Appendix A. Massachusetts Airports That Contain Priority Habitats

Airport	Estimated Habitat Presence	Priority Habitat Presence
Berkley - Myricks Airport	Total	Total
Edgartown - Katama Airpark	Total	Total
Hanson - Cranland Airport	Total	Total
Monponsett Pond Seaplane Base	Total	Total
Provincetown Municipal Airport	Total	Total
Nantucket Memorial Airport	Partial	Total
Northampton Airport	Partial	Total
Turners Falls Airport	Partial	Total
Boston - Logan International Airport	None	Total
Martha's Vineyard Airport	None	Total
Westfield - Barnes Regional Airport	None	Total
Westover Metropolitan Airport	None	Total
Barnstable Municipal Airport	Partial	Partial
Chatham Municipal Airport	Partial	Partial
Great Barrington Airport	Partial	Partial
Marshfield Municipal Airport	Partial	Partial
Merrimack Valley Seaplane Base	Partial	Partial
New Bedford Regional Airport	Partial	Partial
Plum Island - Newburyport	Partial	Partial
Plymouth Municipal Airport	Partial	Partial
Tanner - Hiller Airport	Partial	Partial
Taunton Municipal Airport	Partial	Partial
Worcester Regional Airport	Partial	Partial
Bedford - Hanscom Field	None	Partial
Gardner Municipal Airport	None	Partial
Marstons Mills - Cape Cod Airport	None	Partial
Norwood Memorial Airport	None	Partial
Orange Municipal Airport	None	Partial
Pittsfield Municipal Airport	None	Partial
Beverly Municipal Airport	None	None
Falmouth Airpark	None	None
Fitchburg Municipal Airport	None	None
Hopedale Industrial Airpark	None	None

Airport	Estimated Habitat Presence	Priority Habitat Presence
Lawrence Municipal Airport	None	None
Mansfield Municipal Airport	None	None
Marlboro Airport	None	None
North Adams Airport	None	None
Southbridge Municipal Airport	None	None
Spencer Airport	None	None
Sterling Airport	None	None
Stow - Minute Man Air Field	None	None

“Total” indicates the apparent presence of a designated habitat over the entirety of the airport footprint. “Partial” indicates the presence of a designated habitat in some portion of the airport footprint. “None” indicates a lack of designated habitat in the airport footprint. Red cells indicate a “total” presence for one or both habitat types. Yellow cells indicate a “partial” presence for one or both habitat types, but no “total” presence for any habitat type. Green cells indicate a lack of both habitat types.

Appendix B. Summary of State Regulations on Energy Services Contracts

Table 1. Summary of State Regulations on Energy Services Contracts

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
AK	The state authorizes limited competition procurements under Alaska Stat. §36.30.305 through §36.30.308, although no specific sectors are specifically authorized.							
AL	Ala. Code §41-16-140	Guaranteed Energy Cost Savings Act	School districts, community colleges, universities, state/local government	RFP	The lesser of a 20-year period or the average useful life of the energy cost savings measures from the date of acceptance of the installation	Contract Review: • Suggested but not required by this law • The institution legal counsel should review the contract • ADECA will offer review assistance and guidance • Contracts used by other state agencies will be made available	• Insulation • Window alterations • Energy control and recovery systems • Lighting • Indoor air quality improvements • O&M practices changes • HVAC systems • Water and other natural resources conservation	• General Obligation Bonds • Revenue Bonds • Tax-exempt Lease Purchase • Bank Financing • ESC Financing
AZ	Ariz. Rev. Stat. Ann. §34-105	Guaranteed energy cost savings contracts; definitions	Existing buildings; does not apply to new construction	Agent contract for procurement of a qualified provider.	The term of the agreement or 25 years (whichever is shortest)	Agent Review: • Required by Arkansas Energy Office • Report before installation of any equipment • Sent to governor's office of energy policy	• Insulation • Window alterations • Energy control and recovery systems • Lighting • Indoor air quality improvements • Low-cost procurement • Water consumption reduction devices • Rainwater harvesting • Combined heat and power systems • Renewable and alternative energy projects • Self-generation systems • Geothermal • HVAC systems • Measures reducing operating costs & BTU's	• General obligation bond • Any required financing as part of the original competitive sealed proposal or a third-party financing institution
AR	Ark. Stat. Ann. §19-11-1201through §19-11-1206	Guaranteed Energy Cost Savings Act	New and existing buildings	RFP	Maximum term of energy cost savings is 20 years after implementation of measures	Contract Review: Reviewed and certified by the Arkansas Energy Office as a qualified provider	• Insulation • Window alterations • Energy control and recovery systems • Lighting • Indoor air quality improvements • Low-cost procurement • Water consumption reduction devices • Rainwater harvesting • Combined heat and power systems • Renewable and alternative energy projects • Self-generation systems • Geothermal • HVAC systems	• Lease purchase agreement • General obligation bond

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
CA	Cal. Public Resources Code §25410	Energy Conservation Assistance Act of 1979	Existing and planned buildings or facilities; school, hospital, public care institution, or a unit of local government	Not specified	Not specified	Not specified	• Installation or modification to reduce energy consumption or peak electricity demand, or allow the use of a more desirable energy source	• Loan agreement • General obligation bond
CO	Colo. Rev. Stat. §24 30-2001 through §24-30-2003	CO Statues on Energy Performance Contracting for State Government	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 25 years	Contract Review: Energy Analysis and recommendations approved by state personnel director or director's designee	• Insulation • HVAC systems • Energy control and recovery systems • Renewable/alternate energy systems • Cogeneration systems • Water/sewer consumption reduction devices • Daylighting systems • O&M practices changes	• Lease purchase agreement
CT	Conn. Gen. Stat 11-80, §123	CT Statutes on Energy- Savings Performance Contracting for State Agencies and Municipalities	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Term may not exceed 20 years	Contract Review: By the Commissioner of Energy and Environmental Protection, in consultation with the Office of Policy and Management and the Energy Conservation Management	• Lighting, renewable energy or solar thermal systems, cogeneration, energy control systems • Heating, ventilation, A/C systems, insulation • Indoor air quality improvements, water-conserving improvements • O&M practices changes	State agencies: • Designated funds, bonds, • Lease-purchase agreements • Master lease
DC	None.							
DE	Del. Code Ann. tit. 29 ch.69, §6971	Energy Performance Contracting Act	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Term may not exceed 20 years	Not specified	• Insulation, window alterations • Energy control and recovery systems • Heating, Ventilating, A/C systems • Lighting modifications • Cogeneration, renewable energy systems • Water reduction devices • Storage systems • O&M changes	• Tax exempt financing • Lease purchase agreement
FL	Fla. Stat. §489.145	Guaranteed energy, water, and wastewater performance savings contracting	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Term may not exceed 20 years	Contract Review: • By Chief Financial Officer and Management Services	• Insulation, window alterations • Energy control and recovery systems • Heating, Ventilating, A/C systems • Lighting replacement/modification • Cogeneration, renewable energy systems • Storage systems	• 100% public construction bond • Lease
GA	Ga. Code §50-37-1 through §50-37-8	Guaranteed Energy Savings Performance Contracting	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Not specified	Qualifications Review: • States Agencies request 3+ providers on prequalification list by Director County, Municipality, or Other	• Insulation, window alterations • Energy control and recovery systems • Heating, Ventilating, A/C systems, geothermal HVAC • Training program or facility alteration • Indoor air quality improvement • Lighting replacement/modification/systems • Renewable energy systems • Storage systems • Water/sewer conservation measures • Equipment upgrades	• Performance bond • Installment payment or lease purchase basis

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
HI	Hawaii Rev. Stat.§36-41	Energy retrofit and performance contracting for public facilities.	All Agencies including any executive department, independent commission, board, bureau, office, or other establishment of the State or any county government, the judiciary, the University of Hawaii, or any quasi-public institution that is supported in whole or in part by state or county funds	RFP	Term may not exceed 20 years	Proposal Review: • Except as otherwise provided by law, the agency that is responsible for a particular facility shall review and approve energy performance contract arrangements for the facility	• Energy conservation enhancing retrofits • Water saving technology retrofits • Alternate energy technologies	• Leasing • Lease purchase agreement
IA	Iowa Code §473.13A; Iowa Code §473.19 and §473.19A;Iowa Code §473.20	Energy Management Improvements Identified and Implemented	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Not specified	Not specified	Not specified	Not specified
ID	Idaho Code §67- 5711D	Energy Savings Performance Contracts	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Request for Qualifications	Term may not exceed 25 years	Qualifications Review: • Director or public entity select up to 3 qualified providers or service companies	• Procurement of low-cost energy supplies • Insulation of buildings and systems • Window alterations • Energy recovery systems • HVAC systems • Cogeneration, renewable energy technologies • Steam trap improvement programs • Water consumption reduction devices • Lighting • Building Operations	• Lease purchase agreement
IL	Ill. Ann. Stat ch. 515/1, §50	Local Government Energy Conservation Act	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 10 years	Proposal Review: • Local government evaluate proposal from qualified provider	• Insulation of buildings and systems in building, window alterations • Energy control and recovery systems • HVAC systems • Lighting	• Lease purchase agreement • General obligation bond
IL	Ill. Ann. Stat ch. 805/5A, §110	Community College Energy Conservation and Savings Measures	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 10 years	Proposal Review:	• Insulation of buildings and systems in building, window alterations • Energy control and recovery systems • HVAC systems • Lighting	• Installment payment contract • Lease purchase agreement • General obligation
IN	Ind. Code §4-13.6- 8; Ind. Code §4- 13.5-1.5; Ind. Code	Energy Cost Savings Contract	Public agencies, school districts, municipalities, state colleges/universities,	Not specified	Term may not exceed 20 years	Not specified	• Insulation, window alterations • Energy control systems • HVAC systems • Lighting	Not specified
KS	Kan. Stat. Ann. 75- 37, 125	Energy conservation measure, financing; prior approval of	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 30 years	Not specified	Not specified	• Loan/lease-purchase agreement

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
KY	KY Rev. Stat. §45A.343 through §45A.460; KY Rev. Stat. §58.600 | KY Rev. Stat. §56.770 through §56.784	Guaranteed energy savings contracts involving local public agencies	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term of 1 year to guarantee	Proposal Review: • By commissioner of education for approval/disapproval	• Insulation • Window alterations • HVAC systems • Lighting • Energy control and recovery systems • Cogeneration systems	• Lease-purchase agreements • Energy conservation revenue bond
LA	La. Rev. Stat. Ann §33:4547.1(B);La. Rev. Stat. Ann. §4547.1 through 3; La. Rev. Stat. Ann. §39:251-257; La. Rev. Stat. Ann. §39:1496.1; La. Rev. Stat. Ann. §40:1730.49	Performance-based energy efficiency contracts	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 20 years	Proposal Review: • Required approval by Commissioner of Administration (CA) • Evaluation by Department of Natural Resources (DNR) • CA may select third-party evaluation consultant with DNR	• Insulation • Window alterations • HVAC systems • Lighting • Energy control and recovery systems • Electric system improvements • O&M changes • Energy and water conservation improvements	• General bond obligations
MA	Mass. Gen. Laws ch.25A, §11C; Mass. Gen. Laws ch.25A §11I	Energy management services contracts; request for qualifications; regulations; payments; performance plan	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 20 years	Review: By state agency, local governmental body or building authority to evaluate the qualified providers to determine which best meets the needs of the public agency	Not specified	• Performance bond
MD	Md. State Finance and Procurement Code Ann. §4-806; Md. State Finance and Procurement Code Ann. §11-101; Md. State Finance and Procurement Code Ann. §12-	Energy performance indices; conservation measures	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Minimum 20% payback in 15 years; phase II calculated on a 13 year term	Proposal Review: • By MD Energy Administration Phase I (Feasibility Study/Development of Guaranteed Savings program) required approval by State and Board of Public Works	• Installation of efficient lighting/relamping • Installation of efficient heating/cooling systems • Installation of water conservation devices • Weatherization • Modification of lighting and heating/cooling practices • Replacement of auxiliary equipment	• General obligation bond
ME	Me. Rev. Stat. Ann. tit.5 §20005-A; Me. Rev. Stat. Ann. tit.5 §1770	Loans for energy efficiency improvements in municipal and school buildings	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Not specified	Proposal Review: • Agency review plans and specifications and approve/disapprove within reason time period	Not specified	• Loan agreement

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
MI	Mich. Comp. Laws §46.11c | Mich. Comp. Laws §41.75b; Mich. Comp. Law §117.5f;Mich. Comp. Laws §68.36;Mich. Comp. Laws §78.24b | Mich. Comp. Laws §18.1253	Energy conservation improvements; resolution; payment; acquisition by contracts or notes; requirements; reports; forms	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Term may not exceed 10 years	Not specified	Includes but is not limited to: • Heating systems improvements • Fenestration improvements • Roof improvements • Insulation • Install/repair of heating/AC controls • Entrance/exit closures	• General bond obligations
MN	Minn. Stat. §16C.14; Minn. Stat. §471.345	Energy efficiency installment purchases	School districts, municipalities, state colleges/universities, state/local government	Not specified	Term may not exceed 15 years	Not specified	• Insulation • Window alterations • Energy control and recovery systems • HVAC system modifications/replacements • Lighting • Cogeneration systems • Energy conservation measures • Water metering devices	• General bond obligations
MO	Mo. Rev. Stat.§8.231;Mo. Rev. Stat. §8.805	Guaranteed energy cost savings contracts, definitions--bids required, when--proposal request to include what--contract, to whom awarded, to contain certain guarantees	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 15 years	Not specified	• Insulation • Window alterations • Energy control and recovery systems • HVAC system modifications/replacements • Lighting • Indoor air quality improvements • Cogeneration • Energy conservation measures • Water metering devices	• Revenue bonds
MS	Miss. Code §31-7-14	Public contracts for energy efficiency services; authorize entities to enter into energy performance and	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFP	Term may not exceed 20 years	Proposal Review: • Required approval by Energy Division of Mississippi Development Authority	Includes but is not limited to: • HVAC system • Lighting • Window alterations • Insulation • Energy management controls • O&M improvements	• Lease-purchase agreements • General bond obligations • Shared-savings
MT	Mont. Code Ann. §90-4-1101 through §90- 4-11-09	Energy Development and Conservation	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Not specified	Not specified	Any cost-effective facility improvement, repair, or alteration to reduce energy or water consumption or operation and maintenance costs. Includes vehicle acquisitions or fuel source changes.	Not specified. State Building Conservation Bond Program is available.
NC	N.C. Gen. Stat. §143-64.17B	Conservation of Energy, Water, and Other Utilities in Government Facilities, Part 2. Energy Saving	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 20 years from installation and acceptance of the energy conservation measures	Not specified	• Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Other conservation measures that conserve energy,	• Installment payment contract • Lease-purchase agreement • Bonds

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
ND	N.D. Cent. Code §48-05-09 through §48-05-13	Guaranteed energy savings contracts	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Not specified	Not specified	• Modifications to the building envelope • Energy control and recovery systems • HVAC systems • Cogeneration	Not specified
NE	Neb. Rev. Stat. §66- 1062 through §66- 1066	1062: Terms, defined 1063: Governmental unit; energy financing contracts; authorized 1064: Governmental unit; powers and duties 1065: Energy financing contract; contents; energy service company; bond requirements 1066: Energy financing contract;	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Request for Qualifications	Term may not exceed 30 years	Governmental unit shall obtain a written opinion from a third party professional engineer licensed in the State of Nebraska whose interests are independent from the financial savings outcome of the contract.	•Install/repair of heating/AC/ventilation systems •Energy control and recovery systems •Lighting •Insulation •Cogeneration •Any other measure designed to reduce energy consumption	Includes, but is not limited to: • Performance contract • Shared-savings contract • Guaranteed contract • Lease-purchase agreement
NH	N.H. Rev. Stat. §21- I:19a through e	State Facility Energy Cost Reduction	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 20 years from the date of project implementation	Approval by the governor and council	Any project that will lower energy or utility costs in connection with the operation or maintenance of such building or facility and will achieve energy cost savings sufficient to recover any project costs or incurred debt service within 20 years from the date of project implementation.	Includes, but is not limited to: • Joint ventures • Shared-savings contract • Positive cash flow financing • Energy service contracts Provided that at the conclusion of the contract the agency will receive title to the energy system being financed, if the agency so desires.
NJ	N.J. Rev. Stat. §52:34-25	Implementation of energy savings improvement program by State contracting agency	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 20 years from final installation (for cogeneration projects) or 15 years (for all other projects)		Includes but is not limited to: • Energy efficient equipment • Demand response equipment • Cogeneration • Renewable energy production facilities • Water conservation measures, fixtures, or facilities • Building envelope improvements	• Lease-purchase agreement

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
NM	N.M. Stat. Ann. §6- 23-1 through §6-23- 10	Public Facility Energy Efficiency and Water Conservation Act	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 10 years	• School districts: superintendent • State agencies: either the secretary of the general services department or the executive head of the state agency, depending upon which entity controls the facility, systems, or vehicles. • Municipalities and counties: governing body • Post-secondary educational institutions: commission on higher	Includes but is not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable energy production facilities • Maintenance and operation management systems • Traffic control systems • Alternative fuel options or accessories for vehicles • Alteration designed to reduce water consumption or conservation-related operating costs	• Installment payment contract • Lease-purchase agreement
NV	Nev. Rev. Stat. §333A.010 §332.300	State Performance Contracts for Operating Cost Savings Measures (Local Government) Performance Contracts for Operating Cost Savings Measures	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 15 years	State Public Works Division of the Department of Administration issues and evaluates all Requests for Qualifications on behalf of state agencies.	• Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable energy production • Devices that reduce water consumption • Waste reduction • Educational programs to influence behavior and reduce consumption and waste • Any additional improvements to building infrastructures that produce energy and operating cost savings, reduce energy consumption or increase the operating efficiency of the facilities	State: • Installment payment contract • Lease-purchase agreement Local government: not specified
NY	N.Y. Energy Law §9- 101 through §9-103	Energy Performance Contracts in Connections with Public Buildings	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term may not exceed 35 years	Not specified	Energy conservation improvements or energy production equipment	Not specified
OH	Ohio Rev. Code Ann §156.01-05 (State agencies) §307.04.01 (counties) §505.264 (township) §717.02 (municipal corporations) §3313.372 (school districts)	Energy conservation measures	Public agencies, school districts, municipalities, state colleges/universities, state/local government	• State, country, township: RFPs • Municipal corporation: Any manner authorized by the municipal corporation's charter, ordinances, or any other existing authority	• State: Term may not exceed 20 years from final installation (for cogeneration projects) or 15 years (for all other projects) • County, municipal corporation: Not to exceed 30 years Township: Not specified	State: executive director of the Ohio facilities construction commission	• Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable energy production facilities • Any other modification, installation, or remodeling approved by the executive director of the Ohio facilities construction commission/board of county commissioners/board of township trustees/ legislative authority of the municipal corporation as an energy conservation measure	• State: lease, lease-purchase, lease with an option to buy, or installment purchase • County: Bond • Township, municipal corporation: installment payment contract, bond

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
OK	Okla. Stat. §61.212 (State agencies) §70:5-131.2 (schools) §19.10.458 (counties)	Performance-based efficiency contracts	State agencies, counties, schools	RFPs	State: Term not to exceed 20 years County: Not to exceed 15 years	Not specified	Includes but is not limited to: • Lighting • HVAC systems • Utility services • Indoor air quality improvements • Any additional improvement that provides long-term	• State: Installment contract, lease-purchase agreement or other contractual obligation
OR	Or. Rev. Stat. §279A	Public contracting	State agencies	Not specified	Not specified	Not specified	Not specified	Not specified
PA	Pa. Cons. Stat. 62 §3751-3757	Guaranteed Energy Savings Act	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term not to exceed 20 years	Not specified	May include, without limitation: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Training program or facility alteration that reduces energy consumption or operating costs • A program to reduce energy costs through rate adjustments, load shifting to reduce peak demand, and/or use of alternative energy suppliers • Indoor air quality improvements. • Renewable and/or on-site distributed power generation systems. • Water and sewer conservation measures • Other energy, water or wastewater measures as may provide measurable, long-term operating	Installment payment agreement or lease purchase agreement
PR	PR S 2372(2012)	Energy Savings Performance Contract Act	Public agencies	Request for Qualifications	Term not to exceed 15 years	Not specified	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable and alternative energy generation Steam trap valve improvement programs • Indoor air quality improvements • Personal safety measures that reduce operating expenses • Changes in operating and maintenance practices • Water conservation measures	• Lease-purchase agreement • Installment-purchase agreement • Bond
RI	None. However, Rhode Island does have a "master price agreement" that lists qualified providers for energy services contracts (MPA #436), implying that public agencies are allowed to enter into such contracts.							
SC	S.C. Code Ann. §48- 52670	South Carolina Energy Efficiency Act, section 52 670: Guaranteed energy, water, or wastewater savings contracts	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Not specified	State Energy Office	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Water and sewer conservation measures	Not specified

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
SD	South Dakota Stat. §1-33B	Guaranteed Energy Savings Contracts	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Not to exceed 15 years	None specified to set up the ESPC, but the Bureau of Administration must approve any improvements proposed under the ESPC once it is in place.	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Other energy or utility-related improvements that improve energy or metering efficiency or increase operating revenues through the generation of energy, renewable energy, or improved metering technology.	Not specified. The "energy conservation loan special revenue fund" may provide loans, leases, or grants.
TN	Tenn. Code Ann. § 12-4-106 § 12-4-110	• Contracts for professional services • Energy-related services	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Request for Qualifications	Not specified	Not specified	Not specified	Not specified
TX	Tex. Code Ann. Title 10, Subtitle D, Chapter 2166.406 Title 9, Subtitle C, Chapter 302	Energy Savings Performance Contracts for Local Government	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Request for Qualifications	For a third-party lease- purchase agreement or contract with the ESCO, financing term is not to exceed 20 years from the final date of installation	Not specified	• Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Other energy or water conservation-related improvements or equipment, including improvements or equipment relating to renewable energy	• Lease-purchase agreement • Bond • Contract with the ESC
UT	Utah Stat. §63A-5- 701	State Building Energy Efficiency Program	State facilities, including institutions of higher education, are specifically included in statutory language. Other agencies my complete agreements using the State's public procurement code.	RFPs	Term not to exceed 20 years	Proposal review: Governor or the Governor's designee	Any action that: • Reduces the agency's consumption of energy, fuel, water, or other resources; operation and maintenance costs; or cost of energy, fuel, water, or other resources; OR • Increases the agency's energy, fuel, or resource consumption efficiency.	Not specified
VA	Va. Code §11-34.1 through §11- 34.4	Energy and Operational Efficiency Performance-Based Contracting Act	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Term not to exceed 20 years	Not specified	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable energy generation • Devices that reduce water consumption or sewer charges	Not specified
VT	Vt. Stat. Ann. 29 Chapter 5 §152(a)(27-28)	Department of Buildings and General Services: Duties of Commissioner	State buildings and facilities	Not specified	Term not to exceed 20 years	Contract review: State Treasurer Emergency	• Energy efficiency and fuel switching improvements • Revised operating strategies that will result in operating cost savings	Not specified

STATES	ENABLING STATUTES	TITLE	APPLICABILITY	PROCUREMENT	TERM	REVIEW APPROVALS	QUALIFYING EFFICIENCY & OTHER MEASURES	FUNDING MECHANISMS
WA	Wash. Rev. Code §39.35 §39.35A §39.35C	• Energy conservation in design of public facilities • Performance-based contracts for water conservation, solid waste reduction, and energy equipment • Life-cycle cost analysis of public	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Not specified	Not specified	Any equipment, materials, or supplies that are expected, upon installation, to reduce the energy use or energy cost of an existing building or facility, and the services associated with the equipment, materials, or supplies, including but not limited to design, engineering, financing, installation, project management, guarantees, operations, and maintenance. Reduction in energy use or energy cost may also include reductions in the use or cost of water, wastewater, or solid waste.	Not specified
WS	Wis. Stat. §66.0133 §16.858	Energy savings performance contracting	Public agencies, school districts, municipalities, state colleges/universities, state/local government	RFPs	Not specified	Not specified	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Life safety improvements or systems required to comply with the federal Americans with Disabilities Act. • Replacement/improvement of energy/water metering systems. • Water conservation measures	• Installment-payment contract • Lease-purchase agreement
WV	W. Va. Code §5A-3B §8-12-5e	• Energy Savings Contracts • Authority to Enter into Energy Savings Contracts	Public agencies, school districts, municipalities	RFPs	Term not to exceed 15 years	Contract review: Joint committee on government and finance	Including, but not limited to: • Modifications to the building envelope • Energy control and recovery systems • Lighting • HVAC systems • Cogeneration • Renewable energy generation • Devices that reduce water consumption or sewer charges	Tax-exempt lease-purchase
WY	Wyo. Stat. §9-12-1201 through 1203	Wyoming Energy Performance Program	Public agencies, school districts, municipalities, state colleges/universities, state/local government	Not specified	Term not to exceed 20 years from installation of energy conservation measures	Not specified	Energy study, audit, improvement, or equipment that is designed to provide energy/water, and operational cost savings	• Installment-payment contract • Lease-purchase agreement

Appendix C. Example ESC RFP

The following request for proposal (RFP) was developed using the RFP template developed by the State DOE Resources (Environmental Agency/Office) for use in procuring Energy Management Services (EMS) for Renewable Energy Systems under § Section of the State Laws.

The following RFP was developed for The Airport as part of the Carbon Neutral Airport Program, a pilot program developed by the State DOT and Volpe National Transportation Systems Center (Volpe Center) to create an airport with "carbon neutral" ground operations. The Airport was chosen to take all steps necessary to implement that designation.

The Carbon Neutral Airport Program will:

1. Assist State DOT in meeting its initiatives to build a transportation system that is environmentally sustainable;
2. Assist The Airport to implement measures that dramatically reduce fossil fuel consumption and greenhouse gas (GHG) emissions; and
3. Identify lessons and practices learned to support other general aviation and large commercial service airports in their quests to become carbon neutral facilities.

RFP FOR ENERGY MANAGEMENT SERVICES AT The Airport

Awarding Authority:	The Airport
Address:	Street Address, City, State, Zip Code
RFP Contact Person:	Contact Name
Email:	Contact Email Address
Telephone:	Contact Phone
Fax:	Contact Fax

The Airport (owned and operated by the Awarding Authority) seeks proposals, pursuant to § Section, from qualified Energy Service Company (ESCO) providers interested in implementing a comprehensive, performance-based, Energy Conservation Project[1] (project) with guaranteed energy savings[2] at Awarding Authority owned buildings and facilities (tenant facilities will be excluded). The Awarding Authority intends to select and enter into an Energy Management Services (EMS) contract with the most highly qualified provider per the evaluation criteria herein. Within this document, "airport" refers to The Airport physical property owned and operated by the Awarding Authority.

The Awarding Authority may cancel this request for proposal (RFP), or may reject in whole or in part any and all proposals if the Awarding Authority determines that cancellation or rejection is in its best interest.

[1] "Energy conservation projects" means projects to promote energy conservation, including but not limited to energy conserving modification to windows and doors; caulking and weather-stripping; insulation, automatic energy control systems; hot water systems; equipment required to operate variable steam, hydraulic and ventilating systems; plant and distribution system modifications, including replacement of burners, furnaces or boilers; devices for modifying fuel openings; electrical or mechanical furnace ignition systems; utility plant system conversions; replacement or modification of lighting fixtures; energy recovery systems; on-site electrical generation equipment using new renewable generating sources as defined in § Section; and cogeneration systems. .

[2] The energy management services (EMS) contract shall include a written guarantee of the qualified provider that either the amount of energy savings guaranteed shall be achieved or the qualified provider shall reimburse the public agency/Awarding Authority for the shortfall amount. Excess savings remain the property of the awarding authority. Methods for measurement and verification of energy savings shall conform to the most recent standards established by the FEMP of the U.S. DOE.

List of Terms

ASHRAE	American Society of Heating, Refrigerating & Air-Conditioning Engineers
ATC	Air Traffic Control
CORI	criminal offender record information
ECM	energy conservation measure
EMS	Energy Management Services: program of services, including energy audits, energy conservation measures, energy conservation projects or a combination thereof, and building maintenance and financing services, primarily intended to reduce the cost of energy and water in operating buildings, which may be paid for, in whole or in part, by cost savings attributable to a reduction in energy and water consumption which result from such services
Energy audit	determination of the energy consumption characteristics of a building or facility which: (a) identifies the type, size and rate of energy consumption of such building or facility and the major energy using systems of such building or facility; (b) determines appropriate energy conservation maintenance and operating procedures; and (c) indicates the need, if any, for the acquisition and installation of energy conservation measures or alternative energy property
ESCO	energy service company
FAA	Federal Aviation Administration
FEMP	Federal Energy Management Program
GHG	greenhouse gas
GSE	ground service equipment
IGA	investment grade audit
IPMVP	International Performance Measurement and Verification Protocol
O&M	operations and maintenance
PAG	Planning Advisory Group
PV	photovoltaic
RFP	request for proposals
Scope 1	direct emissions—GHG emitted from sources owned/operated by the facility.
Scope 2	indirect emissions—GHG emissions indirectly emitted based on the operation of the facility, and are comprised of purchased electricity which are used at the facility.
Scope 3	other/indirect emissions—indirect emissions from GHG sources with no direct facility control; can include a wide range of sources depending on the analysis boundary, including but not limited to, employee travel and transportation, and product embodied energy.
TA	Technical Audit
VALE	Voluntary Airport Low Emissions
Volpe Center	Volpe, The National Transportation Systems Center (USDOT)

Projected ESCO Selection Timeline:

Notification to the State Energy Office:
Published in Central Register:
Published in:
RFP available:
Optional Pre-bid Webinar:
Mandatory Pre-Bid Conference and Facility Tour:
Final Inquiry Date:
Proposals Due:
Airport Location:
Anticipated Evaluation Complete:
Anticipated Interviews:
Contract, IGA, and EMSC Approval:
Anticipated Selection for Negotiations:
ESCO Completes IGA:
Funding Finalized (Apr Town/City Approval):
ESCO Contract Awarded and Signed:

Solicitation and Proposal Process

STAGE ONE: State Agency Contractor Certification Process

ESCOs are advised that advance certification by State Agency is required pursuant to § Section. Certification application forms are available from Website or at Phone. ESCOs are further advised that a State Agency Update Statement is also required.

STAGE TWO: Pre-Proposal Conference and Facility Tour

A Pre-Proposal Conference and Tour of the Facility(s) will be held at The Airport conference room on Date. All prospective respondents must attend the mandatory pre-bid conference. Respondents interested in attending must confirm attendance by contacting Contact Name (Contact Email Address). Respondents must provide the number of attendees (up to 3) and the full contact information for the key person attending the pre-bid conference.

All questions and inquiries concerning this RFP must be submitted in writing no later than Date at 4:00pm EST at The Airport, City, State. Inquiries will not be answered directly. The Awarding Authority will issue an addendum to address the written questions. Any addenda will be posted on The Airport website Airport Website Address. It is the responsibility of the ESCO to contact ESCO Contact Name ESCO Contact Email Address prior to the submittal deadline to ensure that the ESCO has received all addenda issued by the Awarding Authority.

The Awarding Authority reserves the right to amend this RFP based on questions and issues raised prior to and at the Pre-Proposal Conference.

STAGE THREE: Submission of Proposals

Any qualified bidder who wishes to submit a Proposal to this RFP shall submit 3 hard copies of the Proposal and one single-file electronic version in pdf (Adobe Acrobat) format by Date at 2:00pm. Respondents will be evaluated only on the criteria set forth in this RFP.

STAGE FOUR: Selection of Vendor

The Awarding Authority will evaluate and rank all Proposals based upon the criteria listed in this RFP, and reserves the right to waive any minor informalities. The Awarding Authority reserves the right to cancel the RFP process, or to reject in whole or in part any and all proposals if the Awarding Authority determines that cancellation or rejection is in its best interest.

Following selection of the top-ranked Proposal, the Awarding Authority and the ESCO will enter into an Investment Grade Audit (IGA) Agreement for a Technical Audit (TA) to verify the proposed conservation strategy. Based upon the results of the TA, the Awarding Authority may negotiate an Energy Management Services Agreement with the selected ESCO. If an acceptable contract cannot be reached, the Awarding Authority may initiate negotiations with the second ranked ESCO.

RFP Procedures

A. Modification or Withdrawal of Proposals: Any proposal may be corrected, withdrawn or modified by written request of the ESCO, provided such request is received by the Awarding Authority at the above address prior to the due date for proposals. After proposal opening, an ESCO may not change any provisions of the proposal in a manner prejudicial to the interests of the Awarding Authority or fair competition. The Awarding Authority shall waive minor informalities or allow the ESCO to correct them. If a mistake and the intended meaning of the proposal are clearly evident on the face of the proposal, the Awarding Authority shall correct the mistake to reflect the intended meaning and so notify the ESCO in writing, and the ESCO may not withdraw the proposal. An ESCO may withdraw a proposal if a mistake is clearly evident on the face of the proposal but the intended meaning is not similarly evident.

B. Cost of Proposal Preparation: The Awarding Authority will not reimburse ESCOs for any costs incurred in preparing proposals to this RFP, including site visits or preliminary engineering analyses.

C. Public Record: To review a copy of proposals submitted to the Awarding Authority after the contract has been awarded, submit a written request in compliance with the state Public Records Act to the RFP Contact Person identified above. ESCOs' Update Statements are not public records.

D. Affirmation: By submitting a proposal in response to this RFP, each ESCO will be deemed to have acknowledged, represented and agreed that its proposal was prepared at ESCO's sole cost and expense; that ESCO will make no claims whatsoever against the Awarding Authority, State DOT, or Volpe Center for reimbursement of the costs or expenses of the acquisition or review of the RFP, the preparation and submittal of the proposal, or for reimbursement of costs or expenses for responses to subsequent requests for information, interviews, or other interactions requested by the Awarding Authority, State DOT, or Volpe Center unless by mutual agreement: and that the Awarding Authority can reject or otherwise not respond to any proposal.

General Information

The Awarding Authority seeks proposals from qualified providers interested in implementing a comprehensive, performance-based Energy Management Services (EMS) Project[3] at Awarding Authority owned and operated facilities (tenant facilities are excluded from this project) identified in ATTACHMENT 1: Facility Profile.

This project will upgrade facilities and optimize utility and operating budgets through a comprehensive infrastructure renewal process. It will ensure continued and/or improved peak efficiency through proactive maintenance and service programs and training, customized for the Awarding Authority staff, buildings, and facilities. The Awarding Authority intends to leverage energy savings to fund the cost of the project to the greatest extent possible so the cost of implementing efficiency measures is paid for in whole or in part by the energy and water savings guaranteed from the project by the chosen vendor. The Awarding Authority may consider additional improvements resulting in an overall project that ensures a comprehensive renewal of facilities.

The project should include a comprehensive range of energy conservation measures[4] and services including, without limitation:

- A detailed energy audit;[5]
- The installation or modification of new and existing equipment to reduce energy consumption, carbon emissions, and water consumption associated with heating, ventilation, and air conditioning systems,

[3] "Energy management services" definition is included in several state legislation. According to § Section, it is a program of services, including energy audits, energy conservation measures, energy conservation projects or a combination thereof, and building maintenance and financing services, primarily intended to reduce the cost of energy and water in operating buildings, which may be paid for, in whole or in part, by cost savings attributable to a reduction in energy and water consumption which result from such services.

[4] "Energy conservation measures" definition is included in several state legislation. According to § Section , they are measures involving modifications of maintenance and operating procedures of a building or facility and installations therein, which are designed to reduce energy consumption in such building or facility, or the installation or modification of an installation in a building or facility which is primarily intended to reduce energy consumption.

[5] "Energy audit" is a determination of the energy consumption characteristics of a building or facility which: (a) identifies the type, size and rate of energy consumption of such building or facility and the major energy using systems of such building or facility; (b) determines appropriate energy conservation maintenance and operating procedures; and (c) indicates the need, if any, for the acquisition and installation of energy conservation measures or alternative energy property.

lighting systems, building envelopes, domestic hot water systems, and other energy and water using devices;
- Performance-contracting utility-demand reduction projects;
- Innovative project financing (optional at the Awarding Authority's sole discretion);
- Proactive maintenance and service programs and staff training;
- The work associated with monitoring and verifying project savings and the study and/or design of the subject work; and
- Renewable energy installation options (Photovoltaic (PV), solar hot water, etc.).

Payments for all services must be indexed to measured reductions in energy and water cost savings and there will be no upfront costs to the Awarding Authority. ESCOs may wish to enhance their proposals by considering participation in any utility programs not already utilized by the Awarding Authority.

In accordance with § Section, the Awarding Authority may request and obtain all available criminal offender record information of any contractor. As a condition of the award of any contract and prior to commencement of any work, the successful ESCO shall complete and sign a Request Form. The ESCO shall be responsible to have all of its contractors complete and sign the form.

Terms of Proposal

a. General Terms

The Awarding Authority intends to use this project to address, meet, or exceed several of the goals, objectives, strategies, and actions identified within this document. The overall goal of the project is to achieve net carbon neutrality at The Airport. Therefore the Measurement and Verification (M&V) and the evaluation criteria are not simply energy reduction, but rather carbon neutrality by using this EMS contract as a vehicle.

The Carbon Neutral Airport Program will:

1. Assist State DOT in meeting its initiatives to build a transportation system that is environmentally sustainable;
2. Assist The Airport to implement measures that dramatically reduce fossil fuel consumption and greenhouse gas (GHG) emissions; and
3. Identify lessons and practices learned to support other general aviation and large commercial service airports in their quests to become carbon neutral facilities.

Carbon Neutral Airport Program at The Airport: This EMS project presents significant marketing and publicity opportunities for the selected ESCO not only locally within the State and State' transportation entities but also nationally for airports within the National Airspace System.

[The Airport][The Airport][The Airport][The Airport]Town/City [The Airport] ATTACHMENT 1: Facility Profile provides the energy and GHG baseline of The Airport, including accurate energy consumption data, vehicle and building data, and ESM already completed or underway; the assumptions include that no Scope 3 emissions[6]

[6] Scope 1: direct emissions – GHG emitted from sources owned/operated by the facility.

will be considered as part of this project.

The Carbon Neutral Airport Program is moving forward with data collection and inventory, followed by implementation using this EMS contract as part of the process, with the following steps:

- (Volpe Center) Inventory of all Scope 1 and Scope 2 sources and quantities of greenhouse gas emissions under the control of the Awarding Authority at The Airport
- (ESCO) Implement carbon reduction goals through energy efficiency projects to reduce energy demand
- (The Airport, Volpe Center, ESCO) Identify and reduce airport operations emissions such as transportation and refrigerant use
- (ESCO) Generate renewable energy, with the goal of being equal to or greater than total consumed energy, leaving zero or net negative annual greenhouse gas emissions

In addition to calculating energy savings, the ESCO must also calculate the GHG savings that result from the project. The Awarding Authority is most interested in improvements that will address airport operations under direct ownership and control of The Airport sponsor (i.e., Scope 1 and 2 emissions (defined above), including the airfield and airport building energy consumption, the fuel use and technologies used in the sponsor's vehicle fleet, and various operating programs and practices. Some airport functions will be excluded: the landing and takeoff of aircraft, trips to/from The Airport by the air-traveling public, and the energy use of airport tenants. Certain "other" indirect GHG sources outside airport sponsor ownership and control will be considered based on their relationship to core functions and opportunities for abatement. The Airport has been proactive to date in executing GHG-reduction projects. **ATTACHMENT** 1: Facility Profile lists completed projects and whether they are claimed within the baseline or will be part of the energy savings in this project.

In developing energy conservation measures (ECM), the ESCO must account for certain operational and environmental constraints. Concerns about compatibility of existing controls with any proposed energy management system should be addressed, as well as the following specific restrictions:

1. Environmental/conservation restrictions: endangered species habitats; sensitive ecosystems; sole source aquifer;
2. Town/Cityrestrictions: no solar panels may be visible from roads or tourist areas, and glare for nearby communities must be identified; The Airport noise; by-laws and zoning; any wind turbines that are proposed must be nonconventional, e.g., vertical axis, low profile; and
3. FAA restrictions: including, but not limited to, solar glare for pilots and Air Traffic Control (ATC).

A unique advantage for establishing renewable power capacity on The Airport is that the State net metering cap for The Airport is separate from the rest of the state. There is no competition with other State Town/Cities even though there is still significant capacity remaining under the cap. The applicable historical peak load for

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Scope 2: indirect emissions – GHG emissions indirectly emitted based on the operation of the facility, and are comprised of purchased electricity which are used at the facility.

Scope 3: other/indirect emissions – indirect emissions from GHG sources with no direct facility control; can include a wide range of sources depending on the analysis boundary, including but not limited to, employee travel and transportation, and product embodied energy.

The Airport is approximately # MW. As of the issuance of this RFP, there are no existing renewables projects, or even projects that are beyond the conceptual development stage that would generate net metering credits to count against the Town/City of The Airport's cap.

The proposal shall include:

1. The complete range of conservation services being offered to the Awarding Authority (i.e., auditing, equipment selection and installation, rate monitoring, operations and maintenance strategy, training of facility personnel, commissioning, disposal of ballasts with PCBs, disposal of lamps with mercury, treatment of CFCs in refrigeration systems, etc.) to provide energy and water efficiency upgrades at no upfront cost to the Awarding Authority and to use the money saved to increase building performance to national energy performance ratings[7], including the installation of renewable energy projects where feasible.

2. Any available utility rebates, Renewable Energy Trust funds, etc., that facilitate the incorporation of renewable energy resources, demand resource programs, and/or grants for the renovation of schools with high performance standards.

3. A preliminary review of the Awarding Authority's building/roof structures to determine viability of retrofitting them with photovoltaic installation on rooves including application of any available grant funds.

4. A review of maintenance and operation procedures of each facility against potential energy saving options.

5. Where applicable, the installation of integrated energy management systems for all facilities.

6. A review of energy source (e.g., electric, propane, diesel, or heating oil) to identify potential alternatives for each facility to meet the Awarding Authority's greenhouse gas emission reduction targets.

7. If your firm is not state based, identify and describe the organization, experience, and relationship of the firm that will guarantee the local support services necessary for fulfilling the contract terms.

8. Provide a preliminary assessment of the energy and water cost savings available, based on the consumption and facility profile provided in ATTACHMENT 1: Facility Profile, plus the facility tour. List all problems/systems that your proposed modifications will address. State any exceptions to RFP requirements.

   For power and/or heating plant improvements, a description of the following elements must be included if they are part of the proposed systems:

[7] The national energy performance rating system is an external benchmark that determines how efficiently buildings use energy, relative to similar buildings nationwide. The rating system's 1–100 scale shows how a building is performing — a rating of 50 indicates average energy performance, while a rating of 75 or better indicates top performance. See: **U.S. EPA**

- New boiler (type, size and quantity)
- Feed water system (pumps/ DA tank)
- Blow down system(s)
- Condensate pump/tank
- Fuel oil
- Fuel tanks, etc.
- Combustion air
- New electrical MCC's/transformers
- Emergency power (generator/UPS)
- Co-generation
- Chillers and related systems (ch. wtr. and cond. wtr. pumps)
- Campus steam and condensate distribution piping
- Renewable energy: production, storage, consumption system (e.g., solar, flow batteries, biodiesel conversion, respectively)

In addition, a basis of design describing the level of redundancy and automation to be incorporated into the proposed power and/or heating plant improvements must be provided. Responders must include an indication of the level of commissioning provided.

9. Specify both the longest individual and combined paybacks in which ESCO will invest. NOTE: Under typical state legislature, energy management services contracts may include terms of twenty (20) years or less.

10. For each proposed ECM, specify the expected method of measurement and verification, based on the most recent version of the Federal Energy Management Measurement and Verification Guidelines (FEMP Guidelines), which will be used to measure and verify their performance throughout the contract period.

11. List all equipment that will become property of the Awarding Authority upon installation and upon expiration of the contract. Describe all warranties that will become the property of the Awarding Authority and explain how they will be transferred to the Awarding Authority. Provide Manufacturer's cut sheets for each proposed equipment installation measure.

12. State all maintenance services required for proposed improvements. Include the frequency and estimated time necessary to complete each function. The Awarding Authority's facility staff normally performs routine maintenance on equipment and building systems. If your proposal contains additional maintenance services, state specifically how the cost and terms would differ if all equipment and systems were maintained by (a) facility staff, or (b) your firm. The Awarding Authority will not accept any measure that requires hiring additional maintenance staff unless previously and specifically agreed to in writing.

13. Propose a project implementation schedule, including expected construction schedule from beginning to end, paying particular attention to facility concerns such as scheduling and/or special facilities, expected number of workers, chain of command, etc. Include estimated dates for preliminary design documents and construction documents including design development drawings, construction drawings, basis of design, outline specifications, and cost estimates.

14. Provide a description and schedule indicating any training of facility staff to be offered by the ESCO.

15. Evaluate the potential for incorporating renewable energy technologies for this project including onsite electricity generation. ESCO's evaluation shall include, but not be limited to:

    - Photovoltaic Hardware
    - Solar hot water heating
    - Fuel cells (non Natural Gas fed)
    - Biofuel conversion
    - Energy storage technology

    Note that this RFP shall not consider renewable energy generation from ocean-based (tidal, wave) resources or conventional horizontal-axis wind turbines. As with all other aspects of this project, any renewable energy installations must comply with FAA regulations for airport operations.

16. The method for computing the energy baseline and subsequent energy savings shall comply with the letter and intent of the most recent version of the U.S. DOE, Federal Energy Management Program Measurement and Verification Guidelines (FEMP Guidelines). Acceptance of the FEMP Guidelines by your firm is a minimum contract term/requirement.

    The goal of the project is to achieve carbon neutrality at The Airport. Thus, in addition to calculating energy savings, the ESCO must also calculate the GHG savings that result from the project. In order to do this, baseline GHG emissions and post-baseline emissions will need to be calculated. For the baseline, the ESCO may rely on the GHG baseline calculated by the Volpe Center for The Airport, or alternatively, estimate GHG emissions independently using either the ISO 14064 International Standard for Greenhouse Gas Emissions or Federal Energy Management Program (FEMP) guidelines. Post-baseline GHG emissions must be calculated using one of the above methodologies.

17. A summary of all ECMs / carbon reducing measures that could result in net carbon neutrality even if the payback time horizon is beyond 20 years. There is a possibility for external funding from a variety of sources (e.g., the FAA VALE program) that could tip the balance of some or all of these ESMs to become financially feasible.

b. Firm's Abilities

1. Please provide the resumes of project team members, including the prime contractor and any subcontractors, and a description of their respective responsibilities. The project team must include a State Registered Professional Engineer. Resumes should include each participant's background, specific areas of expertise, and previous experience with projects of this type and size.

2. Provide a copy of a contract recently executed by your company, firm, or organization with a similar organization (City, Town/City, or School Department). Please provide a minimum of three (3) project references for the proposed project team members. These project references should be of the same size and type of project as this project.

c. Finance Options

Financing for performance contracts may be provided in a variety of ways. Respondents shall include information

regarding financing through a third party. Other financing mechanisms may be included in the proposal provided they are paid out of energy savings and the ESCO guarantees the savings. The Awarding Authority reserves the right to secure financing from whichever source(s) it determines is in its best interest.

The Selection Committee will weigh the merit and value added to the Awarding Authority by any proposed financing source or financing model. The ESCO should note if any part of the proposal is conditional upon the Awarding Authority utilizing an identified financing source or proposed model and describe any way in which rejection of the financing proposal would change any other part of the proposal.

At a minimum, the ESCO must cooperate with the Awarding Authority in obtaining financing. This cooperation may include the provision of backup or supplementary information to support the Awarding Authority's financing application, answering questions orally and in writing to one or more prospective financing entities, and providing adequate disclosures in connection with the due diligence of a financing entity.

All applications or requests for financing, grants or other assistance made by the ESCO on the Awarding Authority's behalf are subject to review and approval by the Awarding Authority prior to submission.

d. Guaranteed Energy Savings

1. State the projected and guaranteed annual energy and water savings to be generated by this project over the life of the contract (in terms of percentage of budget, energy units, water units, and total dollar value). Indicate what portion of dollar savings, if any, is due to non-energy (or non-water) saving measures, such as rate changes or fuel switches. Specify total cost to awarding authority.

2. Specify the total investment that will be made by ESCO to realize these savings. Break out the total investment into two categories: capital investment and supporting investment. Under the capital investment category, identify the estimated costs for equipment that ESCO plans to purchase and for labor/installation. Under the supporting investment category, identify the costs for items such as engineering design, project management, training, maintenance, and any other project related expenses. Specify ESCO's total investment for each proposed energy conservation measure.

   Describe the financial terms upon which the proposal is based. Include sources of money and costs and risks associated with it; the paybacks and return on investment you require; and the value of tax benefits and other non-energy specific values in determining your profits from this project. If funds are to be raised from a third party or investment pool, please attach the offering memorandum to the limited partnership or investors, or one from a prior, similar arrangement.

3. Provide an energy price floor and a corresponding ceiling and indicate the basis for these figures.

4. Provide a cash flow statement of proposed savings allocations (see, **ATTACHMENT 2: RFP Form of Response**). Use an energy cost escalation rate of 2.0 percent per year and a water cost escalation rate of 5.0 percent per year for these calculations.8 To provide an equitable basis for evaluating proposals,

[8] Cost escalations are elective and may lead to risk for the Awarding Authority if, in fact, costs do not escalate. Conversely, not using a cost escalation may lead to risk for the ESCO. See: U.S. DOE Energy Information Administration (EIA) for non-binding, advisory forecasts of percentage changes in future energy rates. The Awarding Authority will accept no responsibility or liability for use of such forecasts in respondent proposals.

the Awarding Authority has developed and included on the attached forms energy and water baselines against which savings can be measured. These baselines will only be used for comparison; it is not intended to represent the baseline that will be established during contract negotiations. The cash flow statement should clearly indicate expected guaranteed savings allocations for each year of the contract, and be consistent with the consumption formula presented in Part C above. Please specify all assumptions used in constructing the cash flow statement at the bottom of the chart. The Awarding Authority will not consider proposals with a guarantee based solely on an escalation in unit fuel prices in any year of the contract.

NOTE: ESCOs are not expected to escalate their guaranteed dollar savings in accordance with these baseline escalations. ESCOs will be held contractually to both the annual and total guaranteed dollar savings identified in the cash flow, regardless of any mistaken escalation in guaranteed savings cash flow identified in the spreadsheet.

5. Quantify any available utility rebates not already claimed by the Awarding Authority. Specifically, provide a utility company contact name, rebate program summary, capital value of rebates, and type of payment plan. It is the ESCO's responsibility to: 1) determine all incentives and credits offered by the local utility serving the facility or any tax incentives, 2) coordinate with Awarding Authority to prepare the documentation required to apply for credits, rebates, incentives, and effectively apply for them, and 3) address IRS regulation owner/agency transactions to fully support successful leveraging of credits and incentives

6. The guaranteed savings provision shall be fully defined in the EMS Agreement and shall be the measured reduction in fuel, energy, water and operating or maintenance costs resulting from the implementation of the Scope of Services defined in the EMS Agreement. Such guaranteed savings shall be determined when compared with an established baseline of previous fuel, energy, water, and operating or maintenance costs, including, but not limited to, future capital replacement expenditures avoided as a result of equipment installed or services performed pursuant to the EMS Agreement.

   The selected ESCO shall provide the Awarding Authority with a written guarantee that either the amount of energy and water savings guaranteed will be achieved on an annual basis or the ESCO shall reimburse the Awarding Authority for the full shortfall amount each year for which the shortfall exists. Methods for measurement and verification of guaranteed savings shall conform to the most recent standards established by the FEMP of the U.S. DOE and the most recent International Performance Measurement & Verification Protocol (IPMVP).

   The value of guaranteed savings may represent either all or part of annual payments at the discretion of the Awarding Authority. The overall term of the EMS Agreement, including the performance term shall not exceed 20 years. The guarantee shall be a first party direct guarantee from the ESCO to Awarding Authority. No third-party guarantee shall be allowed, except however, corporate guarantees from a parent company of the ESCO will be considered. All savings in excess of the guaranteed savings shall be the sole property of the Awarding Authority.

   Savings = Baseline Energy-Post Installation Energy $\pm$ Adjustments[9]

[9] FEMP M&V Guidelines: Measurement and Verification for Federal Energy Projects, Version 3.0, U.S. DOE

7. Please state the proposed length of contract. Explain how the equipment ownership will be transferred at the conclusion of the contract. Describe how the value of the equipment will be calculated upon contract expiration. Also, describe any early termination/buyout options offered by your firm.

8. Describe any federal and state tax benefits the ESCO expects to claim concerning its investment.

Please include any other information that you would like the evaluation committee to consider in its analysis of the proposal.

Energy Audit Agreement

The proposal must include the performance of a detailed investment grade technical energy audit ("Energy Audit"), of acceptable quality to the Awarding Authority. The Energy Audit, prepared under an Energy Audit Agreement ("Agreement") is a more in-depth and comprehensive economic and physical analysis of conservation measures proposed in proposal to this RFP. It compares alternatives when requested by the Awarding Authority and further specifies equipment, materials, subcontractors, scheduling, and other details. If a satisfactory Agreement is not executed within 7 days of the award, then the Awarding Authority shall have the right to withdraw the award and make the award to the next ranked ESCO. The Energy Audit is subject to acceptance by the Awarding Authority and together with any revisions becomes the specifications for the contract.

A. Audit Agreement

The Agreement shall use the Model Energy Audit Agreement (**ATTACHMENT 5: Model Energy Management Services Contract (EMSC)**), and include, at a minimum:

1. A facilities and maintenance assessment;
2. An investment quality comprehensive energy audit report for a comprehensive and sustainable conservation and renewable program;
3. A proposed technical scope of work for construction/implementation of the ESCO's recommendations including facility improvements and maintenance and/or owner training programs;
4. Proposed methods of measurement and verification of guaranteed savings that conform to the most recent standards established by the FEMP of the U.S. DOE; and
5. A Guaranteed Energy Savings proposal.

Upon completion of the Energy Audit, the ESCO will provide the Awarding Authority with a detailed written report (Audit Report) containing:

1. A fixed minimum guaranteed annual energy savings, measured in kWh, BTUs, or other appropriate unit of energy. The annual energy savings are guaranteed (with no carryover from previous years or to subsequent years) by the ESCO. If these savings are not realized during the annual guarantee period, the ESCO will reimburse the owner for the shortfall. Any excess savings remain the property of the awarding authority;
2. The cost of each measure including the expected life and payback period; and

3. A fixed maximum guaranteed cost of the project.

B. Audit Report

The Audit Report must include the following:

1. Facility profile of building characteristics and energy and water use listed for each building.

2. Determination of the total annual cost to operate and maintain the existing energy and water systems in each building.

3. Description of energy and water systems and the power plant.

4. The methodology used for the lighting system component of the audit shall be as follows:

   a. To ensure consistency in the lighting system component of the audit, the abbreviations for lighting systems shown below should be used.

C	Compact fluorescent	EE	Energy efficient lamp
HW	Hard wired fixture	HO	High output lamp
LV	Low voltage	VHO	Very high output lamp
FIXT	Fixture	STD	Standard ballast
BX	Biax/Twin tube lamp	NEW	New fixture
R	Reflector	SI	Screw in lamp
T/TW	Tandem wire	PAR/P	Parabolic lens
MV	Mercury vapor lamp	WRAP	Wrap style fixture
MH	Metal halide lamp	T8	T8 Lamp/Elect. ballast
Lens/Rep	Lens replacement	HPS	High pressure sodium lamp
EEMAG	Energy efficient magnetic	LED	Light emitting diode

   b. To ensure accuracy regarding the type of ballast or lamp type, a percentage of each fixture type must be opened to determine the manufacture and model of number of the ballast, and the number of lamps and lamp type. A random sample of at least 30 fixtures of each type must be opened.

5. Allocation of total energy and water among end uses including:

   a. Heating
   b. Air Conditioning
   c. Domestic Hot Water
   d. Fans & Pumps
   e. Lighting, indoor and outdoor
   f. Equipment
   g. Standard and any other major water uses (laundry, irrigation, and pool)

   Allocation must be reconciled with actual usage. The allocation must be based on at least a bin[10]

[10] A bin is an energy estimating technique wherein energy usage for different temperature intervals and time periods is evaluated separately. See: ASHRAE

calculation and consider:

a. Documented hourly occupancy patterns
b. Heat gain/loss analysis to include:
    i. shell losses/gains: rooves, walls, glass
    ii. ii. air flow losses/gains: infiltration, ventilation

c. Equipment performance
   Heating and cooling crossover temperatures resulting from the analysis should be noted (these may vary with operating conditions.)

6. List of recommendations. For each of the proposed improvements, the ESCO shall develop costs and annual savings. The savings shall be calculated using the same method described above and shall consider the interactions among measures. The total annual cost to operate and maintain the proposed conservation measures in each building shall be determined.

7. Exploration of appropriateness of current utility rates and available incentive/rebate programs.

8. Energy usage for the last three fiscal years (to be provided by the facility).

9. The audit must be stamped by a State Registered Professional Engineer.

10. ESCO's proposed baseline and proposed annual adjustments. Inventory of all energy using equipment and appliances during base year.

11. The method utilized for determining actual energy and water savings by the ESCO that agree with the most recent version of the FEMP Guidelines.

C. Acceptance of the Audit

As part of its consideration of the Audit Report and the recommendations of the successful ESCO, the Awarding Authority may, in its sole discretion and prior to the execution of the Contract, elect to proceed with all or any portion of the proposal. The Awarding Authority may also elect to proceed with certain improvements on a “phased” basis, whether over a period of months or years if it determines that proceeding with all of the selected improvements simultaneously is not in the best interests of the Awarding Authority.

If the Awarding Authority decides not to enter into a Contract with the ESCO after the completion of the Energy Audit and submission of the final Audit Report, even though the proposed contract terms meet all the conditions set forth in the RFP, the Awarding Authority will pay reasonable and substantiated costs associated with the Energy Audit/Report under the Agreement. However, the Awarding Authority may refuse payment for the Energy Audit if: (a) the savings identified in the proposal vary more than 15 percent from the proposed savings identified in the Energy Audit, (b) the projected value of the net benefit to the Awarding Authority set forth in the proposal differs by more than ten percent (10%) of the corresponding purchase option price

provided in the Energy Audit, or (c) any purchased option price set forth in Energy Audit is greater than one hundred and ten percent (110%) of the corresponding purchase option price provided in the proposal.
Minimum Contractual Terms

The proposal shall conform to the terms and services in the Model EMS Contract, found at Attachment 6, and discussed below. The proposal may contain additional services or terms, but no proposal will be considered if these minimum conditions cannot be met by the ESCO.

Part 1: Required Energy Services

A. The ESCO will be required to work with current Awarding Authority operating and maintenance personnel, training and overseeing their work on a pre-planned and programmed basis. The facility maintenance responsibilities will be clearly delineated in the Contract. In addition, the ESCO will develop for the maintenance staff a preventive maintenance schedule for all new equipment installed as part of this project. No equipment may be installed that will require the Awarding Authority to hire additional maintenance personnel, unless contract negotiations produce an explicit exemption from this rule for a specific installation (such as the agreement to include cogeneration as part of the project).

B. All energy systems in the Awarding Authority's buildings must be considered in this project. These systems include but are not limited to: space heating; domestic hot water; air conditioning; ventilating; pumps and motors; interior and exterior lighting; energy management system; all other water and energy uses, including laundry and irrigation. The Awarding Authority is responsible for determining end-use condition requirements at all times, and must have override capability to deal with emergencies, malfunctions, or extra-ordinary needs. ESCO Proposals may include maintenance services for all equipment installed for the full length of the contract. At all times, the requirements of the State Building Code shall be met.

C. The Contract must require the ESCO to provide "as built" and record drawings of all existing and modified conditions associated with the project conforming to typical engineering standards. This should include architectural, mechanical, electrical, structural, and control drawings each stamped by a State Registered Professional Engineer (P.E.) for the corresponding discipline.

D. Minimum acceptable illumination must be kept for the use intended. Light levels within other space types should be determined using the most current Illuminating Engineering Society guidelines based upon the tasks performed. Please note bench testing and test retrofits may be requested to verify illumination levels. In areas where light levels are specifically mandated by code, light levels must meet these requirements at all times.

E. All ballasts are suspected to contain PCBs unless they are specifically labeled otherwise. Further inquiry and clarification of PCB ballast storage and disposal can be obtained from the State environmental agency.

F. Disposal plans must be documented and appropriate transportation and disposal documents prepared before disposal. Actual disposal must be documented immediately after disposal.

1) Lamp Ballasts Containing PCBs: The ESCO will be responsible for the proper handling and storage of fluorescent lamp and HID fixture ballasts containing or suspected of containing PCBs in accordance with applicable local, state, and federal laws and regulations.

2) Lamps Containing Mercury: The ESCO will be responsible for the proper handling, storage, and transportation of fluorescent and HID lamps, as necessary, in accordance with applicable local, state and federal laws and regulations.

G. The ESCO will use a method for computing the energy baseline and subsequent energy savings which is wholly consistent with the letter and intent of the most recent version of the U.S. DOE, Federal Energy Management Measurement and Verification Guidelines (FEMP Guidelines).

H. The ESCO is responsible for providing the owner with an energy conservation measurement (ECM) commissioning plan that assures the Awarding Authority that the performance of the ECMs achieves facility and/or process performance requirements as set out in the Contract. ECM Commissioning is to be accomplished through a process of verification and documentation. Furthermore, commissioning requirements must be: 1) specified in the Contract, 2) defined explicitly after design, 3) implemented during construction, 4) completed prior to final project acceptance, and 5) followed-up on after acceptance.

Part 2: Required Contractual Language

A. Terms of the Contract must conform to the terms included in the RFP. Terms that do not conform to the terms set forth in this RFP shall be considered void.

B. The Awarding Authority shall determine whether the material or equipment installed is equal to those specified in the Proposal. In the event an article of any class or materials or equipment specified by the trade name of any particular patentee, manufacturer, or dealer, or by reference to the catalog of any such article or articles or materials is to be substituted, the replacement must be equal in quality, finish and durability and equally as serviceable for the purpose for which it is or they are intended as the originally specified article. The Awarding Authority shall make the decision as to whether the materials or equipment offered are equal to those specified, and the decision of the Awarding Authority shall be final.

C. The ESCO shall protect and save the Awarding Authority harmless against all claims, and actions brought against The Town/City of Town/City Name, The Airport, and The Airport Commission by reason of any actual infringement upon patent rights in any material, process, machine or appliance used by him in the work.

D. The necessary rights-of-way for any construction to be done across or in private property will be obtained by the ESCO. The ESCO shall take due and proper precautions against any injury to adjacent structures and shall hold himself strictly within the rights secured to him by The Town/City of Town/City Name, The Airport, and The Airport Commission in prosecuting the work on private property.

E. The ESCO shall obey and abide by all laws of the State relating to the employment of labor and public work and all ordinances and requirements of the Awarding Authority regulating or applying to public improvements.

The ESCO agrees not to discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of age, sex, race, color, religion, national origin, or ancestry.

F. In the execution of the Agreement, it may be necessary for the ESCO to subcontract part of the work to others; however, the ESCO shall not award any work to any subcontractor without prior written approval of the Awarding Authority which approval shall not be given until the ESCO submits to the Awarding Authority a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Awarding Authority may require.

   The ESCO shall be fully responsible to the Awarding Authority for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by the ESCO, as it is for the acts and omissions of persons directly employed by it. Nothing contained in this Agreement shall create any contractual relation between any subcontractor and the Awarding Authority.

   The ESCO shall not assign, transfer, convey, or otherwise dispose of this Agreement, or any part hereof, or its right, title or interest in the same or any part thereof, without the prior written consent of the Awarding Authority. The ESCO shall not assign by power-of-attorney, or otherwise, any of the moneys due or to become due and payable under this Agreement, without the prior written consent of the Awarding Authority.

G. During the life of this Agreement, the ESCO shall procure and maintain Worker's Compensation Insurance in accordance with the Relevant Legislation of the State. This insurance policy shall adequately protect all labor employed by the ESCO during the life of this Agreement and, if required, the ESCO shall provide written evidence to the Awarding Authority that such insurance is in fact in force.

H. ESCO must carry an appropriate level of insurance for both the construction and operations phases

I. Notwithstanding any other law, the provider of the energy management services must file with the Awarding Authority a payment and performance bond relating to the installation of the project including the following:

   1) Prior to entering into a Contract, the ESCO shall furnish a certified copy and duplicate of a performance bond, with project financier as co-beneficiary along with the Awarding Authority.

   2) The performance bond and the payment bond shall each be in an amount equal to 100% of the total contract value from a surety company licensed to do business in the State and whose name appears on U.S. Treasury Dept. Circular 570.

   3) The ESCO shall furnish a certified copy and duplicate of a performance bond, with project financier as co-beneficiary along with the Awarding Authority. The ESCO shall also furnish a payment bond in duplicate.

4) Unless otherwise specified by the Awarding Authority, the performance and payment bonds shall remain in effect during the total implementation period for all ECMs. The ECM implementation period shall include all time required for installation, testing, measuring initial performance, and Awarding Authority acceptance of all installed ECMs.

5) The performance bond shall be released upon Awarding Authority acceptance of all ESCO-installed ECMs. The payment bond shall be released upon receipt of satisfactory evidence that all subcontractors, laborers, etc., have been paid in full or final acceptance whichever is later.

6) The ESCO shall not file any mechanics liens against the Awarding Authority for the project and this requirement shall flow down to all subcontractors. Therefore, the payment bond shall secure the ESCO's obligations for payment of laborers, suppliers, and all subcontractors.

J. The ESCO will maintain and operate the equipment in a manner that will provide the accepted standards of service and comfort (i.e., heating, cooling, hot water, lighting and so forth).

K. Dispute Resolution: For any dispute resolution information, see ATTACHMENT 5: Model Energy Management Services Contract (EMSC).

L. Within two months of contract execution, the ESCO will begin implementation of preliminary operations and procedures to save energy and/or water at the named properties of the Awarding Authority.

M. The Awarding Authority retains ultimate approval over scope of work, choice of subcontractor, equipment installed, and end use conditions. No work can proceed without the prior written consent of the Awarding Authority. However, such approval shall not be unreasonably withheld. No approval or lack thereof by the Awarding Authority shall relieve the ESCO of its responsibilities under the Contract.

N. The Awarding Authority will review all proposed modifications to the building and systems, and must approve of them before commencement of any work. Such approval shall not be unreasonably withheld.

O. ESCO is required to pay minimum wage rates for all employees involved in providing contract services, as determined by a state occupational safety division. Please note wage rates are valid only for 90 days from date of issue. Further inquiry and clarification of prevailing wage laws can be obtained from a state occupational safety division.

P. All work shall meet the minimum standards of ASHRAE and the State Building Code.

Q. The Awarding Authority, State DOT, and the Volpe Center must have access to inspect both the work conducted at project site(s) during construction and operations phases, and to the books, records, and other compilations of data, which pertain to the performance of the provisions and requirements of this agreement. Records shall be kept on a generally recognized accounting basis, and calculations kept on file in legible form.

R. Prior to contract termination, the ESCO will be obligated to perform a walk-through survey of the facility and to prepare an assessment of the condition of the equipment installed as part of the project.

The Awarding Authority retains the right to hire an independent, certified professional engineer to prepare an assessment of the condition of the equipment installed as part of the contract.

S. All drawings, reports and materials prepared by the ESCO specifically in performance of the Energy Services Agreement shall become the property of the Awarding Authority, and shall be delivered to the Awarding Authority as needed or upon contract termination.

T. The ESCO will be required to file a Disclosure Statement listing all its public contractors; a Truth in Negotiations Certificate and other relevant financial/tax certificates noted in § Section.

U. The ESCO shall perform its obligations hereunder in compliance with any and all applicable federal, state, and local laws, rules, and regulations, including applicable licensing requirements, in accordance with sound engineering and safety practices, and in compliance with any and all reasonable rules of the Awarding Authority relative to the premises. The ESCO shall be responsible for obtaining all governmental permits, consents, and authorizations as may be required to perform its obligations hereunder.

ATTACHMENT 1: Facility Profile

*For more information, see Appendix G: Facility Data in State Energy Office's manual, Energy Management Services in State available at Energy Office Email Address.

Building Information

Building #_:		**Square footage (ft^2)**:	**Age** of Building:	**Occupied**
Airport function:	Percent of building **heated/conditioned**:	Individually **metered** for **Electricity**:	Individually **metered** for **Water**:	**Sub-metering**:
Airport owned: NO	Who pays **utility bill**:	If leased when is **lease** up for **renewal**?	**Roof** available for **solar** energy generation:	If applicable, Building **"green" certification** and level:
Energy efficiency retrofit (date) year:	Date (year) of last **energy audit**:	Date (year) of last **energy retrofit**:	**Other energy** source(s):	Building **utility data** available included in proposal:
Building #_:		**Square footage (ft^2)**:	**Age** of Building:	**Occupied**
Airport function:	Percent of building **heated/conditioned**:	Individually **metered** for **Electricity**:	Individually **metered** for **Water**:	**Sub-metering**:
Airport owned: NO	Who pays **utility bill**:	If leased when is **lease** up for **renewal**?	**Roof** available for **solar** energy generation:	If applicable, Building **"green" certification** and level:
Energy efficiency retrofit (date) year:	Date (year) of last **energy audit**:	Date (year) of last **energy retrofit**:	**Other energy** source(s):	Building **utility data** available included in proposal:
			Propane Gas, Radiant Heat	

Airfield Facilities Information

The Airport Airfield Facilities

	Length	Rwy Lts.	Twy Lts.	App. Lts	CL lts.	TDZ lts.	Wig Wags	LAHSO lts.	illuminated signs
Rwy #									
Rwy #									
Rwy #									
Rwy #									

	Length	Rwy Lts.	Twy Lts.	App. Lts	CL lts.	TDZ lts.	Wig Wags	LAHSO lts.	illuminated signs
Rwy #									
Rwy #									
Twy A									
Twy B									
Twy C									
Twy D									
Twy E									
Twy F									

Circulators, Ground Service Equipment, and Fleet

Description	Response
Airfield facility information (# of runways, # of taxiways, lengths, # of edge lights and # of illuminated signs)	**Please see tab under Airfield Facilities**
Number and types of **internal circulators** (i.e., escalators, elevators, moving walkways, baggage conveyors, etc.)	
Ground Support Equipment (GSE) Please list the total number for each model type of equipment and the age each vehicle. Please list the **fuel source** and **age** for each of the GSE	
"Other" fleet equipment owned and operated by airport (e.g., mowers, snow removal, maintenance vehicles, fire suppression, etc.) type and age. **Fuel source** and **age** for each "Other" fleet equipment.	
Transport Vehicles for passengers and employees	

Fleet Equipment

Year	Make	Model	Type	Fuel Type	Notes

Ground Service Equipment Detail

Year	Type	Fuel Type

Airport Employees

	Full Time	Part Time
Administration		
Operations		
Maintenance		
Terminal/Security		
Fixed Base Operator		

Primary Individual Responsible for Sustainability Efforts

Name:

Title:

Environmental Resources

Description	Response
Wetlands, critical habitat, and cultural resources	
Size of environmentally sensitive lands on airport property in acres	
Threatened and Endangered plant species	
Threatened and Endangered *Lepidoptera* species (year observed)	

Airport Boundaries and Maps

Insert relevant CAD drawings/maps here

Projects and Initiatives

The following ECMs have already been completed at The Airport and are reflected in the latest Year baseline consumption data:

1.
2.

Projects that have been identified, but not implemented. The ESCO is free to complete these and take credit for their savings:

1.
2.

Electrical Usage

Year 1 Electrical Usage

Insert relevant data here

Year 2 Electrical Usage

Insert relevant data here

Year 3 Electrical Usage YTD

Insert relevant data here

Heating Fuel Oil Usage (Year 1, Year 2, Year 3 YTD)

Account	Description	#2 Fuel Oil, Year 1 (gal)	#2 Fuel Oil, Year 2 (gal)	#2 Fuel Oil Year 3 YTD (gal)
Year 1				
Year 2				
Year 3				

Total			

Diesel and Gasoline Usage

Year 1 Diesel Usage*

Vehicle ID	Name	Diesel (gal)
	Total Diesel	

Year 1 Gasoline Usage*

Vehicle ID	Name	Gasoline (gal)
	Total Gasoline	

Year 2 Diesel Usage**

Vehicle ID	Name	Diesel (gal)
	Total Diesel	

Year 2 Gasoline Usage**

Vehicle ID	Name	Gasoline (gal)
	Total Gasoline	

Year 3 Diesel Usage***

Vehicle ID	Name	Diesel (gal)
	Total Diesel	

Year 3 Gasoline Usage***

Vehicle ID	Name	Gasoline (gal)
	Total Gasoline	

Bulk Gasoline and Diesel Delivery, including Commercial Sales

Bulk delivery includes everything The Airport uses including what is sold directly to airline tenants. Therefore, bulk delivery volumes equal direct The Airport volumes plus commercial volumes. Commercial volumes/sales are direct sales to airline tenants to support their Ground Service Equipment.

Bulk Delivery

Insert relevant data here

Commercial Sales

Insert relevant data here

Water / Sewer Usage

Year 1 Water / Sewer Usage

Insert relevant data here

Year 2 Water / Sewer Usage

Insert relevant data here

Year 3 Sewer / Water Usage (YTD)

Insert relevant data here

ATTACHMENT 2: RFP Form of Response

Response Title Page

To: _____

ESCO: _____

Address: _____

City, State, Zip Code: _____

Phone: _____ Fax: _____ E-mail _____

Federal tax id# (SSN for individuals): _____

Organizational structure: Corporation: _____ Partnership: _____ Joint venture: _____

Individual/Proprietorship _____ Other: _____

Ownership: Public stock: _____ Privately owned: _____ Nonprofit: _____

Minority and women business enterprise information (check as appropriate):

Minority owned: _____ Women owned: _____ Owned by person with disability: _____

Small Business: _____ SOMWBA Certified: _____

I have read, understand, and agree to comply with the terms and conditions for providing Energy Management Services to the Awarding Authority as stated in the Awarding Authority's Request for Responses. Furthermore, I hereby certify, under penalties of perjury, that this response has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Signature Date

If applicable, fill in the following:

I acknowledge receipt of Addendum No(s). _____, dated _____.

Section II—Statement of Qualifications Format and Preparation Instructions

Responses must be submitted in the format outlined. The Awarding Authority may reject from further consideration any Response that does not follow the format or is deemed non-responsive. Please provide eight (8) copies of your response, and one single-file electronic version.

1. TABLE OF CONTENTS

Statements of Qualifications shall include a table of contents properly indicating the section and page numbers of the information included.

Statements of Qualifications shall include a table of contents properly indicating the section and page numbers of the information included.

A. Contractor Qualifications Data

1. Minimum Required Items

a) Proposal completeness and adherence to format. Substantial conformity with the specifications and other conditions set forth in the request for qualifications.
b) References of other energy savings contracts performed by the qualified providers.
c) State Agency Certificate of Eligibility and Update Statement
d) Quality of the products proposed
e) Methodology of determining energy savings
f) Time specified in the qualifications for the performance of the contract.
g) General reputation and performance capabilities of the qualified providers.

2. Other Required Items

a) Evidence of bond capability of at least five (5) million dollars from a surety company licensed to do business in the State and whose name appears on United States Treasury Department Circular 570. Please provide the cost or fee your firm will charge for the performance and payment bonds as a percentage of the construction costs.
b) Form of legal entity and year entity was established.
c) Describe any changes in ownership status over the past ten (10) years.
d) Other entity names, if any.
e) Ultimate parent company, if applicable.
f) Federal Tax Identification Number for Respondent
g) Please submit a detailed financial report prepared in accordance with generally accepted accounting principles (GAAP) reflecting the current (as of the most recent financial statement date) financial condition of the Respondent. Such report must include a balance sheet, income statement and statement of cash flows, along with applicable footnotes, dated concurrently for at least each of the last preceding three years ending on the most recent fiscal quarter such statements were prepared. Public entities or subsidiaries should attach SEC Form 10-K along with, as applicable, detailed unaudited statements for the

Submitting Entity. Non-public entities may attach either unaudited financial statements or copies of tax forms and schedules that are filed with the Internal Revenue Service where applicable.

h) Performance Guarantee. Describe the form of guarantee that the Respondent will be providing in respect of the Project, and its associated cost. If a corporate guarantee backstop by a parent company or credit enhancement by a financial institution is anticipated, please provide a letter from the parent company or financial institution, indicating that such credit enhancement is available, the terms of such credit enhancement and the credit rating of the guarantor.

i) Describe any other factors which would strengthen the credibility of the Respondent's financial capacity to undertake the construction and guarantees proposed in this Response. "Other factors" could include corporate strategies which establish and fund reserves for contingent liabilities accruing from a growing portfolio of performance contracts, escrows, energy hedging, letters of credit or other financial tools. "We have never had to fund a shortfall" is inadequate to strengthen the Respondent's financial credibility.

j) Lawsuits and Disputes. Discuss whether your firm has ever been involved in a lawsuit or dispute regarding a performance contract. If so, please provide all such incidents and describe the circumstances and outcomes of such lawsuit or litigation. Further, please discuss whether your firm has been barred from providing performance contracting or other services in any states.

3. General Reputation and Performance Capabilities

a) Describe the general reputation and performance capabilities of the firm and explain how these characteristics translate to optimizing results for the Awarding Authority.

b) Provide the number of years Respondent has been engaged in providing EMSP services.

c) Describe the experience the Respondent has had with municipalities and public school systems, particularly in the region and specifically in state. Respondents shall demonstrate by example its experience working in facilities similar to the facilities included in this RFP. Please list at least five (5) examples of EMSP projects in the Northeast, and if possible, specifically in State, which included varying types of mixed-use facilities.

d) Provide the number of projects and aggregate dollar value of EMSP projects implemented by Respondent each year for the past five (5) years, including the value of the guarantees related to such projects and any shortfall in savings related to such projects.

e) Provide the number of full-time personnel employed by the Respondent. Please segment the data, as appropriate, into categories of personnel providing EMSP services, Non-EMSP Operations/Maintenance Services and Non-EMSP Equipment Installation Services.

f) Provide the number of full-time EMSP personnel located in any applicable local or branch office to be utilized for the (Awarding Authority)'s project, and the site address of that local or branch office.

g) Discuss any accreditations or pre-qualifications for EMSP work, describing the relevance or importance of such qualifications to the project.

4. Experience and Project References

a) Fully describe five (5) EMSP that Respondent has implemented within the last five (5) years. Matrix of Performance Contracting Projects—Insert in Tab 4 a table summarizing Respondent's performance contracting or related projects and indicate the services performed in connection with each. A table similar to the following would be preferred:

Project Name/ Type of Property	Yr	Location	Services							
			Audit	Financ'g	Constr.	Monitor	G'tees	Train'g	Cogener.	Other

b) Identify projects that involve facilities similar in type, size or scope to the Awarding Authority's facilities.

c) Identify projects that have been managed by individuals who Respondent anticipates will be assigned to the Awarding Authority's project. Discuss the level of technical/economic expertise of the staff. Provide resumes of the project team members and indicate which branch office each project team member is assigned. For each project team personnel, please list the current projects such employee is currently involved with and the status of the project. Please provide an organizational chart.

d) Provide detailed project information for all five (5) including: customer name, project dates, total project cost at proposal stage, total final project cost, projected annual energy and water cost savings from IGA, projected annual operations and maintenance cost savings, actual realized annual cost savings to date, and any annual savings shortfalls. Respondent must also indicate whether the project was completed on schedule and on budget, and if not, explain the reasons for such delay or budget noncompliance.

e) Provide a list of technologies implemented for each of the five (5) reference projects. For each technology, Respondents must provide the specific measurement and verification protocol implemented (FEMP Option A, B, C, D) along with the rationale Respondent used in selecting the specific FEMP Option.

f) Provide references for the Respondent and references for each key person proposed in the submittal to be part of the project team, including the proposed role for each such individual. Please include the names, addresses, email addresses and telephone numbers for reference. It is understood that the Awarding Authority may contact any or all of the above references regarding the project and personnel performance as part of the RFP submittal review process.

5. Investment Grade Audit

a) Describe Respondent's general approach to conducting an IGA. Specifically, what is the process? How will the Awarding Authority be involved? Detail the level and depth of the information and resources that will be required of the Awarding Authority?

b) Describe Respondent's approach to the technical design of the project including the methodology Respondent normally uses to compute the baseline(s) of energy and water use, as well as the performance of improvements.

c) Describe the method(s) used to adjust the energy, water and O&M baseline due to such factors as weather, facility use changes and operating behavioral changes. Describe factors that would necessitate adjustment.
d) List all procedures, formulas and methodologies including special metering or equipment, which Respondent would use to calculate energy, water and O&M savings.
e) Does your firm use multiple baselines for different ECMs? If so, please discuss approach.
f) Discuss the frequency of baseline adjustments over the course of the Energy Services Management Contract (ESMC), define the drivers that influence such adjustments and how frequently such data is collected.
g) Discuss Respondent's approach to identifying and quantifying interactivity between ECMs throughout the optimization process, specifically during the winnowing process performed in collaboration with the Awarding Authority.
h) Provide an example of a comprehensive IGA developed by Respondent for a project where the specific project team proposed for the (Awarding Authority) was involved and completed similar work as contemplated for this project. Provide a sample bound copy of the IGA as an attachment. This IGA must include energy and economic methodologies and engineering approaches.
i) Discuss Respondent's approach to relying on energy and non-energy related operational savings in the savings calculation supported by the guarantee.
j) Discuss Respondent's application of applying a "risk factor" to ECM-specific annual energy savings. Does Respondent's firm guarantee an annual level of savings less than the projected savings? Discuss how this "risk factor" is determined, whether it is ECM specific and if O&M activities contracted to the ESCO (rather than performed by the Awarding Authority) has any impact on such "risk factor".
k) Describe the procedure to assign dollar values to the savings. Include energy savings as well as maintenance or capital savings.
l) Provide a detailed schedule and timeline for the IGA from signed IGA Agreement to final IGA Report. Please assume a notice to proceed date for the IGA of February 1, 2009.

6. Construction and Commissioning

a) Describe protocols related to management of critical path schedule to ensure timely completion, including willingness to post liquidated damages for delays and performance shortfalls. Discuss Respondent's project management protocols to ensure schedule adherence.
b) Describe Respondent's reporting and client liaison protocols to be employed throughout the construction process.
c) Describe how Respondent would work with current building management and maintenance personnel to coordinate construction activities. Discuss in detail Respondent's protocols to avoid conflicts with the facilities' operation and use, and Respondent's conflict resolution process.
d) Discuss Respondent's perspective on integrating customer contractors into the ESMC. If desired by the Awarding Authority, is Respondent willing to solicit qualifications and

expertise from local area contractors provided such contractors meet Respondent's requirements?

e) Describe standards of comfort and functionality that Respondent would propose for light levels, space temperatures, ventilation rates, etc. in the facilities. Specifically discuss the application of these standards in municipal buildings and the public school environment. Also describe how Respondent anticipates those standards would be maintained throughout the term of the ESMC.
f) Discuss how Respondent will ensure that the Awarding Authority is not exposed to "margin pancaking" by using specialty subcontractors (defined as those subcontractors that provide full turnkey services including engineering, design, and installation). Will Respondent reduce its overhead markup on those services provided by specialty subcontractors to mitigate against the margin pancaking issue?
g) Discuss the role Respondent takes in managing subcontractors. Will Respondent oversee all work performed by subcontractors, including any work performed during occupied and unoccupied times?
h) For any design work conducted by third-party experts, please identify whether Respondent takes engineering risk including stamping engineering submittals.
i) Discuss Respondent's approach to commissioning ECMs and describe any differences in commissioning Respondent employs on an ECM basis. Please provide a copy of a commissioning plan previously executed for one of the five (5) reference customers.
j) Discuss Respondent's approach to the timing of commissioning and training with respect to the commencement of the warranty.

7. Methodology of Determining and Guaranteeing Energy Savings

§ Section requires that methods for monitoring, measurement, and verification of guaranteed energy and water savings shall conform to the most recent Performance Measurement & Verification Protocol (IPMVP) and standards established by the FEMP of the U.S. DOE.

a) Describe in detail the firm's methodology to determine energy savings and explain how this approach will minimize risk and maximize return for (Awarding Authority) over the course of up to 20 years. Include in the description, the firm's approach to verifying energy savings and addressing changes based on past experience and changes in use of municipal buildings and facilities over time.
b) Discuss Respondent's general approach to identifying the appropriate M&V protocol on an ECM specific basis. Please provide a listing by ECM category of the anticipated FEMP protocol for each ECM.
c) Describe how excess savings is documented, and how Respondent treats excess annual savings. Do excess annual savings accrue to the benefit of the Awarding Authority? (Annual savings must stand alone in the year they are realized and cannot be carried over or credited to another year.)
d) How does Respondent treat savings realized during construction? Are those savings included in the guarantee and credited to the project or are those savings treated as excess savings to the Awarding Authority?

e) Describe Respondent's standard measurement and verification procedures, including reporting frequency, reconciliation methods and timing.
f) Provide a sample measurement and verification report from one of the five reference projects together with an explanation of how Respondent demonstrated, with respect to such report, whether the guaranteed savings level was met and if not, the mechanics of how the customer would be compensated. Redacted copies protecting confidential information will be accepted.

8. Service and Maintenance and/or Owner Training

In your responses to the following, include a description of Respondent's experience with ensuring that equipment warranties and maintenance records are maintained and the requirements of the performance guarantee for savings is met.

a) Provide detailed information on any proposed training programs for Awarding Authority maintenance personnel and staff, including course content, location, and schedule.
b) Describe Respondent's capability to provide ongoing service and maintenance with Awarding Authority in-house personnel and with third party contractors selected by the Awarding Authority.
c) Provide the numbers of accessible truck based service and maintenance professionals and describe their level of training and experience.
d) State Respondent's general recommendations as to benefits of contracted service and maintenance vs. training of Awarding Authority personnel.

9. Pricing Structure

a) Describe Respondent's approach and preference to project pricing including: (a) Open Book/Open Book with contracted mark-ups, (b) Open Book/Closed Book/Guaranteed Maximum Price and (c) Closed Book/Guaranteed Maximum Price. Please note that the Awarding Authority will determine its final preferred approach.
b) For each of the pricing scenarios above, please discuss the Change Order process Respondent employs, including specifically how the pricing is developed and presented, and the risk controls the Awarding Authority should expect.
c) Under a Guaranteed Maximum Price contract, what level (percentage) does your firm include as a contingency to contractually eliminate any Change Orders?
d) Under an ESMC, will Respondent accept a ten percentage hold-back Retainage on all progress payments until final completion?
e) Respondents must complete the chart in Attachment A for contracted mark ups. If other categories are to be considered, please provide such additional information. Please also note that mark-ups not included by the Respondent in this response will not be considered in the development of the IGA Report, project development and the ESMC negotiations. ESCOs are encouraged to provide additional detail on mark-up categories as needed.
f) The Awarding Authority desires pricing for the IGA Agreement. Provide a schedule of fees for the IGA Report based on a tiered unit cost per square foot using the following tiers:
g) Under 1,000,000 total square feet
h) 1,000,001 ≥ 1,250,000 total square feet

i) 1,250,001 ≥ 1,500,000 total square feet
j) 1,500,001 ≥ 2,000,000 total square feet
k) Over 2,000,001 total square feet
l) Provide a fixed price break-up fee for the IGA if the IGA is completed in accordance with the IGA Agreement and the Awarding Authority does not proceed with an ESMC. Please provide a fixed price break-up fee for each of the tiered levels above.

10. Other Factors the Awarding Authority Shall Consider

a) Provide specific information regarding experience and expertise with the various types and uses of buildings and facilities under consideration in this Project, including but not limited to the particular needs of public schools, public safety buildings, and historic buildings. Provide a list of public buildings in State for which Respondent has furnished comprehensive services valued at $500,000 or greater.
b) Describe the services your firm will provide to identify, abate, and otherwise address hazardous materials that may be present in buildings or facilities under consideration for this Project. Materials may include but not be limited to asbestos and lead.
c) Describe the type, method, formatting, and frequency of the Project reporting recommended and required. The selected ESCO shall provide access to records and preserve them for a period of six (6) years after final payment.
d) Describe any financing options that could be provided by the firm directly or through a third party. The Awarding Authority, however, reserves the right to secure financing from whichever source(s) the Awarding Authority determines is in its best interest.
e) Describe all potential funding sources that could be applied to any or all potential energy management services, including the firm's experience(s) in securing such funding, and describe any new sources of funding that may have recently become available but that the respondent has not yet had experience with. Such funding sources may include, but are not limited to, utility rebates, demand response payments, grants, sale of renewable energy or carbon credits, or sale of efficiency benefits on the ISO Region Forward Capacity Market.
f) Describe past experience installing renewable energy systems (such as solar hot water, photovoltaic, wind turbines, biomass and landfill-gas-to energy systems), high-efficiency power systems (such as combined heat and power systems), district energy systems and green technologies (such as green rooves, rainwater reclamation, etc.).

B. Completeness

The Awarding Authority will review each Response prior to the selection process for completeness and adherence to format. A Response will be considered complete if all requested sections and information are included in the proper order.

C. Evaluation of Responses

1. Evaluation Process

The Awarding Authority has established a Program Evaluation Team consisting of Awarding Authority representatives to formally evaluate each Response. The evaluation process may include verification of

references, confirmation of financial information and may include examination of other information as the Project Evaluation Team deems appropriate. The Project Evaluation Team may conduct interviews of all ESCO's as it may deem necessary to evaluate the ESCOs. The Awarding Authority reserves the right to request or obtain additional information about any and all Responses. The Program Evaluation Team shall specify revisions, if needed, to each proposal which should be obtained by negotiation with the ESCO before any contract shall be awarded to the ESCO offering the proposal. Awarding Authority will award a contract, if at all, to the ESCO whose proposal offers the lowest overall cost to the Awarding Authority, taking into consideration the comprehensiveness of services, energy or water costs savings, costs to be paid by the Awarding Authority, and revenues to be paid to the Awarding Authority. The Awarding Authority may condition an award on successful negotiation of the revisions specified in the evaluation by the Program Evaluation Team, and shall explain in writing the reasons for omitting any such revisions from a plan incorporated by reference in the contract. If the Awarding Authority awards a contract to an ESCO who did not submit the proposal offering the lowest overall cost, the Awarding Authority shall explain the reason for the award in writing.

Upon acceptance of a fully documented IGA Report, the Awarding Authority plans to enter into negotiations with the ESCO for an EMSC with a performance term up to twenty (20) years.

2. Minimum Required Items

Each of the items listed on the following table shall be marked "Y" if supplied and "N" if not supplied.
RFP responses that do not contain all items enumerated in "Minimum Required Items" as set forth below, shall be disqualified prior to further qualification review at the discretion of the Awarding Authority.

Criteria	Supplied
Minimum Required Items	Y/N
References	
Certificate of eligibility and update statement	
Conformed with the specifications and other condition set forth in RFP	
Proposal completeness and adherence to format	
Evidence of bond capability	
Form of legal entity	
Changes in ownership	
Other Entity names	
Parent company	
Federal tax identification number	
Financial statements	
Form of performance guarantee	
Lawsuits and disputes	

3. Key Project Criteria

Respondent's submittal describes a firm:

1. Whose anticipated project team has an extensive record of highly successful performance contracting experience with facilities similar in type, size, and scope to the Awarding Authority's facilities.

2. With ample ability to properly staff such a team with the requisite skills and expertise throughout the term of the contract.
3. Who has a history of, and can describe a rational for, using specific measurement and verification protocols (FEMP Option A, B, C, D) to track the performance of specific technologies and ECMs that demonstrates a reasonable balances between risk and cost that is most advantageous to the client.
4. With a history of working smoothly with client staff to collect data necessary for successful completion of the project with the least interruption to staff's other responsibilities.
5. With extensive experience in performing Investment Grade Audits (IGAs) including establishing energy and water use baselines and baseline adjustments, identifying opportunities, estimating performance of improvements, and proposing reasonable M&V strategies.
6. Committed to completing projects while under a strong contractual incentive(s) to ensure that work is completed on time and to expected performance levels.
7. With a past history of establishing working relationships between client and Respondent that lead to smooth, timely, and full completion of projects including the audit, construction, and M&V phases.
8. Whose protocols used for working with subcontractors and whose commissioning practices resulted in smooth, timely, and full completion of past projects at fair and equitable levels of cost and risk to the client.
9. With a level of experience and understanding of M&V, including annual savings reconciliation and payment of shortfalls, that has demonstrably minimized risk and maximized return for past clients.
10. With a history of developing a balance of contracted services versus training of client staff for ongoing service and maintenance work that minimized clients costs, maximized the use of resources already available to the client, and produced quality service and maintenance programs over the term of the contract.
11. With a history of identifying creative opportunities to employ energy and water efficiency, renewable energy, and combined heat and power and/or district heating solutions to the client's advantage.
12. With a history of working with clients to identify pricing structures that minimizes risk and maximizes return for the client.
13. With a proven history of understanding client's goals and developing effective strategies to achieve them.

4. Evaluation Format

Each section or subsection of the Response will be evaluated individually for completeness and to determine the most advantageous option for the Awarding Authority. Each section has been assigned a weight, which will be applied to the category criteria to determine a final score for that criterion.

Scoring will be summarized on a Formal Evaluation Form. The Awarding Authority may adjust the scores following interviews as required by § Section, and such additional interviews as the Awarding Authority may deem necessary to evaluate the Respondents.

5. Final Decisions

The decision of the (Awarding Authority) regarding the selection of a qualified provider shall be final and, to the fullest extent allowed by law, shall not be subject to appeal except on the grounds of fraud or collusion.

Cash Flow Statement

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Annual Energy and Water Bill**		$0	$0	$0	$0	$0	$0	$0	$0	$0
#6 Oil (gals)*										
#2 Oil (gals)										
Natural Gas (ccf)										
Electricity (kWh)										
Water (gals)										
Sewer (gals)										
Total Expected Unit Savings										
#6 Oil (gals)										
#2 Oil (gals)										
Natural Gas (ccf)										
Electricity (kWh)										
Water (ccf)										
Sewer(gals)										
Total Expected $ Savings										
(% of Budget-$)										
Awarding Authority net cash flow (%)										
Awarding Authority Expected $ Savings										
Total Guaranteed $ Savings										
(% of Budget)										
Awarding Authority Guaranteed $ Savings										
Upfront Costs to Awarding Authority										
Lease Payment										
Net Guaranteed $ Savings To Awarding Authority										

Assumptions: First year electricity/ gas/ oil costs based on __-year average historical use at ____ rates: with a __percentage annual rate increase.

First year water costs based on __-year average use at ____ rates: with a __percentage annual rate increase.

	YEAR 11	YEAR 12	YEAR1 3	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20
Annual Energy and Water Bill**		$0	$0	$0	$0	$0	$0	$0	$0	$0
#6 Oil (gals)*										
#2 Oil (gals)										
Natural Gas (ccf)										
Electricity (kWh)										
Water (gals)										
Sewer (gals)										
Total Expected Unit Savings										
#6 Oil (gals)										
#2 Oil (gals)										
Natural Gas (ccf)										
Electricity (kWh)										
Water (ccf)										
Sewer(gals)										
Total Expected $ Savings										
(% of Budget-$)										
Awarding Authority net cash flow (%)										
Awarding Authority Expected $ Savings										
Total Guaranteed $ Savings										
(% of Budget)										
Awarding Authority Guaranteed $ Savings										
Upfront Costs to Awarding Authority										
Lease Payment										
Net Guaranteed $ Savings To Awarding Authority										

Baseline Energy Consumption

Describe in general terms how the baseline for each ECM is defined. Describe variables affecting baseline energy or water use. Include variables such as weather, operating hours, set point changes, etc.

Describe how each variable will be quantified, i.e., measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.

Define key system performance factors characterizing the baseline conditions. Include factors such as comfort conditions, lighting intensities, temperature set points, etc.

Provide details of baseline data collected, including:

1. Parameters monitored
2. Details of equipment monitored, i.e., location, type, model, quantity, etc.
3. Sampling plan, including details of usage groups and sample sizes
4. Duration, frequency, interval, and seasonal or other requirements of measurements
5. Personnel, dates, and times of measurements
6. Monitoring equipment used
7. Installation requirements for monitoring equipment (test plug for temperature sensors, straight pipe for flow measurement etc.)
8. Certification of calibration/calibration procedures followed
9. Expected accuracy of measurements/monitoring equipment
10. Quality control procedures used
11. Results of measurements (attach appendix and electronic forma as necessary)
12. Completed data collection forms

Provide details of baseline data analysis performed, including:

1. Analysis using results of measurements
2. Weather normalized regressions
3. Weather data used and source of data
4. The effective utility rate schedules used for calculating energy cost savings.

ATTACHMENT 3: RFP Evaluation Form

Firm Name:_____ Date: _____

Evaluator: _____

To determine the most advantageous response, the Awarding Authority will evaluate each section and sub-section individually for completeness. An overall score will be calculated using the Analytical Hierarchy Process framework. The stakeholders calculated the weights for each element in Section 2 and Section 3 using a pairwise comparison. The final score is then calculated by multiplying each question score by the weight and summing the subtotals together.

Section 1: Minimum Evaluation Criteria

If a response receives a negative "(No)" rating to any requirement in Section 1, it will be deemed non-responsive and given no further consideration.

		No	Yes
1.	Title page		
2.	STATE AGENCY Contractor Certification & Update Statement		
3.	Debarment Statement		
4.	Adhered to format and is complete		
5.	Evidence of bond capability		
6.	Form of legal entity		
7.	Changes in ownership		
8.	Other entity names		
9.	Parent company		
10.	Federal Tax Identification Number		
11.	Financial statements		
12.	Form of performance guarantee		
13.	Lawsuits and/or disputes		
14.	References of other EMS projects		
15.	Acceptance of model audit agreement and EMS contract		
16.	State licensed professional engineer		

Section 2: Skill and Experience

1= Unacceptable 2= Disadvantageous 3= Advantageous 4= Highly Advantageous

1.	Project team has extensive record of highly successful performance contracting experience with facilities similar in type, size, and scope. (Weight = 4.5%)	
2.	Capacity to staff the project team with the requisite skills and expertise throughout the term of the contract. (Weight = 9%)	
3.	Familiarity with using specific measurement and verification protocols (FEMP Option A, B, C, D) to track the performance of ECMs that demonstrates a reasonable balances between risk and cost that is most advantageous to the client. (Weight = 5%)	
4.	History of working smoothly with client staff to collect data necessary for successful completion of the project with the least interruption to staff's other responsibilities. (Weight = 5%)	
5.	Extensive experience in performing Investment Grade Audits (IGAs) including establishing energy and water use baselines and baseline adjustments, identifying opportunities, estimating performance of improvements, and proposing reasonable M&V strategies. (Weight = 13%)	
6.	Shows commitment to completing projects on time and to expected level of performance. (Weight = 7%)	
7.	History of establishing good working relationships with clients throughout the whole project including the audit, construction, and M&V phases. (Weight = 6%)	
8.	Protocols used for working with subcontractors resulted in smooth, timely, and full completion of past projects at fair and equitable levels of cost and risk to the client. (Weight = 8%)	
9.	Level of experience and understanding of M&V, including annual savings reconciliation and payment of shortfalls that has demonstrably minimized risk and maximized return for past clients. (Weight = 10%)	
10.	History of developing a balance of contracted services versus training of client staff for ongoing service and maintenance work that minimized clients costs, maximized the use of resources already available to the client, and produced quality service and maintenance programs over the term of the contract. (Weight = 4.5%)	
11.	History of identifying creative opportunities to employ energy and water efficiency, renewable energy, and combined heat and power and/or district heating solutions to the client's advantage. (Weight = 12%)	
12.	History of working with clients to identify pricing structures that minimizes risk and maximizes return for the client. (Weight = 7%)	

13. History of understanding client's goals and developing effective strategies to achieve them. (Weight = 9%)

Section 3: Comparative Evaluation Criteria

1= Unacceptable 2= Disadvantageous 3= Advantageous 4= Highly Advantageous

RATING CATEGORY	Score1-4
Relevant Company Experience (10,000 foot view), Weight = 23% • Company-wide Experience and Capability • Local Experience and Capability • Technical Approach and Capability • Experience of Similar Projects • Record of Satisfactory Performance • Financial Soundness	
Project References, Weight = 3% • Five (5) Relevant Complete References • Proven Success with Similar Projects in State • Proven Success with Similar Projects in New England • Demonstration of Savings and Project Performance • Proven Success in Meeting Client Goals	
Personnel Experience, Weight = 30% • Qualifications of Assigned Management Personnel • Qualifications of Assigned Technical Personnel • Qualifications of Assigned Construction/Site Personnel • Qualifications of Assigned Commissioning Personnel • Qualifications of M&V Staff	
Project Approach, Weight = 20% • Comprehensiveness of Overall Proposed Approach • Comprehensiveness of Scoping Audit • Technical and Engineering Approach • Construction Management Approach • Operations and Maintenance Approach • Training Approach • Commissioning Approach	
Measurement and Verification, Weight = 17% • Comprehensiveness of Overall Proposed M&V Approach • Demonstration of Achieving Savings Guarantees • Approach to M&V Reporting, Reconciliation and Shortfall Payment • Approach to M&V Leads to Reasonable Balance of Risk and Cost	

Cost and Pricing, Weight = 7% • Cost of the IGA • Approach to Contract Pricing (Open/Closed/Hybrid) • Competitiveness of Markups • Margin Pancaking • Approach to Rebates, Incentives and Grants	

ATTACHMENT 4: Model Energy Audit Agreement

This agreement between the ESCO and the Awarding Authority will be written, negotiated, and finalized as part of the ESCO selection process. At the time this RFP is issued, an Energy Audit Agreement is not yet required beyond what has already been written in this document regarding the Energy Audit.

ATTACHMENT 5: Model Energy Management Services Contract (EMSC)

This contract between the ESCO and the Awarding Authority will be written, negotiated, and finalized as part of the ESCO selection process. At the time this RFP is issued, an EMSC is not yet required beyond what has already been written in this document regarding the EMSC.

For reference, this attachment does contain the standard contract form from the Awarding Authority to be folded into eventual EMSC:

Preamble

This Energy Management Services Agreement (hereinafter "Agreement") is made and entered into as of _____ ("***Effective Date***") by and between _____ (hereinafter "***Contractor***"), a _____based Corporation having its principal offices at _____, and _____ (hereinafter the "***Customer***"), having its principal offices at _____(address), for the purpose of furnishing certain equipment and work specified herein ("***Work***"), and assuring the performance of said Work, designed to improve thermal efficiency, conserve energy, conserve water, reduce waste water, and, when specified, generate electrical power at Customer properties described in **Attachment 1: Description of Premises** (hereinafter "***the Premises***").

Section 1: Definitions

Key terms used within this Agreement are defined as follows:

Adjusted Energy Baseline—An energy baseline adjusted to compensate for factors that would have changed energy consumption in the absence of any energy conservation measures, such as increases or decreases in conditioned or illuminated space, changes in occupancy or building use, facility renovation,

or extremes in weather.

Commissioning—The process for achieving, verifying, and documenting the performance of the energy and water conservation measures to meet the operational capabilities of the project as designed including documentation of checklists, systematic functional testing of equipment and systems, oversight of training for operations and maintenance staff, and follow-up on any warranty issues.

Construction Period

STATE AGENCY—State Agency Name

STATE ENERGY OFFICE—State Energy Office

Energy Baseline—The energy baseline is a measure of each type of energy consumed in existing facilities, prior to the installation of energy conservation measures based on historical metered data, engineering calculations, sub-metering of buildings or energy consuming systems, building load simulation models, statistical regression analysis, or some combination of these methods.[11]

Energy Conservation Measures—Measures involving modifications of maintenance and operating procedures of a building or facility and installations therein, which are designed to reduce energy consumption in such building or facility, or the installation, or modification of an installation in a building or facility which is primarily intended to reduce energy consumption.

Energy Conservation Projects—Projects to promote energy conservation, including but not limited to, energy conserving modification to windows and doors; caulking and weather-stripping; insulation, automatic energy control systems; hot water systems; equipment required to operate variable steam, hydraulic, and ventilating systems; plant and distribution system modifications including replacement of burners, furnaces or boilers; devices for modifying fuel openings; electrical or mechanical furnace ignition systems; utility plant system conversions; replacement or modification of lighting fixtures; energy recovery systems; and, cogeneration systems.

Energy Cost Savings—A reduction in the cost of energy, water, and related operation and maintenance expenses from a base cost established through a methodology set forth in an Energy Management Services Agreement as a result of: (1) installation of energy conservation measure(s); (2) the lease or purchase of operating equipment, improvements, altered operations and maintenance, or technical services; or (3) the increased efficient use of existing energy sources by cogeneration or heat recovery.`

Energy Management Services—A program of services, including energy audits, energy conservation measures, energy conservation projects, or a combination thereof, and building maintenance and financing services, primarily intended to reduce the cost of energy and water in operating 1 or more

[11] FEMP (Federal Energy Management Program)

buildings, which may be paid for in whole or in part, by cost savings attributable to a reduction in energy and water consumption which result from the services.

Energy Management Systems—The design and installation of systems or maintenance programs to conserve energy use within a building, including, without limitation, performance-contracting energy saving projects; the installation or modification of new and existing equipment which will reduce energy and water consumption associated with heating, ventilation, and air conditioning system, lighting system, building envelope, domestic hot water system, and other energy and water using devices; and the work associated with monitoring and verifying project savings and the study or design of the subject work, whether performed directly or managed through subcontractors.

Energy Savings—A measured reduction in fuel, energy, operating or maintenance costs resulting from the implementation of 1 or more energy management services when compared with an established baseline of previous fuel, energy, operating or maintenance costs, including, but not limited to, future capital replacement expenditures avoided as a result of equipment installed or services performed pursuant to the guaranteed energy savings contract.

Escalation Rate—The escalation rate is the rate of change in price for a particular good or service (as contrasted with the inflation rate, which is for all goods and services).

Estimated Energy Cost Savings—The Contractor-estimated energy cost savings in dollars per year for each energy conservation measure (ECM), and equal the estimated energy savings multiplied by the established energy prices in appropriate units. For ECMs with multiple energy type impacts, energy cost savings equals the sum of the products of the energy savings by energy type and established energy prices.

Excess Savings—Actual savings realized that are over and above guaranteed savings.

FEMP—The Federal Energy Management Program.

FEMP Measurement and Verification Guidelines

Final Completion—Final Acceptance by the owner that the Contractor has fulfilled all of its obligations under the EMSA including construction, installation, inspection, testing, measuring initial performance and commissioning, and that all punch list items are reconciled and subcontractors, laborers, and suppliers are paid in full.

Guaranteed Savings—The gross cost savings guaranteed by Contractor to Customer.

Guaranteed Energy Savings Contract—A contract for the evaluation, recommendation or implementation of one or more energy management services in which payments are based, in whole or

in part, on any energy savings attributable to the contract.[12]

Guaranteed Savings Year - the 365 day period beginning on the Final Completion Date and each consecutive 365 day period thereafter during the contract period.

Implementation Period - The implementation period is the period between the date the Agreement is executed to the date that all energy conservation measures (ECMs) are operational and accepted

Investment Grade Audit (IGA)—A procedure that may include, but is not limited to, a detailed analysis of the energy cost savings and energy unit savings potential, building conditions, energy consumption, and hours of use or occupancy for a facility, for the purpose of preparing final technical and price proposals.

Measurement and Verification (M&V)—The process of measuring and verifying the guaranteed energy, water and related cost savings.[13]

Notice to Proceed—Letter from an Owner to a Contractor stating the date the Contractor may begin the Work subject to the conditions of the agreement.

Payment Bond—Provides assurance that specified subcontractors, laborers and suppliers associated with the project will be paid in the event of default by the contractor.

Performance Bond—Provides protection from financial loss to the project owner should the contractor or subcontractor fail to perform according to the terms and conditions of the contract.

Punch List—A list of disputed energy conservation measures.

Substantial Completion Date—The date on which the Contractor warrants by written notice that the ECMs are substantially complete and producing savings equal to or greater that the guaranteed savings.

Shortfall—A savings shortfall is the difference between guaranteed savings and actual savings.

Termination Value—The amount the Customer pays to Contractor after the Substantial Completion Date to terminate this agreement.

Section 2: Price and Terms

2.1 Agreement Price

[12] Same as Energy Management Services Agreement or Contract
[13] See Federal Energy Management Program Measurement and Verification Guidelines here

As payment for the Work, Customer shall pay Contractor a firm, fixed price for which the total maximum contract value is not to exceed $_____ ("Agreement Price"). To the extent that materials and supplies are used or incorporated in the performance of Agreement, the Contractor is considered an exempt purchaser under the State Sales Act, § Section. Contractor shall be responsible for paying all other taxes and tariffs of any sort related to the Work. This Agreement is conditional upon the Customer obtaining financing from a regulated lender or municipal lessor in an amount not less than the Agreement Price under such terms as are satisfactory to the Customer, provided Customer shall diligently pursue such financing and such terms are customary, reasonable and in compliance with pertinent laws and regulations.

2.2 Payment Terms

a) Initial Payment: Upon receiving funds from its lender or municipal lessor, an amount of _____ dollars ($) shall be paid for performance under the Investment Grade Audit Agreement ("Agreement"), mobilization and other costs incurred prior to commencement of Work.

b) Progress and Final Payments: A Payment Schedule is attached hereto in Attachment 8: Payment Schedule, Payment Application and Certification. The Contractor will invoice on a progress basis all Work using the Application and Certification for Payment form.

   All Payment Applications will be based on the Schedule of Contract Values, which will allocate the entire Project Install Price among the various portions of the Installation Services on a per ECM basis and be supported by sufficient data to substantiate its accuracy. Stored materials and pre-purchased equipment must be accompanied by written pre-authorization from the Owner. The Owner will make progress payments to the Contractor within 45 days of all amounts due upon receipt of such properly executed form.

c) Payment Application: Progress payments will be calculated using the Payment Application and Certification Summary and Current Earnings form in Attachment 8 as follows:

   i. Current Earnings

      Determine the per ECM Installation Service charge for the current billing period as the percentage of work completed of the total ECM project cost allocated to that portion of the Installation Services in the Schedule of Contract Values, less Retainage of ten percent (10%), which shall be held as additional security for the faithful performance of all the work required under this Agreement. The Owner will pay retainage within forty-five (45) days after Final Acceptance;

      Add that portion of the ECM project cost for pre-approved materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, less Retainage of ten percent (10%);

      Deduct any utility or third-party rebates, withheld, or nullified earnings and any other adjustments to determine revised contract value to determine Payment for current

Application.

ii. Contract Payment Status

Complete information in Application Summary bringing forward aggregate of data from Current Earnings. The Owner will review, approve, or reject Payment Application within ten business days.

iii. Substantial Completion

Upon Substantial Completion, the Contractor will provide a Delivery and Acceptance Certificate in the form of Exhibit 4 for each ECM. Within ten business days of receipt, the owner will sign and return the Certificate for each completed ECM indicating either acceptance or rejection of Substantial Completion.

Other than as a result of circumstances beyond the reasonable control and without the fault or negligence of the parties, if the Contractor fails to substantially complete a specific ECM by the scheduled ECM Substantial Completion Date stated in Attachment 7: Project Schedule (or an adjusted date approved by the owner in writing) then for each 30 days (or portion thereof) that the Substantial Completion Date is behind schedule, liquidated damages will be calculated and assessed. The monetary value of damages will equal that portion of the ECM remaining incomplete multiplied by the product of the number of days late divided by 30, multiplied by 3%, which calculation shall serve to reduce the Project Install Price. The assessment of liquidated damages shall cease as of the date of submission of a Delivery and Acceptance Certificate for such ECM. This reduction in the Project Install Price, if imposed, shall constitute the sole monetary recourse for the previously mentioned delay(s).

The Contractor will submit a Payment Application and Certification Summary and Current Earnings, adding a sum sufficient to increase the balance to 90% of the ECM project cost, less any amounts disputed as incomplete Work or unsettled claims.

iv. Final Completion

At least thirty days in advance of the scheduled date of Final Completion, the Contractor will meet with the Owner to assess the progress and remaining work to complete the Scope of Services. If the Contractor is unable to complete the Scope of Services within the schedule time remaining then the Owner may request that the Contractor accelerate the Work.

v. Performance Period

Following the date that the owner executes a Final Delivery and Acceptance Certificate (Attachment x), the owner will pay the current Performance Period Fee set forth in Attachment 4 for each successive twelve (12) month period.

vi. Retainage

In addition to any other amounts to be retained hereunder, the owner may retain any sums otherwise owed to the ESCO sufficient to cover the full costs of any of the following:

1) The ESCO's failure to comply with any provision of the Scope of Services, or because of negligent acts or omissions in the performance of any part of the Agreement, including, but not limited to, violation of any applicable law, order, rule or regulation, including those regarding safety, hazardous materials or environmental requirements;

2) Correction of defective or nonconforming work by redesign, repair, rework, replacement or other appropriate means when the ESCO states, or by its actions indicates, that it is unable or unwilling to proceed with corrective action in a reasonable time and/or if the ESCO fails to take action within thirty (30) calendar days after receiving written notice and the owner is required to take action or perform work such as cleanup or completion of incomplete work.

vii. Charge Backs

The owner may also back charge the ESCO for work done or cost incurred to remedy the aforementioned or any other ESCO defaults, errors, omissions or failures to perform or observe any part of the Scope of Services. The owner shall give written notice, and the ESCO will have thirty calendar days to remedy the reported problem before the owner performs such actions or work or incurs such cost.

The cost of back charge work shall include:

1) Labor costs including all payroll additives;

2) Net delivered material costs;

3) Lower-tier supplier costs directly relating to performing the corrective action;

4) Equipment and tool rentals at prevailing rates;

5) Alternative temporary equipment; and

6) A factor of 15% applied to the total of Items (1) through (5) for overhead, supervision and administrative costs. The back charge notice will request ESCO concurrence for the owner to proceed with the required action or work. The ESCO's failure to concur shall not impair the owner's right to proceed with the action or work under this or any other provision of this Agreement.

The owner will separately invoice or deduct from payments otherwise due to the ESCO the costs as provided herein. The owner's right to back charge is in addition to any and all other rights and remedies provided in this Agreement or by the State. The performance of back charge work by the owner shall not relieve CES of any of its responsibilities under this Agreement.

viii. Final Payment

The entire unpaid balance of the Project Install Price, shall be made when (1) the Installation Services have been fully performed, including all training, commissioning and delivery of Project documentation, (2) a Final Delivery and Acceptance Certificate has been executed and (3) an Application for Final Payment has been issued and approved.

The owner will make final payment not more than thirty days after the issuance of the Application for Final Payment of any balance remaining that is not disputed.

2.3 Agreement Termination

This Agreement shall terminate _____ ( ) years after Acceptance and Final Completion unless otherwise agreed to in writing (with twenty years being the maximum allowed).

Section 3: General Provisions

3.1 Dispute Resolution

Disputes regarding changes in and interpretations of the terms or scope of the Agreement and denials of or failures to act upon claims for payment for extra work or materials shall be resolved according to the following procedures:

a) All claims by either party shall be made in writing and submitted to the Customer for a written decision.

b) Contractor shall not delay, suspend, or curtail performance under the Agreement because of any dispute subject to this section.

c) Within sixty days of submission of the dispute to the Customer, the Customer shall issue a written decision stating the reasons thereof, and shall notify the parties of their right of appeal under this section. If the official or his designee is unable to issue a decision within sixty days, he shall notify the parties to the dispute in writing of the reasons and of the date by which the decision shall issue.

d) Arbitration to commence w/in 60 days

Failure to issue a decision within one hundred and twenty-days (or within the additional period specified in such written notice) shall give the petitioner the right to pursue any legal remedies available to him without further delay.

3.2 Conditions beyond Control of the Parties

Except as otherwise provided herein, if either party shall be unable to carry out any material obligation under this Agreement due to events beyond its control, such as acts of God, governmental or judicial,

insurrections, riots, extended labor disputes, fires, explosions or floods, this Agreement shall remain in effect but the affected party's obligations shall be suspended until the uncontrollable event terminates or is resolved, unless the Agreement is terminated by mutual consent, in which event, Customer shall pay Contractor for all parts of the Work furnished to the date of termination or as otherwise agreed.

3.3 Labor Laws

The Contractor shall obey and abide by all laws and regulations of the State relating to the employment of labor and public work.

Contractor shall comply with all federal and state laws, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices. Contractor shall not discriminate in the delivery of services against any person who otherwise meets the eligibility criteria for services, or in the hiring of any applicant for employment nor shall any qualified employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages, benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability, status as a Vietnam Era Veteran, sexual orientation or for exercising any rights or benefits afforded by law.

3.4 Prevailing Wage Rate

The State Agency has established a Schedule listing the prevailing minimum wage rates that must be paid to all workers employed on the Agreement by either the Contractor or its subcontractors. Such Schedule shall continue to be the minimum rate of wages payable to workers on this Agreement throughout the term of this Agreement. The Contractor shall not have any claim for extra compensation from the Customer if the actual wages paid to employees on the Agreement exceeds the rates listed on the Schedule. The Contractor shall cause a copy of the Schedule to be kept in a conspicuous place at the project site during the term of this Agreement § Section. If reserve police officers are employed by the Contractor they shall be paid the prevailing wage rate of regular police officers § Section.

3.5 Appropriations

The Customer reasonably believes that funds can be obtained sufficient to make all payments due to Contractor under this Agreement. The Customer hereby covenants that it will make reasonable and diligent efforts to obtain and maintain funds from which such payments may be made, including making provisions for such payments to the extent necessary in each annual or supplementary budget submitted for the purpose of obtaining funds, and using reasonable efforts to have such portion of the budget approved. Nothing herein shall obligate the Customer to institute legal action before any court, to commence proceedings before any forum, or to institute proceedings in the nature of mandamus against any public official in attempting to obtain said funds.

In the event that the Customer is unable to obtain an appropriation of funds sufficient to discharge the

Customer's obligations under this Agreement § Section**.**

3.6 Laws, Regulations, Ordinances and Standard Practices

Contractor shall perform its obligations hereunder in compliance with all applicable federal, state, and local laws, regulations, ordinances and by-laws, including applicable licensing and permitting requirements, in accordance with sound engineering and safety practices, and in compliance with all reasonable rules or policies of the Customer relative to the properties. Contractor shall be responsible for obtaining all governmental permits, licenses, consents, and authorizations as may be required to perform its obligations hereunder (see Section regarding permits and fees pertaining to the Work).

This Agreement is made and shall be interpreted and enforced in accordance with the laws of the State. If any provision of this Agreement shall be determined to be invalid or unenforceable under applicable law, such provision shall, insofar as possible, be construed or applied in such manner as will permit enforcement; otherwise this Agreement shall be construed as if such provision had never been made part thereof.

The Parties agree to notify each other as promptly as is reasonably possible but in no event more than 3 business after becoming aware of an inspection under, or any alleged violation of, the Occupational Safety and Health Act or any other provision of Federal, State or local law, relating in any way to the undertakings of either Party under this Agreement.

3.7 Patents and Patent Rights

The Contractor shall indemnify and hold the Customer harmless from all claims and actions due to any actual or asserted infringement upon patent rights in any equipment, material, or process used by Contractor in connection with this Agreement.

3.8 Access and Inspection

Customer shall have access to inspect the Work and the books, records, and other compilations of data that pertain to this Agreement. Records shall be kept on a generally recognized accounting basis and calculations kept on file in legible form. Records shall be saved or archived for a period of three (3) years after the termination of this Agreement and shall be kept or made available within State.

Contractor shall have access (upon reasonable notice to the Customer) to inspect the property to assess the condition and operation of material and equipment installed and shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the Agreement conforms to Agreement requirements. The Contractor shall maintain complete inspection records and make them available to the Customer.

All work is subject to inspection and testing at all places and at all reasonable times before acceptance

to ensure strict compliance with the terms of the Agreement. Contractor shall replace or correct work, without charge, found not to conform to the Agreement. If the Contractor does not promptly replace or correct rejected work, the Customer may, by contract or otherwise, replace or correct the work and charge the cost to the contractor or terminate for default the Contractor's right to proceed.

Notwithstanding inspection and acceptance by the Customer or any provision concerning the conclusiveness thereof, the Agreement warrants that all services performed will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this Agreement.

3.9 Ownership of Documents

All drawings, reports and other materials prepared by Contractor specifically in performance of this Agreement shall become the property of the Customer. Said documents will be available as needed by the Customer or, if not so requested, prior to acceptance of the project.

3.10 Sales Tax Exemption

Customer is exempt from the assessment of State sales and use taxes. Customer shall issue Contractor a tax exemption certificate to use for the purchases of new equipment/systems for the Customer's benefit to complete the Work. Contractor shall not pay any sales or use taxes on any item exempt from State sales and use taxes unless authorized by Customer or is ordered by an appropriate taxing authority to remit sales and use taxes.

3.11 Certificates

Contractor certifies as follows:

a) **Certificate of Authorization**: If Contractor is a corporation, each person executing this Agreement on behalf of the Contractor hereby covenants, represents and warrants that Contractor is a duly incorporated or duly qualified (if foreign) corporation and is authorized to do business in the State (a copy of evidence thereof to be supplied to the Customer upon request); and that each person executing this Agreement on behalf of the Contractor is an officer of Contractor and that he or she is duly authorized to execute, acknowledge and deliver this Agreement to the Customer, a copy of a corporate resolution to this effect is attached hereto as Attachment _.

b) **Tax Compliance Certification**: Pursuant to § Section, each person signing this Agreement on behalf of the Contractor hereby certifies, under the penalties of perjury, that to the best of his/her knowledge and belief, the Contractor has complied with any and all applicable state laws.

c) **Certificate of Non-collusion**: The undersigned certifies under penalties of perjury that this Agreement has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business,

partnership, corporation, union, committee, club, or other organization, entity of group of individuals.

d) **Foreign Corporation**: Contractor, if a foreign corporation, hereby certifies that it complies with § Section and that the name and address of the resident agent is attached hereto with Exhibit _.

e) **Covenants**: Contractor covenants that: (1) it presently has no financial interest and shall not acquire any such interest direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement or which would violate § Section, as amended from time-to-time, (2) in the performance of this Agreement, no person having such an interest shall be employed by the Contractor, and, (3) no partner or employee of the Contractor is related by blood or marriage to any Commissioner or employee of the Customer.

f) **Customer Certification**: The Customer certifies that it is duly authorized to execute, acknowledge and deliver this Agreement under the provisions of § Section, to retain Contractor to design, acquire, install and assist in the maintenance of the installed equipment to accomplish the energy conservation measures and to provide other services, as more fully set forth herein, subject to all the terms and conditions of this Agreement.

3.12 Assignment

Contractor shall not assign, transfer, convey, or otherwise dispose of this Agreement, or any part hereof, or his right, title or interest in the same or any part thereof, without the prior written consent of the Customer. Contractor shall not assign by power-of-attorney, or otherwise, any of the moneys due or to become due and payable under this Agreement, without the prior written consent of the Customer.

3.13 Audit Report and Project Development

The Contractor has prepared the complete Audit Report of the Project Site(s) that has been approved and accepted by Customer (Exhibit 4: Certificate of Acceptance—Technical Energy Audit Report). The Final Audit Report set forth in Attachment 3: Scope of Work and dated _____ includes all energy conservation measures agreed upon by the parties.

3.14 Complete Agreement

This Agreement, together with any documents incorporated herein by attachment or by reference, shall constitute the entire and exclusive Agreement between both parties. This Agreement may not be amended or modified except in writing and executed by the Customer and the Contractor.

It is understood and agreed that the following documents, attachments, exhibits, schedules and any amendments and/or addenda, comprise the total Agreement:

- Attachment 1: Description of the Premises
- Attachment 2: Baseline Energy Consumption

- Attachment 3: Scope of Work (Final Audit Report)
- Attachment 4: Cost and Savings
- Attachment 5: M & V Plan
- Attachment 6: Commissioning Plan
- Attachment 7: Project Schedule
- Attachment 8: Payment Schedule, Application and Certification
- Attachment 9: Equipment Submittals
- Attachment 10: Training

- Exhibit 1: Notice to Proceed
- Exhibit 2: State Energy Office Annual Report Form
- Exhibit 3: Certificate of Acceptance Final Audit Report
- Exhibit 4: Certificate of Acceptance Forms

- Appendix A: Financial Agreement
- Appendix B: ESCO Response

The failure of either the Contractor or the Customer to insist upon the strict performance of any term or condition hereof shall not constitute or be construed as a waiver or relinquishment of either party's right to thereafter enforce the same in accordance with this Agreement.

Section 4: The Work

4.1 Time for Performance and Final Completion

Contractor shall commence Work within sixty days of Customer sending the Contractor a Notice to Proceed, which Customer shall send upon closing financing. Contractor shall substantially complete Work within _____ ( ) days after commencing said Work. Extension of dates to commence or complete Work is at the sole discretion of the Customer. Approval for an extension of dates to commence or complete Work shall not be unreasonably withheld if the cause for an extension is pursuant to the following Sections.

If Contractor is delayed in the commencement or completion of any part of the Work due to events beyond Contractor's control and without the fault or negligence of the Contractor, including but not limited to fire, flood, extended labor disputes, unusual delays in deliveries, unavoidable casualties, abnormal adverse weather, war, and acts of God, or due to Customer's actions or failure to perform its obligations under this Agreement or to cooperate with the Contractor in the timely completion of the Work, then Contractor will notify Customer in writing of the existence, extent of, and reasons for such delay. Contractor shall have no claim for additional compensation because of such delays but Contractor and Customer may extend the Agreement time by revision to the Technical Audit for such reasonable time, as they shall agree.

4.2 Specifications of Work

Contractor's obligations hereunder are specified in Attachment 3: Final Accepted Technical Audit, which shall include the Scope of Work and related drawings and plans and any subsequent revisions thereto, as approved by the Customer. Excluded from the Work are any modifications or alterations to the properties not expressly included within the Work. The requirements of all applicable laws, regulations and codes of federal, state, and local Town/City or city government shall be met at all times. All Work shall be performed in a professional and competent manner.

4.3 Construction Procedures, Changes to Work and Coordination

Contractor shall supervise and direct the Work using its best ability, skill, attention, and oversight. Contractor, in consultation with Customer, shall be responsible for the construction means, methods, techniques, sequences, and procedures. The Customer will review all proposed modifications to the building and systems and must approve of them prior to commencement of any work; such approval will not be unreasonably withheld. No change to the scope or specifications of Work shall be made without the written consent of the Customer, in the form of a revision to the Technical Audit. If Contractor fails to correct Work that is not in accordance with the specifications or persistently fails to meet specifications herein, Customer, by written order signed personally or by its authorized agent, may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

Contractor shall perform the Work in such a manner as to not harm the structural integrity or operating systems of any building and shall repair and restore any damage caused by the Work at Contractor's expense.

Contractor shall not create or allow to continue any condition deemed to endanger health or safety as defined in Section 5.1 and if such a condition exists Customer shall have the right to exercise the remedies described therein.

Contractor shall supply to the Customer the telephone number of a responsible person who may be contacted during non-work hours for emergencies arising in connection with or affecting the Work.

Contractor shall coordinate any utility hookups provided by others under a separate agreement at no additional cost or expense to the Customer.

Contractor and its employees, subcontractors and agents shall not smoke within any building, including basements.

4.4 Relationship with Maintenance Staff

Contractor shall cooperate with Customer's operating and maintenance personnel, train said personnel in operation and maintenance of any equipment installed as part of the Work, and coordinate the Work

on a planned and programmed basis. Contractor shall deliver a preventive maintenance schedule and procedures for any equipment installed as part of the Work. No equipment shall be installed which will require additional personnel to be hired by the Customer for the operation or maintenance of said equipment without prior approval of the customer in the form of a revision to the Technical Audit.

4.5 Material and Equipment Installed

The Customer shall make the final determination whether any material or equipment installed is as specified in Contractor's Response to the RFP/RFQ, which is incorporated in this Agreement by Section 3.15, and the Technical Audit. No substitution of any material or equipment specified shall be made without the written consent of the Customer in the form of a revision to the Technical Audit, and any such substitution shall be at least equal in quality, finish, durability, serviceability and performance for the purpose intended.

Contractor shall install and, when applicable, operate and maintain, or, if specified in the Technical Audit, train Customer personnel to operate and maintain equipment in a manner that will provide standards of service to meet requirements of Section 4.2 and equipment manufacturers' literature, specifications and instructions.

Prior to the installation of any major mechanical systems, the Contractor shall submit design documents. The installation of such ECM shall not commence until the Customer accepts the design documents in writing. **All mechanical, electrical, and structural design drawings shall be stamped by a State registered professional engineer for each corresponding trade if applicable.**

Contractor will prepare and furnish at least three Maintenance Manuals that include product data and, which are subject to acceptance by the Customer for all equipment installations at each property.

4.6 Disposal

Contractor will be responsible for proper disposal of all non-hazardous materials and construction demolition debris.

The Contractor will be responsible for proper disposal of all ballast's containing or suspected of containing PCBs and fluorescent lamps containing mercury. Disposal plans must be documented and appropriate transportation and disposal documents prepared before disposal commences, and actual disposal must be documented immediately after disposal.

Demolition debris can only be disposed of at an Environmental Agency/Office and Town/City Board of Health licensed municipal sanitary landfill or Environmental Agency/Office licensed recycling facility. The landfill or recycling facility must be permitted to receive the type of waste involved.

Hazardous waste can only be disposed of by a contractor licensed for special waste disposal.

In the event that friable asbestos is encountered and must be disturbed during the course of this Agreement, the Contractor will notify the Owner immediately. All work in the affected area shall cease until the Parties agree upon a remediation plan. This will not affect the savings allocation, but an extension of the completion date may be granted equal to the time lost. Contractor will take into account all available asbestos studies provided by the Customer during the audit phase of the project.

4.7 Subcontracting

Contractor may subcontract part of the Work to others provided any subcontractors are identified in Contractor's Response to the RFP/RFQ or in the Technical Audit. Contractor may, with the written consent of the Customer in the form of a revision to the Technical Audit, substitute a subcontractor for one so identified or, if no subcontractor for a certain trade or task has been so identified, engage one. Contractor shall be responsible for the conduct, acts and omissions, whether intentional or unintentional, of its subcontractors, employees, agents, invitees or suppliers. Nothing in this Agreement shall create any contractual relationship between any subcontractor, employee, agent, invitee or supplier and the Customer.

4.8 Equipment Location and Access

Buildings may be occupied during construction. Contractor shall take all necessary precautions to ensure the public safety and convenience of the occupants during construction. The Contractor shall complete the Work in accordance with the schedule in Attachment 7: Project Schedule. Contractor must use sufficient personnel and adequate equipment to complete the Work pursuant to Section 4.01. The Work must be completed in a continuous uninterrupted operation between the hours of 8:00 AM and 4:30 PM on Monday through Friday, unless otherwise authorized in writing by the Customer. No Work is to be done on holidays, Saturdays, or Sundays other than for emergencies or unless agreed to in writing.

The Contractor is responsible for the security of partially completed work and for materials or equipment stored at Customer properties. Only materials and equipment intended and necessary for immediate use shall be brought into the buildings. Equipment and unused materials shall be removed from each building by the end of each workday. The Customer shall provide if available, without charge, a mutually satisfactory location or locations for the storage and operation of materials and equipment and the performance of the Work, including a location for staging and mobilization.

Flammables and combustibles shall be stored only in accordance with Fire Prevention Regulations (§ Section). In the event that the Customer is unable to provide a satisfactory location then Contractor shall provide and pay for suitable storage.

4.9 Permits and Fees

Contractor shall secure and pay for building and other permits and governmental fees, licenses, and

inspections that are required by federal, state, or Town/City or city governments for proper performance and completion of the Work. In the event that fees for any permits are reduced or waived by request, standing or intervention of the Customer, then, at the Customer's option, the amount of the savings of the fee shall be deducted from the line item in the Work budget and added to the contingency line item or the Agreement Price reduced by that amount.

Subsequent to receipt of a Notice to Proceed, the Contractor shall provide a listing of all anticipated permits required to implement the Scope of Work described in Attachment 3.

4.10 Utilities

The Customer shall provide and pay for water, heat, and utilities consumed by the Contractor during performance of the Work. The Contractor shall install and pay for any facilities or modifications not already in existence that are necessary to access such water, heat, and utilities during the Work.

4.11 Concealed or Unknown Conditions

If Contractor finds conditions during the Work that are subsurface or otherwise concealed physical conditions that differ materially from those indicated on the drawings or are unknown physical conditions of an unusual nature that differ materially from those conditions ordinarily found to exist and generally recognized as inherent in similar construction activities, Contractor shall notify Customer of such conditions promptly, prior to significantly disturbing the same, and in no event later than one (1) business day after first observing the conditions. Such conditions may include, but are not limited to, water damage, termite damage, or structural building defects. If such conditions differ materially and cause an increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall submit a written estimate of the material and labor cost increase and time delay. If the Customer concurs with the need, cost estimate, and time delay, Customer and Contractor shall make an equitable adjustment in the Agreement Price or Time for Performance and Final Completion, or both. Pursuant to Section 4 above, Contractor shall not be entitled to damages for delay. In no event shall the Agreement Price be increased by more than ten percent (10%) of the applicable ECM at the applicable building.

4.12 Casualty, Condemnation, Damage

If any fire, flood, other casualty, or condemnation renders a portion of any property described in ATTACHMENT 1: Facility Profile unsuitable for habitation or destroys a substantial part of the area within which the Work is to be performed or which the Work affects, the Customer and Contractor may terminate or modify this Agreement by mutual agreement. The Customer shall pay Contractor for all Work completed to the date of termination. If any material or equipment is damaged by the negligence or willful misconduct of an employee, agent or invitee of Customer, Customer shall repair or replace said item within a reasonable period, or, adjust the Agreement Price to pay for repair or replacement or adjust Time for Performance and Final Completion, or both.

4.13 Standards of Service and Comfort

The following facility performance requirements of service and comfort shall apply throughout the Agreement term:

	Type of Service	Environmental Requirement
a)	Heating	
b)	1) Occupied	70° F
	2) Unoccupied	55° F
	3) Storage	55° F
c)	Cooling	
	1) Occupied	72-76° F
d)	Hot Water Heaters	140° F (Must meet § Section)
e)	Hot Water Distribution	110°F (Maximum)
f)	Ventilation	Within Code at all times
g)	Lighting	Within code at all times

4.14 Shutdown of Services

Contractor hereby acknowledges that continuous operation of services, including but not limited to heat, water, domestic hot water, electricity, gas, sanitary facilities, elevators, fire alarms or protections, and access to the property or common areas is essential to the operation of the Customer's properties. If any such service, or access to the property, or any common area is to be discontinued for any period of time in order to perform the Work, Contractor shall give the Customer as much notice in writing as is practicable, but in no event less than seven (7) days in which event the Customer shall, by written response, approve unconditionally or with conditions such shutdown of services. Such conditional approval may include a requirement for the Contractor to provide and pay for temporary services, may limit the time for which services or access may be shut down, or may require other actions, accommodations or expenditures on the part of the Contractor. With respect to fire alarm or other fire protections, Contractor shall also notify the local fire department of any shutdown of service and notify the fire department when such service is restored.

The Customer acknowledges that such shutdowns may be necessary to perform the Work from time to time and will not withhold approval unreasonably. The Customer agrees to communicate with occupants on plans to shut down services or access and temporary measures, if any, which will be made.

4.15 Indemnification and Limitation of Liability

Contractor shall be responsible for the Work and take all precautions for preventing injuries to persons and property in or about the Work and shall bear the costs of all losses or damages resulting from or because of the Work. The Contractor shall pay or cause payment to be made for all labor performed or furnished and for all material used or employed in carrying out this Agreement. Contractor shall assume the defense of, indemnify and hold harmless the Customer, their officers and agents from all claims relating to the following:

a) Labor performed or furnished and materials used or employed for the Work,
b) Inventions, patents and patent rights used in and in doing the Work,
c) Injuries to any person received or sustained by or from the Contractor and its employees, subcontractors and its employees, any agents, suppliers and invitees in doing the Work, or as a consequence of any improper materials, implements of labor used or employed therein, and
d) Any act, omission, or neglect of the Contractor and any employees, subcontractors and employees, agents, suppliers and invitees.

Nothing herein shall relieve or limit the Contractor of liability for losses and damages to person or property because of its operations. The Contractor shall indemnify and hold the Customer harmless from all liability, including attorneys' fees and legal costs, associated with or resulting from the Contractor's operations.

Section 5: Performance and Evaluation Subsequent to Work

5.1 Workmanship and Equipment Warranty

Contractor hereby assigns to the Customer all warranties of all equipment and materials used in the Work. **ATTACHMENT 3: RFP Evaluation Form** lists equipment and material warranties, however, failure to include any equipment or materials having a warranty neither excludes said equipment or materials from the provisions of neither this section nor Contractor's responsibilities hereunder.

Contractor warrants that, for a period of one year from the date of the Certificate of Final Completion ("Warranty Period"), all equipment, materials and Work shall be free from defects in material, manufacture, workmanship and performance as set forth by the catalogs, bulletins and specifications included within Contractor's Response to the RFP/RFQ, Technical Audit, or this agreement, whichever is appropriate. If such defect occurs within the Warranty Period, Contractor shall correct and pay for correction of all defects including replacement or repair and all parts and labor.

Contractor warrants that, for any equipment or materials used in the Work with a warranty period in excess of one year, Contractor shall correct all defects including replacement or repair provided that Contractor's obligation is limited to the terms of the warranty and provided further that the Customer, by mutual consent with Contractor, may correct said defect.

No warranty liability shall attach to the Contractor until Work has been substantially completed and payment has been made. Contractor's warranties expressly exclude any remedy for damage or defect caused by abuse, improper operation, unapproved modifications or improper repairs not performed by Contractor.

If Contractor, upon written notice from the Customer, fails to correct defective equipment, materials or Work within a reasonable period of time, but no less than seventy two (72) hours, unless such defect is a condition deemed to endanger health or safety or is a fire hazard, Customer may correct any defect and Contractor shall reimburse Customer for its reasonable expenses incurred in performing such correction subject to any limitations contained within this section. Conditions which are deemed to endanger under the State Law (§ Section) or are fire hazards under Fire Prevention Regulations (§ Section) shall be addressed promptly and jointly, if necessary, by Contractor and Customer assuring that immediate precautions are taken to avoid risk to persons or property, imminent measures are taken to prevent deterioration of condition, occupants are alerted to any dangers or hazards, and steps for final correction taken within twenty four (24) hours.

5.2 Evaluation of Savings Achieved

The energy and water savings that occur after the Final Completion Date shall be determined by the difference between actual consumption and baseline consumption as shown on Baseline Data and Projection (**ATTACHMENT 2: RFP Form of Response**), as adjusted for occupancy, changes in the manner in which energy or water may be used other than manner of use which has been incorporated as part of the Work, and in the case of heating energy, substantial differences in heating degree days for the pertinent periods. For the duration of this agreement, the Contractor shall monitor Customer's energy and water bills at properties subject to the Work for energy and water usage and shall report quarterly, within fifteen (15) business days after receiving bills for said period, comparing actual usage to the baseline and projections with detailed explanations of variations in savings, including shortfalls, to the Customer. The determination and evaluation of savings shall be consistent with procedures and methods described in the RFP/RFQ and the Audit Report.

Contractor shall prepare an annual report pursuant to § Section for submission to the Customer in a form suitable for review, and shall simultaneously forward the submission electronically to State Energy Office at State Energy Office Email Address**.**

The Customer shall notify Contractor of substantive changes in the properties or the operation or occupancy thereof that could affect energy or water use within 48 hours or as soon as is reasonably possible. Such substantive change will be incorporated in the determination and evaluation of savings.

The obligations under this section are also described in the RFP/RFQ and the Contractor's response thereto, and incorporated herein by reference as described in Section 3.15. Contractor shall be compensated at the rate of _____ dollars ($_____) per quarter for monitoring and reporting services, payable no later than forty-five (45) days after receipt of the quarterly report as described above, provided such compensation shall be payable only if available from savings after any scheduled financing expenses or interest are paid.

5.3 Performance and Guarantees

Contractor guarantees to the Customer the following:

a) Products provided by the Contractor meet or exceed the published catalog ratings and that these ratings were accurately used in the calculation of energy and water savings estimates,

b) Representations made concerning energy or water consumption in its estimates are accurate, and

c) Based on the projected use of energy and water for the equipment, conditions and operations in place at the time of completion of the Work, which the Customer and the Contractor have agreed to and documented in **Baseline Data and Projection attached hereto as Attachment 6**, the Customer will save at least _____ dollars ($_____) per year during the term of this Agreement.

d) Calculations for Verified Unit and Cost Savings will be made in the same manner as the savings analysis set forth in the IGA, measured, and verified pursuant to Attachment 5: Measurement and Verification Plan and subject to adjustments as set forth in this Agreement.

5.4 Performance Remedies

Contractor shall be bound to both the yearly and total guaranteed savings. If, in any guaranteed savings year, , during the term of this Agreement, the utility savings (in native units) are less than the guaranteed amount (shortfall), Contractor shall be required to implement one or more of the following remedies, such remedies to be at the sole and exclusive discretion of the Customer:

a) Within forty five (45) days after determination that actual savings are less than guaranteed, modify the installation at no cost to the Customer so that the guaranteed savings rate as projected in Attachment 6 is attained, and pay or credit, at the Customer's option, to the Customer an amount equal to the difference in the actual savings, if any, and the guaranteed savings, and/or

b) Pay or credit the Customer, at the Customer's option, an amount equal to the difference between the actual savings, if any, and the guaranteed savings, as projected in Attachment 6.

The value of any shortfall in the specific year will be assessed using the utility rates calculated for the specific year (Refer to Attachment 6), in which the shortfall exists. Any excess savings will remain the property of the Customer.

5.5 Independent Audit

The Customer shall have the right to retain, at its own expense, an independent auditor to complete and submit to the parties an audit of the calculations of Energy Cost Savings made pursuant to this

Agreement. Any audit so performed must use and incorporate the same methods, procedures, and assumptions as contained in this Agreement and used by Contractor to perform the calculations undergoing an audit pursuant to this Section. Any payments between the parties necessary to resolve an irregularities identified in the audit shall be made within thirty days after submission of the audit to the parties. If, after thirty days, the parties are unable to agree upon the adjustment, the matter shall be submitted to resolution pursuant to Section 3.01.

5.6 Other Performance Terms and Conditions

All actions taken under Section 6, including but not limited to correction of warranties, remedy of performance shortfalls and maintenance of equipment by Contractor, shall conform to sections 5.02 through 5.16 inclusive.

5.7 Agreement Closeout Responsibility

Prior to any final payment made pursuant to Section 4, Contractor shall perform commissioning as stipulated in Attachment 8 of the equipment covered by this Agreement and prepare an assessment of the condition of the equipment and materials installed as part of the Work.

a) Conduct a thorough and systematic performance test of each element and total system of the installed equipment detailed in Attachment X: Equipment Submittals in accordance with the commissioning procedures as defined in Attachment 8. Prior to Substantial Completion of each ECM, the Contractor will determine if (1) equipment is functioning in accordance with both its published specifications and, (2) in accordance with the terms of this Agreement, and all building systems, subsystems or components are functioning properly with the new integrated environment.

b) Conduct the training program described in Attachment X: Training Program, including software, prior to Final Delivery and Acceptance. The cost of such training shall be included in the Performance Period Fee set forth in Attachment X.

c) Prepare a closeout report that includes (but is not limited to as appropriate) the operating and maintenance recommendations during the remaining life of equipment installed, if any changes in technology or procedures affecting the equipment could extend the useful life of the equipment or increase the conservation efficiency, and an overview of new technology or additional conservation measures for the Customer to consider.

Section 6: Obligations of the Parties

Agreement Closeout Responsibility

Contractor acknowledges and agrees that Contractor's obligations hereunder are in the capacity of providing professional services for the purposes described in the Preamble to this Agreement and in said capacity is expected to provide energy and water auditing, engineering, design and monitoring services, construction management including general contracting as necessary, and other related services as

solicited in the RFP/RFQ and as may normally be incidental to these types of professional services. Contractor acknowledges and agrees that any other functions including but not limited to manufacturer's representative, dealer or distributor of equipment, materials or commodity specified herein or as subcontractor, or ownership in whole or in part or financially affiliated with a Contractor which performs such other function shall constitute a conflict of interest which shall constitute a material breach of this Agreement unless 1) fully disclosed in the Contractor's Response to the RFR, and 2) accepted by the Customer under terms which are specified in the Technical Audit. Contractor acknowledges and agrees that this paragraph applies to all its officers and employees.

The following events or conditions shall constitute a breach by the Contractor and shall give the Customer the right, without an election of remedies, to proceed pursuant to Section 3.01 and/or terminate this Agreement by delivery of written notice declaring termination, upon which event the Contractor shall be liable to the Customer for any and all damages sustained by the Customer:

a) Any attempt by the Contractor to increase the Agreement price for reasons other than those related to changes in the Work pursuant to Section 5.03,
b) Any failure by the Contractor to provide quarterly monitoring reports pursuant to Section 6.02,
c) Any failure by the Contractor to remedy a shortfall in the yearly guaranteed savings pursuant to Section 6.04,
d) Any representation or warranty furnished by the Contractor in Contractor's Response to the RFR, the Technical Audit or this Agreement which is false or misleading in any material respect when made,
e) The filing of bankruptcy by the Contractor or by Contractor's creditors, an involuntary assignment for the benefit of creditors, or the liquidation of the Contractor,
f) Any failure by the Contractor to perform or comply with any other material term or condition of this Agreement, including breach of any covenant contained herein, provided that such failure continues for thirty (30) days after written notice to Contractor demanding that such failure be cured or, if cure cannot be effected in thirty (30) days, the Contractor fails to begin to cure and proceed to completion thereof as quickly as is reasonably possible.

Obligations of the Customer

The Customer acknowledges and agrees that the implementation of the maximum conservation of energy and water practical within any pertinent regulatory, operational or physical constraints is of the essence to this Agreement. Customer agrees to respond to all audits, proposed revisions and related requests on a timely basis for the expeditious design, implementation and monitoring of conservation measures.

Each of the following events or conditions shall constitute a breach by Customer and shall give the Contractor the right, without an election of remedies to proceed pursuant to Section 3.01 and terminate this Agreement by delivery of written notice declaring termination, upon which event the Customer shall be liable to the Contractor for all Work furnished to date:

a) Any failure by the Customer, without cause, to authorize payment due more than forty-five (45) days after receipt of the invoice therefore,
b) Any representation by Customer in the RFP/RFQ and this Agreement is false or misleading in any material respect when made,
c) Any failure by the Customer to perform or comply with any other material term or condition of this Agreement, including breach of any covenant contained herein, provided that such failure continues for thirty (30) days after written notice to the Customer demanding that such failure be cured or, if cure cannot be effected in thirty (30) days, the Customer fails to begin to cure and proceed to completion thereof as quickly as is reasonably possible.

Section 7: Insurance and Bond Requirements

7.1 Worker's Compensation Insurance

Workers Compensation Coverage A	Statutory Minimum
Employer's Liability Coverage B	$500,000 each accident $500,000 disease per employee $500,000 disease policy

7.2 Comprehensive General Liability

Bodily Injury and Property Damage	$2,000,000 each occurrence, $4,000,000 aggregate
Products & Completed Operations	$2,000,000 aggregate
Personal & Advertising Injury	$2,000,000 each occurrence

This policy shall include coverage relating to explosion, collapse, and underground property damage and contractual liability coverage. Contractor shall provide a separate "Owners and Contractor's Protective Liability" policy in the name of the Customer at the same limits listed above. The completed operations coverage shall be maintained for a period of two (2) years after Substantial Completion as defined in Attachment 3.

7.3 Vehicle Liability

Contractor shall provide the following minimum coverage with respect to the operations of the any employee, including coverage for owned, non-owned, and hired vehicles:

Bodily Injury	$2,000,000 each person
Property Damage	$2,000,000 each accident $4,000,000 aggregate

7.4 Property Coverage

Contractor shall provide the following coverage against loss or damage by fire and against loss or damage covered by the special perils insurance endorsement on all Work:

Special Perils	80% of Agreement Price minimum

Upon completion of Work at Customer buildings, Contractor shall provide an installation floater, in the full amount of the Agreement Price, for the requirements set forth above. The policy or policies shall specifically state that they are for the benefit and payable to the Customer, the Contractor, and all persons furnishing labor or labor and materials for the Work, as their interests may appear.

7.5 Customer as Additional Insured

The Customer shall be named as additional insured on the Contractor's Liability Policies.

7.6 Certificates of Insurance, Policies

Certificates of insurance, acceptable to the Customer, shall be submitted to the Customer upon the execution of this Agreement and shall be renewed upon expiration of the policies. Certificates shall indicate that the coverage required by section 7.01 through 7.05 is in effect. If the Customer is damaged by Contractor's failure to maintain such insurance, then Contractor shall be responsible for all reasonable costs or damages attributable thereto. Certificates shall note the thirty-day cancellation notice requirement of Section 7.07. All policies shall be issued by companies authorized to write that type of insurance under the laws of the State.

7.7 Cancellation

Cancellation of any insurance required by this Agreement, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and the Customer at least thirty days prior to the effective date thereof.

7.8 Bonds

Contractor shall provide the Customer with 100 % payment and performance within 30 days of award of the contract. The contractor shall furnish a certified copy and duplicate of a performance bond, with project financier as co-beneficiary along with the customer. Performance and payment bonds shall secure 100% of the Agreement Price for all ECMs cited.

The performance bond shall remain in effect until the Final Completion Date. The payment bond shall be released upon receipt of satisfactory evidence that all subcontractors, laborers, etc., have been paid in

full.

Agreement Signatures

IN WITNESS THEREOF, the parties have each caused this Agreement to be executed in triplicate on the dates set forth below (the last of which shall be considered the date of execution hereof) by their duly authorized representatives.

Contractor Name	Municipality
Name _____	Name _____
By _____	By _____
Title _____	Title _____
Date _____	Date _____

Municipality Agency

Name _____

By _____

Title _____

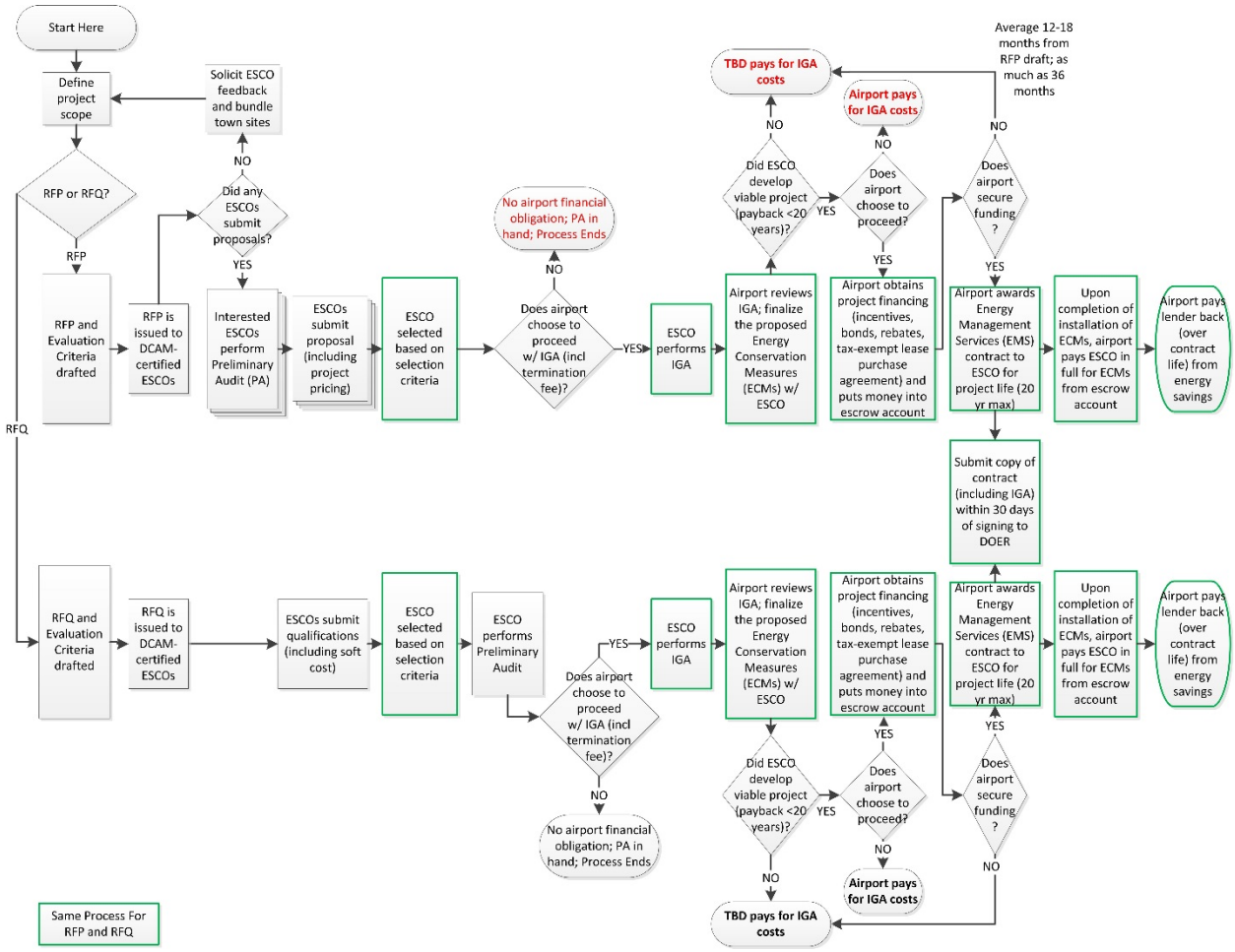
Date _____

Approved as to Form:

_____

Office of General Counsel

Appendix D. RFP versus RFQ Process Flows



The tradeoff between using an RFP versus an RFQ for soliciting an energy services contract is one of risk versus reward. Use of an RFQ is likely to promote multiple responses, so the risk of a non-response is low. However, an RFQ generates relatively low publicity, and responses are unlikely to include preliminary energy audits, will not be highly tailored to the airport's existing conditions, and will not allow a detailed comparison of costs or proposed energy conversation and renewable energy measures when selecting the vendor. In contrast, an RFP generates stronger publicity and expects require vendors to perform preliminary energy audits and to visit the airport prior to submitting their proposals. While the airport gains this upfront investment and additional clarity for vendor selection, there is a greater risk of no responders.

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Table 2. Energy Services Contract Procurement Options—RFQ vs. RFP

	RFQ	RFP
Pros	More likely to get more responders than an RFP	Project generates more publicity
	Preliminary energy audit unlikely before proposals submitted	Preliminary energy audit performed before proposals submitted
Cons	No costs or ECMs known when an ESC is selected	Risk of no responders

Appendix E. Detailed Payback Calculation Example for ECMs

Table 3. Costs and Savings Cash Flows of Four Hypothetical Airport ECMs

	Savings	Baseline
Electric	$ 217,000	$ 900,000
Fuel Oil	$ 22,500	$ 150,000
Total	$ 239,500	$ 1,050,000
SIMPLE PAYBACK	12.5	YEARS

IN/OUT	Description	Total Energy Savings	Energy Savings						Operational Savings	Costs & Payback	
			ELECTRIC			FUEL OIL					
			kWh Savings	kWh % Baseline	Total $$ Savings	Gallon Savings	Gallon % Baseline	Gallon $$ Savings		Total Cost	Simple Payback
Y	Lighting and Lighting Controls	$ 147,500	900,000	47.1%	$ 150,000	(600)	-4.4%	$ (2,500)	$ 3,402	$ 2,000,000	13.3
Y	Building Management System - Airport Wide Monit	$ 25,000	120,000	6.3%	$ 18,000	2,100	15.3%	$ 7,000	$ 1,200	$ 400,000	15.3
Y	Building Envelope Improvements	$ 22,000	30,000	1.6%	$ 4,000	5,000	36.4%	$ 18,000	$ -	$ 500,000	22.7
Y	Reduce Outside Air Volume	$ 45,000	300,000	15.7%	$ 45,000	-	0.0%	$ -	$ -	$ 350,000	7.8
	Total:	**$ 239,500**	**1,350,000**	**70.6%**	**$ 217,000**	**6,500**	**47.3%**	**$ 22,500**	**$ 4,602**	**$ 3,250,000**	**14.7**
	PROJECT COST		**$ 3,250,000**								
	INCENTIVES		**$ 200,000**								
	ADJUSTED PROJECT COST		**$ 3,050,000**								
	ADJUSTED SIMPLE PAYBACK		**12.5**	**YEARS**							

Appendix F. Detailed Analytical Hierarchy Process Description

Provided below is a more detailed description of the analytical hierarchy process that was discussed in Chapter 3. AHP is a widely used, structured technique for organizing and analyzing complex decisions often by a group. While there are many different decision-making processes that rely on AHP as a foundation, a five step process is offered below:

1. Create a list of project requirements that are then separated into project musts and project wants. Be sure to document any assumptions made when making the list or deciding between a must and a want. Ideally, the requirements will begin with, "The project shall" and all project musts/wants will be affirmative statements that conform to the SMART[14] criteria (specific, measurable, achievable, relevant, and time-bound).
2. Using a spreadsheet able to perform pairwise comparisons among the wants, ask the team one-by-one whether a given want is more important, the same importance, or less important than another given want. Record the result in the spreadsheet that is then capable of calculating relative weights for those wants. The pairwise comparison matrix and resulting weights may be completed before any proposals are received or solicited so that the weightings can be communicated to potential proposers in advance. See Figure 37 and Figure 38 for examples of pairwise comparison.
3. Gather a list of the alternative possibilities, whether a list of candidate ESCOs, a list of candidate airports being considered for carbon reduction, or any other list of alternatives. Immediately eliminate any alternatives that do not meet the list of project musts from step 1.
4. For the wants identified in step 1 and used in step 2, create an agreed-upon list of quantitative grades for each want. Typically a range from 1 to 3 is used, but any scale is acceptable.
    a. A '3' should represent some grading for that want that can be assessed when an alternative meets the requirement and the customer (airport) is completely satisfied.
    b. A '2' represents a grade for that want that is below the requirement, but the customer is accepting of the deviation.
    c. A '1' represents a grade for that want that significantly dissatisfies the customer.
5. Using the weights from step 2, the remaining alternatives from step 3, and the grading scale from step 4, evaluate all alternatives by assigning a grade for each want on the scale from 1 to 3 and then multiplying this grade by the weight. The overall sum of this weighted grade for each want is the overall score for that alternative. See Figure 39 for an example where all of these steps are brought together.

[14] http://en.wikipedia.org/wiki/SMART_criteria

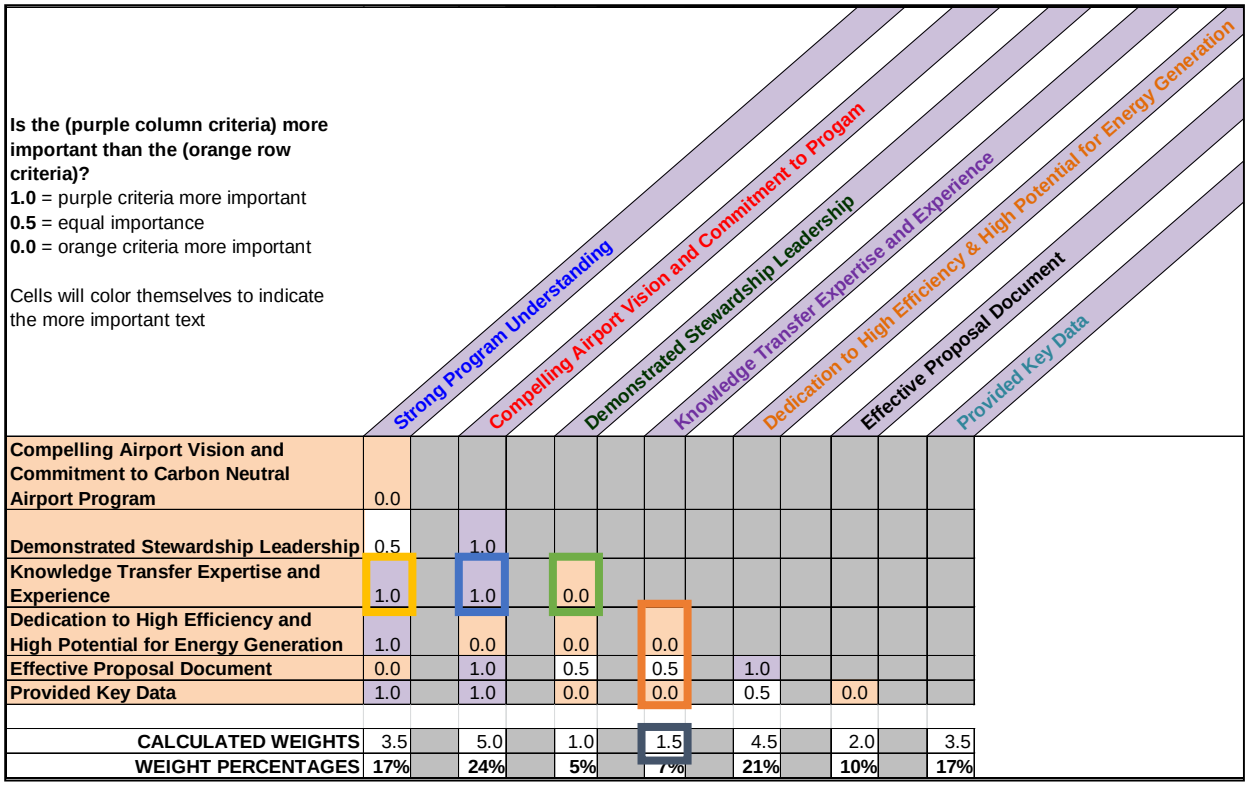

Figure 1. ESCO Selection Example of a Pairwise Comparison Matrix Used in Step 2 of the AHP.

In Figure 37, the purple column is compared to each orange row one-by-one. If the purple column is more important to the project, a 1 is entered. If the column and row are of equal importance, a 0.5 is entered. If the column is less important than the row, a 0 is entered. One method for remembering which number to enter in a given cell is by keying off the "1" looking like an arrow pointing to the more important column (↑). The calculated weights are then the sum of the column values plus the sum of 1 minus the row values not represented in the column. For example, the weight of **1.5** for Knowledge Transfer Expertise and Experience is the column sum **(0.0+0.5+0.0)** plus the sum of 1 minus the row values (1-**1.0**)+(1-**1.0**)+(1-**0.0**). The results are then easily converted to percentage weights if desired.

Is the (purple text) more important than the (orange text)?
1.0 = purple text more important
0.5 = equal importance
0.0 = orange text more important

Cells will color themselves to indicate the more important text

	Demonstrated understanding of Carbon Neutral Airport Program and past innovation	Completed application with significant contributions to the local economy	Large physical footprint and new buildings	Green initiatives will be easy to implement	Low current energy consumption	High current energy efficiency and high use of renewable generation	Detailed metering and understanding of energy uses	Current commitment level to sustainability is high	High quality documentation provided
Completed application with significant contributions to the local economy	0.5								
Large physical footprint and new buildings	0.5	0.5							
Green initiatives will be easy to implement	0.5	0.5	0.5						
Low current energy consumption	0.5	0.5	0.5	0.5					
High current energy efficiency and high use of renewable generation	0.5	0.5	0.5	0.5	0.5				
Detailed metering and understanding of energy uses	0.5	0.5	0.5	0.5	0.5	0.5			
Current commitment level to sustainability is high	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
High quality documentation provided	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
CALCULATED WEIGHTS	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
WEIGHT PERCENTAGES	11%	11%	11%	11%	11%	11%	11%	11%	11%

	Score	Score	Score	Score	Score	Score	Score	Score	Score	Total Score
Airport 1	10	5	6	3	5	3	3	4	1	4.4
Airport 2	1	2	3	4	5	6	7	8	9	5.0
Airport 3	9	9	9	6	6	6	3	3	3	6.0
Airport 4	1	1	1	1	1	1	1	10	5	2.4
Airport 5	5	4	6	5	4	5	5	5	4	4.8

Figure 2. Airport Selection Example of a Pairwise Comparison Matrix Used in Step 2 of the AHP.

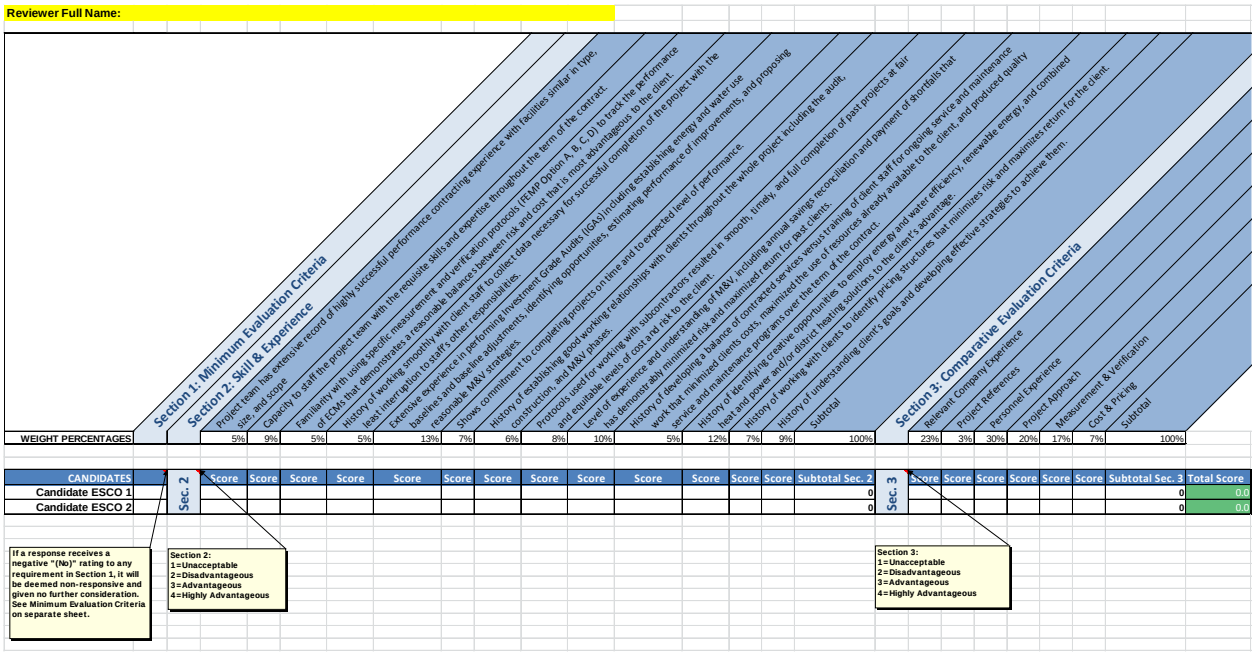

Figure 3. Example of Full Data Integration from Step 5 of the AHP.

In Figure 39, the project wants are listed as the darker blue columns identified in step 1, the respective weights for each want are listed in the row just below the wants from step 2, and the scoring criteria are contained in the yellow comment boxes from step 4. The scores for each candidate ESCO, in this case, are then entered into the appropriate box and a Total Score is calculated in the green box to the far right.

Consider the following tips when using this AHP to select among alternatives:

- The goal of the AHP is to use a tool to navigate a team through an assessment process that suggests the best selection after completing all five steps. At any time, the team is able to alter the inputs in any way in a well-connected spreadsheet such that the process does not need to be repeated from the start.
- The process is set up to ensure the team chooses quantitative metrics for both quantitative wants as well as what at first appear to be qualitative wants.
- An even more sophisticated feature that can be built into the spreadsheet is to measure the spread of the input data from the team for the scoring. Examining high spread in the inputs can help focus the team on the areas of highest disagreement in an attempt to move toward a productive debate and eventual consensus.
- The team should strive for wants that are as "orthogonal" as possible. Any particular want should have as little relation with other wants as possible so that desires aren't effectively over-weighted into one particular area.
- Consistency of the pairwise comparison can be checked using matrix math to compute the Consistency Index (CI), but such a check is beyond the scope of this document.

Appendix G. Recommendations for developing a successful airport renewable energy request for proposals (RFP)

Solicitations for renewable energy systems for an airport renewable energy or carbon neutrality program require that technical information about airport energy usage and physical facility characteristics be collected. These solicitations necessitate the inclusion of a number of unique elements. This document covers the essential elements of such an RFP, guidance on how to evaluate any proposals received, and directs the airport to tools, resources, and sample documents that can help maximize the effectiveness of their renewable energy procurement efforts.

Relying solely or too heavily on existing, generic RFPs or excluding certain key elements from an airport's local government RFP template can have a negative impact on the number and quality of responses received.[15]

1.1 Guiding principles and best practices

Past cases suggest a number of general best practices for developing a quality renewable energy RFP. Section 1.1 presents general recommendations; specific, recommended RFP elements are presented in Section 1.2; and several example RFPs are cited in Section 2.

1.1.1 Start with a Clear, Well-Defined Goal

Perhaps more than any other factor, the reason for purchasing or leasing a renewable energy system or pursuing a PPA will dictate the nature of the proposals received and the installer or vendor who is ultimately awarded a contract. For example if the airport's motivation for pursuing renewable energy and energy efficiency programs includes a secondary focus on using these installations to train the airport's next generation of environmental and facilities staff, this goal should be explicit in the RFP to exclude from eligibility those respondents who are unable to design and host the necessary training sessions. Similarly, if the purpose behind an airport's desire to establish on-site renewable generation is not only to derive the electricity from renewable sources, but to do so in a manner that results in cost savings, this goal should be explicit. Possible reasons for an airport to solicit renewable energy and energy conservation services include reducing greenhouse gas emissions to attain carbon neutrality, but they can also include having the system serve as a demonstration project, creating local jobs, and resilience[16] – each of which will influence the outcome of the procurement process.

[15] The recommended principles and elements in this document are generally adapted from *Steps to a Successful Solar Request for Proposal (RFP)*, The Solar Foundation, Department of Energy 2012.
[16] See for example the San Diego solar PV and microgrid project RFP in the appendix of ACRP Report 151

1.1.2 Early Involvement of a Broad Set of Stakeholders

Purchasing a renewable energy system or energy efficiency services requires the expertise of a number of internal stakeholders outside of the procurement division. Including these stakeholders in the early stages of the RFP development process will enhance the success of the RFP that is finally issued. Staff with expertise in financial analysis will be required to advise on best practices for ensuring the proposals received will describe systems that are economically viable and that maximize the airport's return on investment. Engineering staff will be needed to advise on a site's structural suitability for renewables, and facilities staff can offer advice or identify any knowledge gaps (to be addressed by additional training or resources from the installer) regarding operations and maintenance requirements. Support from legal staff will be essential for ensuring the new RFP meets the requirements of applicable procurement laws. Each airport should at least reach out to the above departments to determine who should be included in the RFP development process. By issuing Requests for Information and hosting stakeholder meetings, airports can obtain valuable feedback from installers and vendors throughout the RFP development process.

1.1.3 Performance-Based Requests for Proposals

An overly restrictive RFP can thwart the procurement process. Therefore, it is recommended that airports develop performance-based RFPs that focus on system output requirements rather than specific system-design criteria. Doing so will provide respondents the flexibility to design a system that will lead to the desired output at the airport's desired cost. In designing an performance-based RFP, in particular for solar, wind, or other renewable energy, it is important that this information be reported in a standard format that facilitates easy proposal review. Requiring all respondents to report system performance in terms of kilowatt-hours (kWh) of electricity generated annually over the system's lifetime or in the number of kilowatts (kW) of installed solar capacity for example will make the airport's review of these proposals much more efficient. To further improve the simplicity and accuracy of the comparison-making process, respondents should be encouraged to use the same methods or tools to estimate system output[17]. Finally, this "common metrics" standard should be applied to as much of the other information requested from respondents as possible (e.g., contractor experience, equipment specifications, emissions reductions, etc.).

1.1.4 Provide Site Information and Conduct Site Assessments

Airports should provide potential respondents with as much information regarding relevant site characteristics as is technically or financially feasible. Such information can include aerial photography or topographic maps, facility energy load information, building plans, as well as shading, electrical, and structural analyses of the site when relevant. At the same time, airports should consider using free screening-level renewable energy planning tools such as PVWatts, Wind Prospector, and Geothermal Prospector to estimate what sizes and types of generation systems can reasonably be sited on airport grounds. All of these tools are available via the DOE website. However, an airport's ability to conduct some of these analyses may be limited by financial constraints or the availability of in-house expertise. In some cases, the county, municipality, state, or port authority that owns the airport may be able to

[17] For example, PVWatts for solar PV, Geothermal Prospector for ground source heat pump, and Wind Prospector for wind turbines.

assist, or the airport may pass some of these responsibilities (e.g., shading analyses for solar PV) off to the respondent, who can recoup these costs in their bids or the PPA rates they offer.

1.1.5 Consider Hiring a Consultant or Owner's Agent

Given the complexity and the negotiations involved in renewable energy and energy efficiency procurement, many airports have found it advantageous to hire a consultant or owner's agent to guide them (and advocate for them) throughout the procurement process. Owner's agents are experts hired to represent the airport's interest in negotiation and execution with energy services contractors, including technical review and optimization of projects, identifying advantageous financing strategies, regulatory support, and writing the RFP. Some states may even provide funding opportunities to hire a consultant or owner's agent. For example, the Massachusetts Department of Energy Resources (DOER) has begun providing funding for owner's agent services, and the Merrimack Valley Planning Commission retains an energy management consultant to assist member communities with solar procurement and to develop a set of shared standardized procurement documents including RFPs and model contracts.

1.2 Key Renewable RFP Elements

In addition to the general considerations listed in the previous section, airports developing a carbon reduction RFP should ideally incorporate as many of the following RFP elements as applicable to their circumstances, along with those elements required by law in their jurisdiction. Note that this is not meant to be an exhaustive list of RFP elements.

1.2.1 Roof Integrity and Warranties

For rooftop solar or wind installations, it is necessary to ensure that the building is structurally sound enough to support a system and that it will continue to be during the project's estimated useful lifetime. Respondents should also be required to ensure that the installation of rooftop energy systems will not adversely impact roof integrity or violate existing roof warranties. Contractors should be required to obtain written certification from the parties issuing or overseeing the roof warranty that the proposed solar installation will not nullify or void this warranty, or else provide their own warranty for the roof.

1.2.2 Financial Requirements

Respondents should be required to submit documents that adequately and accurately demonstrate their financial capacity to cover any applicable up-front design and installation costs, any administrative or other costs associated with development, and any costs associated with recurring responsibilities, such as operations and maintenance. These financial capabilities can be certified through statements from financial institutions, business references, annual reports, credit ratings, or other documents deemed an acceptable substitute.

1.2.3 Permitting and Interconnection Responsibility

It is recommended practice for airports to make the successful respondent fully and solely responsible for obtaining - and covering all costs associated with - any required permits (e.g., building, construction, electrical, plumbing, environmental, zoning, FAA solar glare analysis, etc.) and utility interconnection agreements.

1.2.4 Team Qualifications and Solar Project Experience

Airports should request that respondents submit information indicating their qualifications to undertake the project in question. Company profiles, lists of relevant state licenses and industry certifications, proof of insurance, bonding safety ratings, project team background and qualifications, business references, and any renewable energy and energy efficiency project experience (e.g., total number and capacity of systems installed and facilities retrofitted, differentiated by installation type; experience with certain technology brands; experience with grid interconnection) will help procurement staff identify the most qualified candidate for the contract.

1.2.5 Technical Specifications

This section should outline information on respondents' proposed technical approach and further information on the system equipment to be used. For a PV system, this can include information on module type (including brand name, model numbers, and technology), inverters (brand, type, and efficiency), monitoring and data acquisition systems, and balance of system components. However, in an effort to not be overly prescriptive and to encourage cost-effective proposals, this section should be completed by the respondent.

1.2.6 Operations and Maintenance

Although renewable energy systems and certain building energy efficiency retrofits can be relatively O&M free, the RFP should be cognizant of the operations and maintenance needs that do exist and either contract with the energy services company or another party to handle these responsibilities, or at larger airports ensure that airport staff has the training and resources they need to perform this function internally. For the latter option, the RFP should specify that the successful respondent is responsible for either providing the relevant personnel with O&M manuals or onsite training, or both.

1.2.7 Performance Monitoring and Performance Guarantees

An essential component for ensuring that airports receive the carbon reduction and cost performance benefits contracted through a performance-based RFP is the monitoring of system performance. Such monitoring can accomplish a number of project goals beyond merely ensuring system quality, such as tracking energy production for the purposes of calculating the number of renewable energy credits generated[25] or demonstrating the benefits of the system to the community. At its most basic, system performance can be monitored through inverter or meter displays. Similarly, given the relative predictability of renewable power output over time, as well as the savings from energy conservation measures such as building system upgrades, it is not

unreasonable to ask the respondent to provide some form of performance guarantee, especially when entering into a power purchase agreement.

1.2.8 Milestones with Completion Dates

To ensure the project proceeds as planned, respondents can be required to submit detailed project plans, listing major milestones and anticipated completion dates. Such milestones might include: obtaining required permits, equipment purchasing, organizing project finance, commencement of construction/installation and system operation, and approval of interconnection requests. Airports can make payment for the project contingent on the contractor's ability to successfully adhere to his or her proposed schedule.

Appendix H. Supplemental Information

1.3 Model RFPs

The following example RFPs used by U.S. airports for solar and other carbon reduction projects are provided as examples that generally implement the above recommended best practices and core elements.

- Santa Barbara Memorial
- Barnstable Municipal/Cape & Vineyard Electric Cooperative (http://www.thesolarfoundation.org/wp-content/uploads/2015/02/CapeVineyardElectricCoopRFP.pdf)
- Charlotte Douglas (http://charmeck.org/city/charlotte/airport/aboutclt/documents/advertisements%20for%20bids/rfpsolarpowersystemdevelopment.pdf)
- Chicago Department of Aviation (http://www.thesolarfoundation.org/wp-content/uploads/2015/02/RFPChicago.pdf)
- Indianapolis International (http://www.thesolarfoundation.org/wp-content/uploads/2015/02/IndianapolisRFP.pdf)
- Providence/Rhode Island Airport Corporation (RIAC) (http://www.pvdairport.com/documents/procurement/rfp/rfp%20-%2026124.pdf)

1.4 Comparison of Self-Ownership, Hybrid, and Conventional PPA Models

Previous analyses have shown the relative advantages and challenges of self-ownership and third-party ownership for public entities. Table 1 summarizes the primary conclusions of these analyses.[18]

[18] This section is excerpted and adapted from the NREL publication, "Financing Solar PV at Government Sites with PPAs and Public Debt," 2011.

Table 1. Advantages and Challenges of Third-Party PPAs and Self-Ownership for a Public Entity

	Third-Party PPA	Self-Ownership
Advantages	• No/low upfront outlay of capital • Ability for tax-exempt entity to benefit from savings passed on from federal tax incentives • Predetermined electricity price for 15–25 years • No operating and maintenance responsibilities • Path to ownership (if included as an option in PPA)	• Ability to use cheap public debt (through a tax-exempt debt issuance) • Full control over a project: design, operations, and risks • Ability to choose what to do with renewable energy attributes generated by the project (retain or monetize)
Challenges	• The process of negotiating a PPA can be lengthy and costly • Public entity has limited control over project design, operations, and risks • PPA pricing may be sub-optimal (developer could receive most of the financial benefits) • If PPA term is less than the system useful life, the host must purchase the system at fair market value at the end of the term	• The public entity cannot monetize the value provided by federal renewable energy tax incentives • Need expertise to navigate potential revenues from renewable-portfolio-standard-driven subsidies • Debt issues and limitations could prohibit the model • Project management requirements

Source: Cory et al. 2008, Pearlman 2011a.

The hybrid model can provide additional benefits compared to both the self-ownership and third-party PPA models. Like self-ownership, the hybrid model allows the administrator to take advantage of low-cost public debt. Like a third-party PPA, the hybrid model enables the tax-exempt administrator to benefit through savings passed on from federal tax incentives. In addition, the administrator receives fixed electricity costs for a long-term contract and has no operating and maintenance responsibilities for the solar PV equipment.

The hybrid model enhances the third-party PPA model because the public entity is able to provide low-cost capital to the project. By providing capital and assuming financial risk, the public entity has leverage to bargain for a better PPA price. While the public entity may not have full control over project details as in the self-ownership model, the hybrid model allows public entities to negotiate project specifics and contract terms.

One potential downside of the hybrid model is that transaction costs could be higher than under either the self-ownership or third-party PPA models. Consider that the model requires the state or local government both to issue a bond and to negotiate a PPA. Additionally, the program may have more development costs due to the novelty of the approach. That being said, an administrator can include all of the professional costs incurred (e.g., legal fees and bond issuance costs) in the development costs listed in the RFP. Despite transaction costs, winning PPA bids have still been attractive, ranging from $0.03/kWh (for a recent 10 MW project) to $0.106/kWh in the first deal, where as might be expected, transaction costs were higher due to the learning process.
Program development time may also be lengthy. The first transaction in Morris County, New Jersey,

took around 18 months to finalize (Pearlman 2011b), but subsequent projects have been quicker. One estimate is that it may take eight months to a year from the time the project is announced to when the bond is issued, with an additional year to build the project (Scerbo 2011). It may be possible to compress the model into a 4–5 month schedule, as Salem County, New Jersey, is doing (Scerbo 2011).

Another possible barrier is the credit rating required for the model. Potential administrators will need a strong credit rating (A–AAA) to make the model work. Finally, the deal structure adds an extra layer of liability for the administrator—it is liable to bond holders for bond repayment as well as the third-party developer for PPA payments. The developer assumes some of the project risk, but ultimately the administrator is responsible for bond repayment. Specific terms are usually negotiated in the contract between the developer and the administrator to mitigate this additional risk.

These types of arrangements have been used for airport carbon reduction. For example, the City of Denver provided low-interest capital (raised through appropriations) to a developer to build two Denver International Airport solar projects in 2009. The city did not provide a construction loan; instead, capital was provided after plant commissioning.