

# IAC Lead Student Meeting 2011

## Chicago, IL



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# About NO RESCO

- Energy Service Company (ESCO) founded in 1984
- Projects Implemented in Most States with PC Legislation
- Guaranteed Energy Savings Projects
- Environmental Efficiency Performance Contracts
- Public and Private sector clients
- 600+ Employees
- 15 offices nationwide

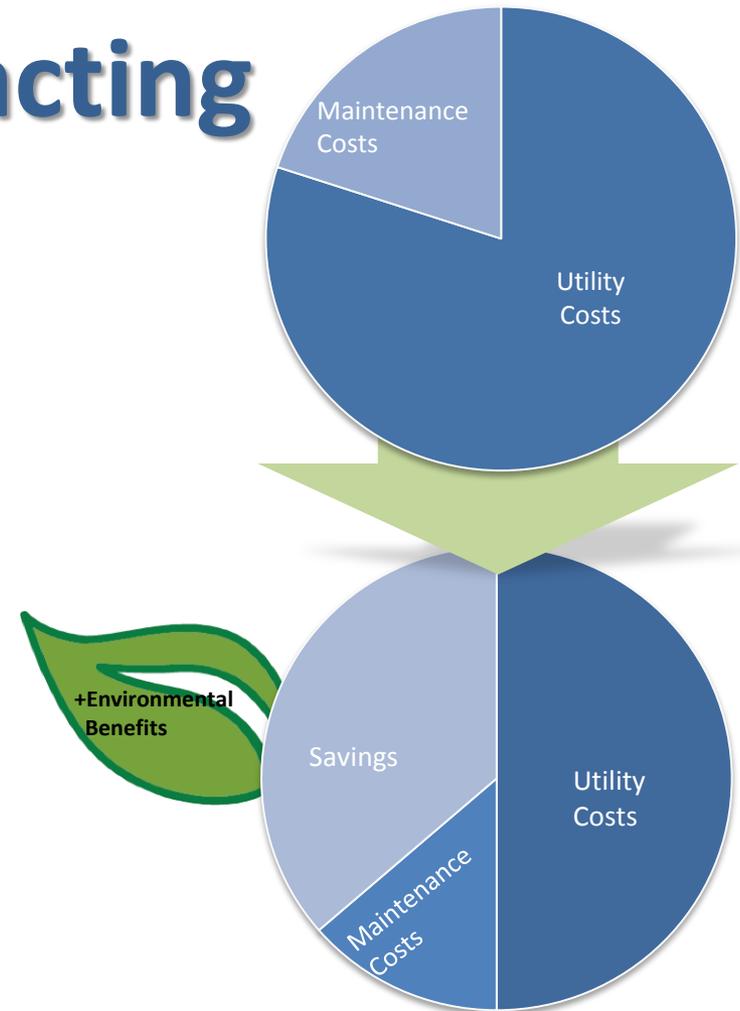


## **NORESCO - a Good Match for IAC Student Graduates**

- Energy auditing
  - Quick Surveys
  - Detailed Audits
- Energy analysis
- Technical communication
- Managed expectations

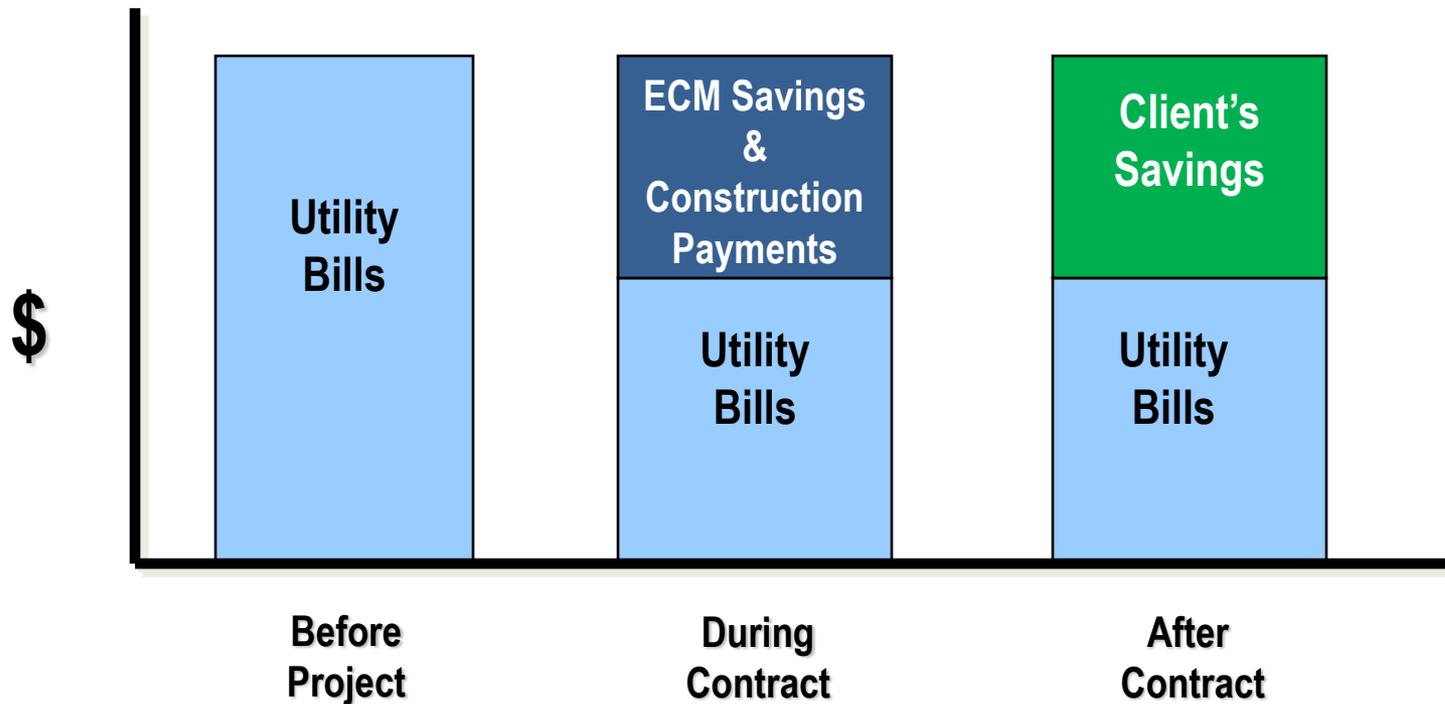
# Performance Contracting

- Key Elements
  - Turnkey Service
  - Comprehensive Measures
  - Project Financing
  - Savings Guarantee
- ESPC is Legislated by State
  - Length of Performance Period
  - Allowable Savings



# What Is Performance Contracting?

Energy Audit + ECM Construction = Guaranteed Energy Savings



# Examples of Energy Conservation Measures

Technologies	Experience Summary
Demand Management	Thermal ice storage & peak shaving
Efficient Lighting Systems	Over 100 million square feet of lighting retrofits and upgrades including LED and Induction
HVAC Systems	More than \$60 million, including new heating systems, upgrades of existing air handling systems, heating and air conditioning units
EMS and Control Systems	Over \$20 million of new, retrofit, upgrade or replacement with advanced systems
Boiler Improvements	Over 100 boiler replacements and decentralization of dozens of central heating plants
Chiller Improvements	Over 50 chiller replacements (magnetic bearing, gas-fired absorption and engine driven chillers, centrifugal and reciprocating machines)
Building Envelope	Over \$4 million of building envelope modifications including insulation, door and window replacement
Distribution Systems	Over a dozen miles of distribution systems, including major steam loops and condensate recovery systems, and natural gas distribution
Electric Motors and Variable Speed Drives	Thousands of premium efficiency motors from 3hp to 100hp. Hundreds of variable speed drives
Water & Sewer System	Extensive experience with water and sewer efficiency applications across almost all our projects
Central Plants	Over \$300 million of installed energy plants generating more than 300 megawatts
Renewable Energy	Fuel cell installations; photovoltaic systems, geothermal systems, solar domestic hot water systems and an 18MW Hydroelectric plant

## Recent Projects: Richard J. Daley Center, Chicago, IL



### ECMs

- Lighting upgrades
- Chiller upgrades
- Boiler upgrades
- Energy management system upgrades
- CHW pump motor VFDs
- AHU upgrades

## Recent Projects: Northeastern IL University, Chicago, IL



### ECMs

- Lighting retrofits
- Water conservation measures
- Energy Management System, controls
- Chiller plant improvements
- Air handler upgrades
- VAV Conversions

## Recent Projects: Northwestern IL University, Chicago, IL



### ECMs

- VFD installation, replacement
- Chilled water plant retrofit
- Steam pipe insulation
- Building envelope upgrades
- Replace VAV boxes, conversion to upgraded DDC controls, VFDs and HW pump motor, cooling coil replacement
- Replace AHU cooling coils, AHU controls upgrades
- Controls upgrades and sequence improvements
- Lighting retrofits including occupancy sensors
- Condensate piping rework and steam trap replacement
- Special High speed roll up door

## Recent Projects: Kentucky DOC Lexington & La Grange, KY



### ECMs

- Lighting upgrades
- Energy management system
- Con systems plumbing controls
- Domestic water conservation
- Heating system renovation
- New kitchen equipment and dishwasher

## Contact Information

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