

## PERFORMANCE CONTRACTING PROJECT SUMMARIES

1. Measurement & Verification and Post-Retrofit Audits. Since ERA was instrumental in creating the energy services industry (performance contracting) industry in the early 1980's, and due to the staff's design/build background and the firm's expert witness expertise, ERA has frequently been called in to set bad projects right - or at least figure out if they could be set right - and to "audit" projects to see if they were performing. A short list of such projects includes:
  - Alameda Courthouse and Administration Building Complex, Oakland, CA
  - Borel Place, San Mateo, CA
  - California Polytechnic University, San Luis Obispo, CA
  - Dallas Independent School District, Dallas, Tx
  - Fort Bend School District, Fort Bend Texas
  - John Muir Medical Center, Walnut Creek, CA
  - Marin County Civic Center, San Rafael, CA
  - Morgan Hill Unified School District, Morgan Hill, CA
  - Pacific Grove Unified School District, Pacific Grove, CA
  - Pacific Park Plaza, Emeryville, CA
  - Pennzoil Place, Houston, TX
  - Pomona Valley Hospital, Pomona, CA
  - San Francisco Newspaper Agency, San Francisco, CA
  - Shell Oil, Westhollow Research Center, Houston, TX
  - Sierra Nevada Memorial Hospital, Grass Valley, CA

Typically ERA's post-retrofit audits have included a statistical review of energy consumption data (usually based on utility company invoices), on-site verification of installed energy conservation measures, actual field measurement of ECM performance (usually pre- and post-retrofit - 6,000 electrical readings, for example at Pennzoil Place), and review, analysis and validation of the engineer's original estimates of savings (at Marin County, this even included re-constructing the engineer's simulation model of the building - as discussed in the ERA paper entitled "Energy Service Projects: Case Studies in Success and Failure", published in DSM Quarterly, Summer, 1992).

2. Performance Contracting Business Unit Creation. As discussed in ERA's Corporate Resume, the company began in 1981 with the intent to rationalize the then-incoherent and still-in-embryonic-form energy services industry. ERA's co-founders, Chet Lyons and Jim Waltz took their collective experience having worked for equipment manufacturers, building owners, consulting firms and design/build contractors and set about to make a mark on the shape, character and players in the performance contracting business. In fact, ERA did so by creating, from scratch, an energy services business unit for a Fortune-500 temperature controls company. This business unit grew to approximately \$40,000,000 per year in sales in the three years ERA was under contract to their Headquarters. Following this auspicious beginning, ERA pursued design/build contractors and the energy services business from the ESCo side of the table for almost a decade, including the development of performance contracting business practices and policies for a number of ESCo's and the development and implementation of nearly \$50,000,000 of performance contracts. While the work was interesting and exciting, maintaining a virtually invisible profile in service to the contractors had its fairly obvious drawbacks, and around 1990 ERA chartered a new course on the Owners "side of the table". While a more viable long-term strategy, this course has been a challenge since the basic business proposition of performance contracting (a guaranteed free lunch, if you would) has unfortunately lulled all too many Owner's organizations into a sense of complacency - at times much to their detriment. It seems that the lure of "easy money" not only lures Owners into letting their guard down, but also seems to attract opportunists on the ESCo side of the business - with predictable results when a complacent Owner and an unscrupulous ESCo "collide". Interestingly enough, the "dirty laundry" in this business rarely gets aired as no facility manager wants it known that his "guaranteed" project failed to perform and that he got "taken", and because accounting for "savings" is so nebulous (despite rigorous M&V plans/protocols) that bystanders rarely notice. As a result, only the most notorious calamities, such as Alameda County's encounter with Western Energy Management, or Arizona's state-wide scams make it to the press. This is unfortunate, as it prevents many Owners from being appropriately and prudently wary and places ethical ESCo's at a disadvantage in the business place.

3. Owner's Representative Services. Many building owners have studied the performance contracting business sufficiently to realize that the “devil is in the details” and that performance contracting is never a “no risk” proposition and therefore requires management of the entire process of doing the work (from feasibility study to design, installation, commissioning, etc.) instead of over-relying on sometimes-elusive guarantees. As a result, ERA has been engaged by such clients as Tenet Healthcare, Foothill-De Anza Community College District, Santa Clara University, the San Francisco Unified School District and the Veterans Administration to assist them in managing their performance contracting programs. For clients such as these, for example, ERA has assessed their facilities' current condition and need, prepared model procurement and contract documents, established program standards, and assisted these organizations in evaluating, selecting and managing a performance contractor. These same services were provided by ERA under its contract with the State of California's Office of Energy Assessments (OEA) to State agencies and other OEA clients (school districts, community colleges, etc.).
  
4. Performance Contracting Program Development. With the firm's wide background in the field and extensive performance contracting project experience, ERA has been asked to assist in developing broad-based performance contracting programs. In 1996 ERA was selected to assist the DOE in preparing their performance contracting program to implement integrated chiller retrofits in all DOE facilities. That same year, ERA was additionally requested by the State of California's Office of Energy Assessments (OEA) to assist them in preparing model energy services documents, including an RFQ, an Energy Audit Agreement, and an Energy Services Agreement including virtually all the Exhibits as well. Following this assignment, ERA was further selected by OEA from among more than 30 consultants to be the State's sole consultant for performance contracting in State facilities (and other OEA client facilities).