference.

Shared Savings Contract – cost savings are split based on an agreed-upon formula

- Variable Fee – the fee is based on a percentage of energy cost savings, which fluctuates each month.
- Scaled Fee – the fee declines as the ESCO recovers its investment.
- Specified Fee and Split of Savings in Excess of Fee – the fee is fixed and any excess savings are split between the facility and the ESCO.
- Specified Fee – the ESCO retains all cost savings until a specified dollar amount is reached, then all savings are split.

Guaranteed Savings Contract – financing is made through another source, not the ESCO. However, the ESCO guarantees that savings will fulfill debt obligations and/or equipment purchases.

Address potential liability issues resulting from the project, and clearly assign responsibility among the parties involved.

- Be sure to consider existing contracts for service or equipment warranties so that these are not inadvertently nullified by a contractor's work.
- Take advantage of existing service contracts whenever feasible. For example, schedule routine HVAC maintenance and testing so that it coincides with any upgrade or retrofit work.

References

California Energy Commission. *Summary of Energy Services Companies: Summary of Responses*. CEC-400-2005-001. January 2005. http://energy.ca.gov/reports/reports_400.html

California Energy Commission. *How to Hire an Energy Services Company*. 400-00-001D. January 2000. http://energy.ca.gov/reports/reports_400.html

California Energy Commission. *How to Hire an Energy Auditor to Identify Energy Efficiency Projects*. 400-00-001C. January 2000. http://energy.ca.gov/reports/reports_400.html

Portland Energy Conservation, Inc. *Operation and Maintenance Service Contracts*. 1997. <http://www.peci.org/library.htm>