Energy Performance Contracting
November 3, 2010

The Public University Energy Conservation Act (110 ILCS 62/1 et seq.) allows the University to undertake "energy conservation measures" (ECMs) by engaging energy service companies. The University may enter into an installment payment contract or lease-purchase agreement with a qualified provider for the funding or financing of the purchase and installation of energy conservation measures. The guaranteed energy savings agreement shall include a written guarantee from the energy service company (ESCO) that either the energy or operational costs savings, or both, will meet or exceed within 20 years the costs of the energy conservation measures. The ESCO shall reimburse the public university for any shortfall of guaranteed energy savings projected in the contract. Each contract or agreement entered into by a public university pursuant to this section shall be authorized by official action of the Board of Trustees of the University.

Energy Performance Contracting allows the University of Illinois to provide an alternative capital delivery method which allows the University to invest in energy-efficient equipment/methodology, new technology, processes and materials. This energy performance contracting project would be paid for from the energy savings realized.

An Energy Service Company (ESCO) develops and implements turnkey, comprehensive energy efficiency projects. ESCOs offer energy performance-based contracts (i.e., contracts that tie the compensation of the ESCO to the energy savings generated by the project) as a significant part of their business. ESCOs demonstrate technical and managerial competence to design and implement projects. Benefits of an energy performance contract are the ability to invest in new technology and equipment, consistent monthly payments/consistent budgets, based on energy savings now and in the future.

The University is planning to enter into an energy performance contract with Energy Systems Group (ESG) for the UIUC Veterinary Medicine (Vet Med) Complex. This ESCO has performed a number of Energy Performance Contracts in the United States and specifically in Illinois including, but not limited to K-12 school districts, colleges and other businesses. ESG has performed an energy audit of the UIUC Vet Med Complex (5 buildings) covering approximately 500,000 square feet including the Basic Science Building, Small Animal Clinic, Large Animal Clinic, Surgical and Obstetric Lab and the Vet Med chiller plant.

As a result of this energy audit, a scope of work has been developed to reduce facility energy and water consumption, upgrade energy-related capital equipment, reduce the University's deferred maintenance backlog, and aid in meeting the University's environmental management responsibilities. The energy conservation measures (ECMs) identified include such items as lighting retrofits, occupancy sensors, water

conservation, heat recovery, steam/valve insulation, roof repairs/ replacement and cleaning, upgrading or replacing steam traps, cooling coils/valves, heating/ventilation/air conditioning ducts, motors, fume hoods, cooling towers, building automation systems and air handling units. It is anticipated that project approval, employment of ESG for design and construction services and financing will be taken to the November Board of Trustees meeting for their approval. The ECMs work is expected to be completed approximately November 2012. Verification of energy savings will begin immediately after this work is completed.

Funding will be provided by utilizing third party financing through an external RFP process to pay for design and construction and the University will subsequently repay the loan with the energy savings realized through the implementation of the ECMs. The project budget is $22.1 million.

Prior to installation of the ECMs, ESG and the University will establish an energy usage baseline for the Vet Med Complex mainly through computer energy modeling calibrated by actual historical metered energy usage. This pre-installation baseline will then be compared against actual energy use after all ECMs have been installed. The difference will be compared against the guaranteed savings established by ESG. If guaranteed energy savings are not realized, ESG will provide compensation to the University for the shortfall.

Measurement and Verification (M&V) of energy savings will be conducted by ESG and reviewed by University staff over the life of the payback period. The first year after implementation of all ECM's will include quarterly reviews/reports on actual energy savings, followed by semi-annual reviews/reports for the next 2 years and then annual reviews/reports for the remaining payback period.