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# State of Wyoming



## Wyoming Energy Conservation Improvement Program

For State Agencies, County & Municipal Governments,  
Higher Education Facilities, Public School Districts,  
Hospitals, and other Public Entities

### PROGRAM MANUAL Appendix 1C

### WYECIP INVESTMENT GRADE AUDIT and PROJECT DEVELOPMENT CONTRACT

# **INVESTMENT GRADE AUDIT and PROJECT DEVELOPMENT CONTRACT**

This Investment Energy Audit and Project Development Contract (Contract) is made and entered into as of (Date), between (Contractor Name), having its principal office at (Contractor address), hereinafter referred to as “Contractor” and (Facility Owner name and address), hereinafter referred to as “Facility Owner”.

## **1.0 Representations**

- 1.1** Contractor has been prequalified and has executed an ESCo Contract with the Wyoming Business Council for participation in the Wyoming Energy Conservation Improvement Program (WYECIP) for work pertaining to the discovery, engineering, procurement, installation, financing, savings guarantee, maintenance and measurement and verification of energy and water saving measures at facilities similar in size, function and system type to Facility Owner’s facilities.
- 1.2** Facility Owner has executed a Facility Owner Contract with the Wyoming Business Council for participation in the WYECIP.
- 1.3** Facility Owner has selected Contractor to perform an Investment Grade Audit and develop a Project Proposal to determine the feasibility of entering into an Energy Performance Contract to provide for the installation and implementation of energy, water, and other cost saving measures at Facility Owner’s facilities.
- 1.4** If such measures are determined to be feasible, and if the amount of savings can be reasonably sufficient to cover all costs, as defined by Facility Owner, associated with an energy performance contracting project, the parties intend to negotiate an Energy Performance Contract under which Contractor will design, procure, install, implement, and provide measurement and verification of such measures. This intent does not commit Facility Owner to entering into such Energy Performance Contract.
- 1.5** The terms and conditions of the WYECIP Facility Owner Contract, ESCo Contract, and the requirements detailed in the WYECIP Program Manual are incorporated by reference into this Contract.

## **2.0 Contract Administration.**

### **2.1 CONTRACT DOCUMENTS.**

**2.1.1 Contract and Attachments.** The documents for this Contract shall consist of the following:

**2.1.1.1 *This Investment Grade Audit and Project Development Contract.***

**2.1.1.2 *Attachments:***

- a) **Attachment A:** WYECIP Contract General Conditions
- b) **Attachment B:** List of Buildings Included in Contract
- c) **Attachment C:** Cost and Pricing Elements
- d) **Attachment D:** WYECIP RFP Package for Financial Services
- e) **Attachment E:** Risk Assessment Matrix
- f) **Attachment F:** Measurement and Verification Plan Guidelines
- g) **Attachment G:** Contract Schedules (CS-1 through CS-5)
- h) **Attachment H:** Notice of Acceptance of Investment Grade Audit Report
- i) **Attachment I:** Investment Grade Audit and Project Development Schedule

**2.1.2 Documents Incorporated by Reference.** The following documents shall be incorporated by reference into this Investment Grade Audit and Project Development Contract:

**2.1.2.1 *WYECIP ESCo Contract with Attachments***

**2.1.2.2 *WYECIP Facility Owner Contract***

**2.1.2.3 *WYECIP Program Manual***

**2.2 MODIFICATIONS TO THE CONTRACT.** Any changes, modifications, revisions or amendments to this Contract which are mutually agreed upon by the parties to this Contract shall be incorporated by written Amendment, executed and signed by all parties to this Contract.

**2.3 ENTIRE AGREEMENT.** This Contract represents the entire and integrated agreement between Facility Owner and Contractor and supersedes all prior negotiations, representations or agreement, either written or oral.

**2.4 NOTICES.** All notices required by the Contract Documents to be given by one party to the other shall be effective only when sent in writing, addressed as follows.

**2.4.1 For Facility Owner:**

(Facility Owner Name)

ATTN: [REDACTED]

(Facility Owner Address)

(Facility Owner City, State, Zip)

**With Copy To:**

Wyoming Business Council, State Energy Office

ATTN: Mr. Tom Fuller

214 West 15<sup>th</sup> Street

Cheyenne, WY 82002

**2.4.2 For Contractor:**

(Contractor Name)

ATTN: [REDACTED]

(Contractor Address)

(Contractor City, State, Zip)

**2.5 ORDER OF PRECEDENCE.** In the event of conflict or inconsistency between this Contract and its exhibits or attachments, such conflicts or inconsistencies shall be resolved by reference to the documents in the following order of priority:

**2.5.1 *This Investment Grade Audit and Project Development Contract including the WYECIP Contract General Terms and Conditions (Attachment A).***

**2.5.2 *WYECIP Program Manual.***

**2.5.3 *WYECIP ESCo Contract with Attachments.***

**2.5.4 *WYECIP Facility Owner Contract.***

**2.6 CONTRACT TERM.** The term of this Contract will become effective upon approval by Facility Owner. The term shall end thirty (30) calendar days after signing of the Notice of Acceptance of Investment Grade Audit Report (Attachment H) by Facility Owner.

**2.7 COMPENSATION.**

**2.7.1** Except as provided for in Subsections 2.7.2, 2.7.3, or 2.7.4 below, within **120** days after Facility Owner's acceptance of the final audit report developed from this Investment Grade Audit and Project Development

Contract, Facility Owner shall pay to Contractor a sum not to exceed **(DOLLAR AMOUNT IN WORDS)** (\$ **DOLLAR AMOUNT**) based on a maximum of **(square footage to be audited)** gross square feet at \$ **cost per square foot**. Facility Owner shall only pay for square-footage actually audited.

- 2.7.2** If Facility Owner accepts the final audit report developed from this Investment Grade Audit and Project Development Contract, and enters into an Energy Performance Contract with Contractor to implement the energy, water, and other operating cost saving measures within **120** calendar days, after issuance of the Notice of Acceptance of Investment Grade Audit Report (Attachment H), Facility Owner shall have no payment obligations under this Agreement but acknowledges that the fee indicated above shall be incorporated into Contractor's project costs in the Energy Performance Contract.
- 2.7.3** If Facility Owner accepts the Investment Grade Audit but fails to enter into an Energy Performance Contract with Contractor to implement the energy and water saving measures within **120** calendar days, Facility Owner shall pay Contractor the amount indicated in Paragraph 2.7.1 above and the agreement will terminate without any further liability to either party.
- 2.7.4** Facility Owner shall have no payment obligations under this Contract in the event that Contractor's final audit report developed from this Investment Grade Audit and Project Development Contract does not contain a package of energy and water saving measures which, if implemented, will provide Facility Owner with cash savings sufficient to fund Facility Owner's payments of all costs and fees associated with the Energy Performance Contract, including:
- 2.7.4.1** The fee associated with the Investment Grade Audit.
  - 2.7.4.2** All monthly payments on an agreement to finance the measures.
  - 2.7.4.3** Any annual fees for monitoring and maintenance incurred by Contractor.
  - 2.7.4.4** Analysis will be based on proposed financing terms not to exceed the term set out in **Section 3.2.5.1** over a fixed rate or interest actually available to Facility Owner.
- 2.7.5** Compensation for termination of the Contract shall be as set forth in Section 2.8 of this Contract.

## 2.8 TERMINATION.

**2.8.1 Termination by Facility Owner.** Facility Owner may terminate this Contract at any time as described below:

### **2.8.1.1 Termination for Cause or Default**

- a) **Failure to Perform:** Facility Owner may terminate this Contract upon Contractor's failure to fulfill the terms of the Contract. If Contractor fails to timely perform any of the provisions of this Contract, with such diligence as will ensure its completion within the time specified in this Contract, Facility Owner may notify Contractor in writing of the non-performance, and if not promptly corrected within the time specified, Facility Owner may terminate Contractor's right to proceed with the Contract or such part of the Contract as to which there has been delay or a failure to properly perform. Contractor shall continue performance of the Contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services elsewhere. Termination shall be effective 30 calendar days from receipt of written notice if conditions of default are not first corrected.
- b) **Protection of Facility Owner Property:** Notwithstanding termination of the Contract and subject to any directions from Facility Owner, Contractor shall take timely, reasonable and necessary action to protect and preserve property in the possession of Contractor in which Facility Owner has an interest.
- c) **Compensation for Termination:** Payment for completed supplies delivered and accepted by Facility Owner shall be at the Contract price and in accordance with Section 2.7 of this Contract. Facility Owner may withhold amounts due to Contractor as Facility Owner deems to be necessary to protect Facility Owner against loss because of outstanding liens or claims of former lien holders and to reimburse Facility Owner for the excess costs incurred in procuring similar goods and services.
- d) **Excuse for Nonperformance or Delays in Performance:** Contractor shall not be in default by reason of any failure in performance of this Contract in accordance with its terms if such failure arises out of acts of God; acts of the public enemy; acts of the State and any governmental entity in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes;

freight embargoes; or unusually severe weather. Upon request of Contractor, Facility Owner shall ascertain the facts and extent of such failure, and, if Facility Owner determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, Contractor's progress and performance would have met the terms of the Contract, the delivery schedule shall be revised accordingly, subject to the rights of Facility Owner.

- e) **Erroneous Termination for Default:** If after notice of termination of Contractor's right to proceed under the provisions of this clause, it is determined for any reason that Contractor was not in default under the provisions of this clause, or that the delay was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience clause.

#### **2.8.1.2 Termination for Convenience.**

- a) **Termination:** Facility Owner may, when the interests of Facility Owner so require, and with thirty (30) calendar days written notice, terminate this Contract in whole or in part, for the convenience of Facility Owner. Facility Owner shall give written notice of the termination to Contractor specifying the part of the Contract terminated and when termination becomes effective. This shall in no way imply that Facility Owner has breached the Contract by exercise of the Termination for Convenience Clause.
- b) **Contractors Obligations:** Contractor shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination Contractor will stop work to the extent specified. Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. Facility Owner may direct Contractor to assign Contractor's right, title, and interest under terminated orders or subcontracts to Facility Owner. Contractor must still complete and deliver to Facility Owner the work not terminated by the Notice of Termination and may incur obligations as are necessary to do so.

**c) Compensation for Termination:**

1. Upon notice of Termination for Convenience by Facility Owner, Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data bearing on such claim. If Contractor fails to file a termination claim within forty-five (45) calendar days from the effective date of termination, Facility Owner may pay Contractor, if at all, an amount set in accordance with subparagraph 2.8.1.2.c.3. of this Section.
2. Facility Owner and Contractor may agree to a settlement provided Contractor has filed a termination claim supported by cost or pricing data and that the settlement does not exceed the total Contract price plus settlement costs, reduced by payments previously made by Facility Owner, the proceeds of any sales of supplies and manufactured materials made under agreement, and the Contract price of the work not terminated.
3. Absent complete agreement, under subparagraph 2 of this Section, Facility Owner shall pay Contractor the following amounts, provided the payments agreed to under subparagraph 2 shall not duplicate payments under this subparagraph:
  - (i) Contract prices for supplies or services accepted under the Contract.
  - (ii) Costs incurred in preparing to perform the terminated portion of the work plus a fair and reasonable profit on such portion of the work (such profit shall not exceed the markup and fee schedules in the Cost and Pricing Elements Attachment C, nor include anticipatory profit or consequential damages) less amounts paid to or to be paid for accepted supplies or services; provided, however, that if it appears that Contractor would have been sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss.
  - (iii) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to Contractor's obligations paragraph of this

clause. These costs must not include costs paid in accordance with subparagraph 2 of this Section.

- (iv) The reasonable costs of Contractor necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the terminated portion of this Contract.
  - (v) The total sum to be paid Contractor under this subparagraph 3 shall not exceed the total Contract price plus settlement costs, reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph 2, and the Contract price of work not terminated.
4. Contractor will be entitled to no other payments in case of termination for convenience.

**2.8.1.3 Termination for Loss of Funding.** Each payment obligation of Facility Owner is conditioned upon the availability of government funds that are appropriated or allocated for the payment of this obligation as described in the WYECIP General Conditions (Attachment A).

**2.8.2 Termination by Contractor.** Contractor may terminate this Contract as described below:

**2.8.2.1 Non-viable Project.** Should Contractor determine any time during the Investment Grade Audit that sufficient savings cannot be attained to meet Facility Owner's requirements; the Investment Grade Audit will be terminated by written notice from Contractor to Facility Owner. In this event this Contract shall be cancelled and Facility Owner shall have no obligation to pay, in whole or in part, the amount specified.

## 2.9 INSURANCE REQUIREMENTS.

(This section may be modified for individual Facility Owner requirements)

**2.9.1 Coverage and Amounts.** It is agreed and understood Contractor shall maintain in full force and effect adequate commercial general liability insurance and property damage insurance, as well as workmen's compensation and employer's liability insurance pursuant to the State of

Wyoming and Facility Owner insurance requirements as defined below. Contractor shall obtain, and maintain such insurance at all times during the term of this Contract.

Insurance requirements and amounts of coverage shall be coordinated with existing Facility Owner policy amounts and coverages. Before commencing any work under this Contract, Contractor shall file with Facility Owner certificates of insurance evidencing at a minimum the coverage specified below. Contractor shall submit a Certificate of Insurance at the signing of this Contract and also any notices of Renewal of said Policy as they occur.

**2.9.1.1 Commercial General Liability**

- a) Combined single limit of \$1,000,000 written on an “occurrence” basis.
- b) Aggregate limit not less than \$2,000,000.
- c) Contractor must purchase additional insurance if claims reduce the annual aggregate below \$1,000,000.

**2.9.1.2 Professional Liability or Errors and Omissions Liability Insurance.** Contractor shall provide proof of professional liability insurance or errors and omissions liability insurance to protect Facility Owner from any and all claims arising from Contractor’s alleged or real professional errors, omissions or mistakes in the performance of professional duties in an amount not less than \$500,000.

**2.9.1.3 Automobile Liability (Minimum Coverage Required).** Combined single limit of \$600,000.

**2.9.1.4 Additional Insured.** All insurance policies required by this Contract shall name Facility Owner as an additional insured, and shall contain a waiver of subrogation against Facility Owner, its agents and employees. Contractor shall provide a copy of an endorsement providing this coverage.

**2.9.1.5 Workers’ Compensation and Unemployment Insurance.** Contractor shall provide to Facility Owner proof of workers’ compensation and unemployment coverage for all its employees who are to work on the project described in this Contract. Certificates of good standing in each of the Wyoming Workers’ Compensation and Unemployment Insurance programs shall serve as sufficient proof if Contractor is statutorily required to participate in those programs. If

Contractor's coverage is under a program different from the coverage provided by the Wyoming Department of Employment, proof of coverage shall be satisfied in manner to be determined sufficient in the discretion of Facility Owner.

**2.9.2 *Payment of Premiums and Notice of Revocation.*** All policies required under this Contract shall be in effect for the duration of this Contract and project. All policies shall be primary and not contributory. Contractor shall pay the premiums on all insurance certificates, which must include a clause stating that the insurance may not be revoked, canceled, amended or allowed to lapse until the expiration of at least thirty (30) calendar days advance written notice to Facility Owner. Insurance shall include provisions preventing cancellation without thirty (30) calendar day's prior written notice, by certified mail to Facility Owner.

**2.9.3 *Facility Owner may Insure for Contractor.*** In case of the breach for any provision of this Section, Facility Owner may, at Facility Owner's option, purchase and maintain, at the expense of Contractor, such insurance in the name of Contractor, as Facility Owner may deem proper and may deduct the cost of taking out and maintaining such insurance from any sums which may be found to be due or become due to Contractor under this Contract.

**2.9.4 *Subcontractors.*** The insurance requirements set forth above apply to all subcontractors. It is Contractor's responsibility to ensure that its subcontractors meet these insurance requirements.

**2.9.5 *Responsibility for Claims.*** Contractor shall be responsible for all claims, damages, losses or expenses, including attorney's fees, arising out of or resulting from the performance of the services contemplated in this Contract, provided that any such claim, damage, loss or expense is caused by any neglect act, error or omission of Contractor, any Consultant or associate thereof, or anyone directly or indirectly employed by Contractor.

## **2.10 DISPUTES.**

**2.10.1** Facility Owner and Contractor agree to engage in good faith efforts to resolve any disputes arising from the performance under this Contract and to utilize the third-party dispute resolution assistance provided under the WYECIP by the Wyoming Business Council, State Energy Office, which shall be Contractor's sole remedy.

**2.10.2 *Governmental Claims:*** Any actions or claims against Facility Owner under this Contract must be in accordance with and are controlled by the

Wyoming Governmental Claims Act, W.S. § 1-39-101 et seq. (1977) as amended.

**2.11 ENERGY PERFORMANCE CONTRACT.** The Parties intend to negotiate an Energy Performance Contract under which Contractor will design, install and implement energy and water saving measures to which the Parties have agreed, and provide certain maintenance and monitoring services. Nothing in this Contract should be construed as an obligation on any of the Parties to execute such a contract. The terms and provisions of such an Energy Performance Contract will be set forth in a separate contract.

### **3.0 Scope of Work**

**3.1 GENERAL.** Contractor shall perform an Investment Grade Audit in accordance with the Scope of Work described below. Contractor agrees to complete the Investment Grade Audit and tender to Facility Owner a final report within **120** calendar days from the execution of this Contract.

Facility Owner agrees to assist Contractor in performing the Investment Grade Audit in accordance with the Scope of Work described below. Facility Owner agrees to work diligently to provide full and accurate information. Contractor agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed.

The parties contemplate that this will be an interactive and iterative process and that Facility Owner will have a reasonable amount of time to review and determine acceptance before issuing the Notice of Acceptance of Investment Grade Audit Report (Attachment H).

Contractor agrees to offer an Energy Performance Contract Project Proposal with a package of energy and water saving measures and with details as specified in the Scope of Work below.

Upon satisfactory completion of the Investment Grade Audit, Facility Owner will have the option to execute an Energy Performance Contract (EPC) with Contractor to implement the recommended project. The EPC will define the final agreed upon scope of work and all its associated costs and mutual responsibilities between Contractor and Facility Owner.

**3.2 INVESTMENT GRADE AUDIT.** The Investment Grade Audit shall be performed and the Energy Performance Contract Project Proposal prepared as described in this section.

**3.2.1 Types of Energy Conservation Measures.** This Contract requires Contractor to possess the capability to implement Energy Conservation Measures (ECMs) that include one or more of the following energy efficiency or renewable energy technology categories. Contractor shall consider technologies in a comprehensive approach including, but not limited to measures listed in the following categories. The category number shall be used when identifying measures in the Investment Grade Audit Report and Energy Performance Contract Project Proposal.

**3.2.1.1 Lighting Improvements (Category 1).**

- a) Interior and exterior lighting upgrades.
- b) Lighting control improvements including occupancy sensors.
- c) LED exit sign upgrade.
- d) Other LED lighting upgrades.
- e) Daylighting.

**3.2.1.2 Boiler Plant improvements (Category 2).**

- a) Boiler Plant improvements (retrofits, replacements).
- b) Boiler control improvements.

**3.2.1.3 Chiller Plant improvements (Category 3).**

- a) Chiller Plant improvements (retrofits, replacements).
- b) Chiller control improvements.
- c) Cooling tower retrofits or replacements.

**3.2.1.4 HVAC System Improvements (Category 4).**

- a) Packaged air conditioning unit replacements.
- b) Replacement of air conditioning and heating units with heat pumps.
- c) Air side economizer installation.
- d) Indoor air quality improvements.
- e) Fan replacement.
- f) Pump replacement or impeller trimming.
- g) Window air conditioning replacement with high efficiency units.
- h) Variable air volume (VAV) retrofit.

**3.2.1.5 Controls and Building Automation System Improvements (Category 5).**

- a) Upgrade from pneumatics to Direct Digital Control.
- b) Upgrade or replacement of existing BAS systems.
- c) HVAC damper and controller repair or replacement.
- d) Scheduling.

- e) Programmable thermostats.

**3.2.1.6 Distribution Systems-Chilled Water, Hot Water, Steam (Category 6).**

- a) Leak repairs
- b) Piping insulation.
- c) Steam trap monitoring, repair and replacement.
- d) Domestic water heater/heat exchanger repair and replacement.
- e) Meters and submeters.

**3.2.1.7 Electric Motors and Drives (Category 7).**

- a) Replace motors with high efficiency motors.
- b) Variable Speed/Frequency Drives.

**3.2.1.8 Water-consuming Systems (Category 8).**

- a) Installation of low-flow showerheads.
- b) Installation of other low-flow plumbing equipment.
- c) Installation of water efficient irrigation and control systems.
- d) Sewage systems improvements.
- e) Meters and submeters.

**3.2.1.9 Building Envelope Improvements (Category 9).**

- a) Installation of insulation.
- b) Weatherization.
- c) Window replacement.
- d) Window tinting.
- e) Cool/Cold roof systems.

**3.2.1.10 Renewable Energy Systems (Category 10).**

- a) Installation of photovoltaic systems.
- b) Installation of solar hot water systems.
- c) Installation of wind energy systems.
- d) Installation of passive solar heating systems.
- e) Installation of passive geothermal heating systems.

**3.2.1.11 Miscellaneous Systems (Category 11).**

- a) Refrigeration equipment replacements or improvements.
- b) Kitchen equipment replacements or improvements.
- c) Pool equipment replacements or improvements.
- d) Laundry equipment replacements or improvements.
- e) Laboratory equipment replacements or improvements.
- f) Exhaust and fume hood systems.

g) Other miscellaneous equipment/systems.

**3.2.1.12 Energy Related Process Improvements (Category 12).**

a) Manufacturing/production improvements.

**3.2.1.13 Distributed Generation (Category 13).**

a) Co-generation systems installation.

b) Micro turbines installation.

c) Fuel cell systems installation.

**3.2.1.14 Energy and Utility Distribution Systems (Category 14).**

a) Transformer installation.

b) Power quality upgrades.

c) Power factor correction.

d) Substations.

e) Meters and submeters.

**3.2.1.15 Electrical Peak Shaving/Load Shifting (Category 15).**

a) Thermal energy storage.

b) Fuel Switching.

**3.2.1.16 Energy Cost Reduction Through Rate Adjustments (Category 16).**

a) Recommendations for changing to more favorable rate schedule.

b) Recommendations for energy service billing and meter auditing.

c) Other rate adjustment recommendations.

**3.2.1.17 Commissioning Services (Category 17).**

a) Retro-commissioning.

b) Continuous commissioning.

**3.2.2 Restrictions on Energy and Water Conservation Measures.**

**3.2.2.1** Energy and water conservation measures proposed or installed by Contractor shall not introduce any of the following conditions.

a) Degraded performance or reliability of existing Facility Owner equipment.

b) Reduction or elimination of extra capacity that was intentionally included for future growth, mission needs, safety, or emergency back-up.

- c) An adverse effect upon the quality of the human environment or violate any Federal, State, or local environmental protection regulations.
- d) Jeopardized operation or environmental conditions of dedicated computers or computer rooms.
- e) Increased water consumption; e.g., once through fresh water cooling systems (Note: evaporative cooling technologies may be considered where environmentally appropriate).
- f) Violation of current versions of national, State, or local building codes.
- g) Unsafe conditions or otherwise adversely impacted Facility Owner facilities, operations, and/or personnel.

**3.2.3 Standards of Comfort.** Energy and water conservation measures proposed or installed by Contractor shall comply with the Standards of Comfort required by Facility Owner. The standards of comfort will be defined during project development meetings between Contractor and Facility Owner and will generally include acceptable temperature and humidity ranges, air quality parameters, lighting levels, and other related factors. Typical standards are described below.

**3.2.3.1 HVAC Systems**

**a) Occupied Areas:**

1. Comfort Range: 65°-78°F dry bulb temperature; 30%-60% relative humidity.
2. Setbacks: For general occupied areas (except computer rooms) the following setbacks may be performed:
  - i. During unoccupied periods during the heating season, the temperature may be reduced to 55°F dry bulb.
  - ii. During unoccupied periods during the cooling season, the HVAC system may be turned off. However, the system must be designed so that it will restart if the temperatures approach levels that could damage equipment.
  - iii. In any case, temperatures must be restored to the 65°- 78°F dry-bulb range by the start of the next occupied period.
3. Outside air shall not be reduced below the quantities cubic feet per minute (CFM) per person value found in ASHRAE 62-89 (or most current version), "Ventilation for Acceptable Indoor Air Quality".

**b) Computer Rooms:**

1. Operating Range: 70°-74°F dry bulb temperature; 45%-55% relative humidity.
2. Setbacks: No setbacks may be performed.

**c) Control Systems:**

1. Designs and specifications for control systems modifications shall ensure that existing systems within the facility are modified to be fully compatible with any new systems installed, particularly with regard to communication protocols.
  2. Control systems requiring manufacturer-proprietary protocols should not be considered in the design of retrofit measures.
  3. All new DDC control system designs shall use open communication protocol for control sensors, devices, etc., including those provided by manufacturers of HVAC equipment.
  4. Thermostatic tolerance must be within plus or minus two degrees Fahrenheit for Occupied Areas and plus or minus one degree Fahrenheit for Computer Rooms.
- d) Hospitals and other special areas may have special requirements that shall be specified separately.**

**3.2.3.2 Lighting Systems.** Except where special circumstances exist, illumination levels shall be maintained as near as practical to the Illuminating Engineering Society of North America (IES) recommended illumination level.

**3.2.4 Allowable Costs and Savings.**

**3.2.4.1 Savings.** The following are allowable savings factors approved for consideration. Facility Owner will provide Contractor with sufficient guidance to develop savings estimates. Any savings related to maintenance and operation of the facilities will be rigorously reviewed and shall be limited to those that can be thoroughly documented.

- a) Energy and water savings.
- b) Customer material/commodity savings, including scheduled replacement of parts.
- c) Outside labor cost savings, including maintenance contracts.

**3.2.4.2 Negotiable Items.** The following may be negotiated. Any savings related to maintenance and operation of the facilities will be limited to those that can be thoroughly documented.

- a) Facility Owner in-house labor costs.
- b) Facility Owner deferred maintenance cost.
- c) Escalation rates for natural gas, electricity, water, material/commodity cost savings, and allowable labor savings. These are rates to be used in cash flow projections for project development purposes. Actual rates and a floor rate may be used in a subsequent Energy Performance Contract.
- d) Interest rates (all types of financing that are available and could be considered for this project).
- e) Outside incentive funds (utility incentives, grants, etc.).
- f) Customer equity cash contribution to the project.

**3.2.4.3 Costs.** Construction Costs shall include the following:

- a) Labor (and normal fringe benefits) paid by Contractor, **including** labor for design, construction management, monitoring and commissioning.
- b) Equipment and materials incorporated into the project.
- c) Construction equipment used in the construction phase, but which are not incorporated into the project.
- d) Subcontract costs including any payments to third parties relating to subcontracted work on the site **including** costs for design, construction management, monitoring or commissioning.
- e) Miscellaneous project costs include reasonable expenses for bonds, insurance, job trailers, portable toilets, job vehicles, software licensed to Facility Owner, and job site office space, but **excludes** costs incurred by Contractor for office supplies and expenses including document reproduction, phone and fax usage; incidental job site expenses such as tools; repairs to Contractor or Subcontractor equipment; meals; and sales, management, and administrative travel and overnight accommodations.
- f) Markups and fees shall be as defined in Attachment C, Cost and Pricing Elements. These markups and fees shall be used in the Investment Grade Audit and are subject to negotiation again prior to execution of any subsequent Energy Performance Contract.

### 3.2.5 Energy Performance Contract Requirements

**3.2.5.1 Energy Performance Contract Term.** The WYECIP Energy Performance Contract may have a term no greater than twenty (20) years and no greater than the cost-weighted average lifetime of the equipment. Facility Owner's goal is for a term no greater than [REDACTED] years.

**3.2.5.2 Annual Savings Estimates.** The utility and operational and maintenance cost savings for all measures must be estimated for each year during the Contract period. Reporting average annual savings over the term of the Contract shall not be acceptable.

**3.2.5.3 Annual Guaranteed Energy and Cost Savings.** The cost of an Energy Performance Contract project must be covered by the reduced energy and related operation and maintenance cost savings incurred at Facility Owner's facility. Facility Owner may provide additional capital contributions to fund incremental costs above the portion of the project that is funded by savings.

The annual guarantee is required for the entire financing term. The guarantee is based on cost savings attributable to all energy saving measures, and must equal or exceed all project costs each year during the Contract period. The energy cost savings must be verified annually.

In instances when Facility Owner elects to pay the cost of the Energy Performance Contract project without the use of financing, the annual guarantee shall be required for the term described in the Energy Performance Contract.

Annual project costs include debt service, Contractor fees, maintenance services, monitoring services, and other services as defined in the Energy Performance Contract.

**3.2.5.4 Excess Savings.** Annual cost savings beyond the guaranteed minimum savings will be retained by Facility Owner, and will not be allocated to shortfalls in other years.

**3.2.5.5 Measurement and Verification of Performance.** Contractor shall prepare and submit a site-specific Measurement & Verification (M&V) Plan with its Energy Performance Contract Project Proposal. The M&V plan shall follow the

International Performance Measurement and Verification Protocol (IPMVP) and specify the M&V options(s) and method(s) that will be used for each energy and water conservation measure included in the Energy Performance Contract.

The M&V plan shall also include a schedule indicating M&V activities and post-implementation M&V reporting for each energy and water conservation measure. Typical M&V activities include, but are not limited to the following items.

**a) Define pre-implementation baseline including:**

1. Equipment/Systems.
2. Baseline energy use.
3. System performance factors (e.g., lighting levels, temperature setpoints, time clock settings, etc.).
4. Actions to determine baseline energy use, which may include site surveys, short term or long term metering, analysis of billing data, and/or engineering calculations.

**b) Define post installation conditions including:**

1. Equipment/Systems.
2. Post installation energy use.
3. Actions to determine post installation energy use which may include site surveys, short-term or long-term metering, analysis of billing data, and/or engineering calculations.
4. Factors beyond Contractor's control that influence post-installation energy (e.g. building occupancy, plug load creep, etc.).

**c) M&V submittals including:**

1. Pre-implementation baseline development (part of Investment Grade Audit and Energy Performance Contract Project Proposal).
2. Site-specific M&V plan (part of Investment Grade Audit and Energy Performance Contract Project Proposal).
3. Post installation report verifying that installed ECMs demonstrate the guaranteed annual energy, energy-related, and water cost savings specified in the Energy Performance Contract.
4. Annual Measurement and Verification Report to Facility Owner including data and calculations that demonstrate that continued performance achieves the guaranteed annual energy, energy-related, and water

cost savings as required by the Energy Performance Contract.

**3.2.5.6 Project Financing.** Financing for projects implemented under the WYECIP may be provided directly by Facility Owner or through a third party financier under a separate agreement between Facility Owner and a financing company. Contractor agrees to include Facility Owner's recommended financial institutions if so requested for this project.

Contractor may be required to solicit bids for financing on behalf of Facility Owner. To solicit bids, Contractor shall use the RFP and supplemental information provided in Attachment D (Financing RFP Package).

**3.2.5.7 Investment Grade Audit and Energy Performance Contract Elements Overview.** During the Implementation and Performance Periods, Contractor shall be responsible for providing all labor, material, etc. to install energy and water conservation projects and provide operations and maintenance as specified in the Energy Performance Contract.

Details regarding the exact improvement measures, the equipment and labor costs associated with them, and all guaranteed energy and maintenance cost savings shall be provided in Contractor's Energy Performance Contract Project Proposal. A separate financing agreement shall be developed including payment schedules and lender financing terms and schedules.

In lieu of work proposed to be performed by Contractor or a subcontractor recommended by Contractor, Contractor agrees Facility Owner may specify that certain energy conservation measure components will be subject to requests for bids to Contractor from one or more contractors acceptable to Facility Owner. Contractor shall provide its specifications for bids for review and comment prior to their release to bidders. Upon written request by Facility Owner, Contractor will provide Facility Owner copies of all bid responses. Contractor must consent to the bidder reasonably recommended by Facility Owner and Contractor warrants that such consent shall not be unreasonably withheld.

**3.2.6 Process and Deliverables.** Facility Owner and Contractor must have clear communications and understanding with regard to project requirements to ensure development and implementation of a project is consistent with and appropriate to the needs of Facility Owner. The process followed for the Investment Grade Audit and Project Development Contract shall be an interactive approach in working with Facility Owner. The process steps that shall be performed by Contractor are briefly described below with further details in subsequent sections. Additional details on process and requirements are found in the WYECIP Program Manual.

**3.2.6.1 *Investment Grade Audit and Project Development Kickoff Meeting***

Following execution of this Investment Grade Audit and Project Development Contract, Contractor and Facility Owner shall schedule a kickoff meeting to provide the opportunity for everyone who will be involved in the project to meet in a formal setting to discuss interests, plans, problems, etc. related to the facility and its operation and to establish goals and parameters for the Investment Grade Audit and development of the Project Proposal. Contractor shall create the kickoff meeting agenda and submit it to Facility Owner within a reasonable time before the meeting and shall be responsible for the capture and publication of meeting notes to all parties.

**3.2.6.2 *Initial Assessment of Needs, Goals, and Opportunities.***

- a) If Contractor has previously prepared an Initial Feasibility Report this step builds upon that report to provide a more in-depth assessment of the project's potential
- b) Meet with Facility Owner to determine interests, plans, problems, etc. related to the facility and its operation and establish goals.
- c) Collect data and background information on buildings, equipment and facilities operation.
- d) Perform an initial survey of facilities and interview staff and occupants to identify potential measures.
- e) Meet with Facility Owner to present preliminary findings and establish agreement on measures to analyze further.

**3.2.6.3 *Preliminary Analysis of Potential Measures.***

- a) Establish base year consumption and reconcile with end-use consumption estimates.
- b) Conduct a preliminary analysis of potential measures.

- c) Meet with Facility Owner to present preliminary findings and establish agreement on measures for detailed evaluation.

**3.2.6.4 *Develop Measures and Draft Investment Grade Audit Report and Energy Performance Contract Proposal.***

- a) Complete detailed energy analysis for potential measures.
- b) Develop a draft Investment Grade Audit Report and Energy Performance Contract Project Proposal.
- c) Meet with Facility Owner to discuss draft Investment Grade Audit Report and Energy Performance Contract Project Proposal.

**3.2.6.5 *Prepare Final Investment Grade Audit Report and Energy Performance Contract Project Proposal.***

- a) Revise Investment Grade Audit Report as needed after discussion with Facility Owner.
- b) Assemble a package of options which are compatible with Facility Owner's investment and infrastructure improvement goals.
- c) Prepare final Project Proposal for an Energy Performance Contract and present to Facility Owner.

**3.2.7 *Collect data and background information from Facility Owner.***

**3.2.7.1** Facility Owner will provide Contractor with information concerning facility operation and energy use for the most recent thirty-six (36) months from the effective date of this Agreement but not limited to the following.

- a) Building area (square footage).
- b) Construction date of buildings and major additions.
- c) Utility company invoices.
- d) Occupancy and usage information, including principal building activity.
- e) Description of all energy-consuming or energy-saving equipment used on the premises, as available.
- f) Description of energy management procedures utilized on the premises.
- g) Description of any energy-related improvements made or currently being implemented.
- h) Description of any changes in structure of the facility or energy-using or water-using equipment.
- i) Description of future plans regarding building modifications or equipment modifications and replacements.

- j) Drawings, as available (may include mechanical, plumbing, electrical, buildings automation and temperature controls, structural, architectural, modifications, and remodels).
- k) Original construction submittals and factory data (specifications, pump curves, etc.), as available.
- l) Operating engineer logs, maintenance work orders, etc. as available.
- m) Records of maintenance expenditures on energy-using equipment, including service contracts.
- n) Prior energy audits or studies, if any.

**3.2.7.2** Facility Owner agrees to work diligently to furnish Contractor, upon request, accurate and complete data and information as available. Where information is not available from Facility Owner, Contractor will make a diligent effort to collect such information through the facility inspection, staff interviews, and utility companies. Contractor agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed.

### **3.2.8 Perform an Initial Assessment.**

Contractor shall perform an initial survey of facilities to identify potential measures.

**3.2.8.1** Interview the facility manager, maintenance staff or others regarding facility operation, including, but not limited to the following items.

- a) Energy management procedures.
- b) Equipment maintenance problems.
- c) Equipment reliability.
- d) Comfort problems and requirements.
- e) Projected equipment needs.
- f) Occupancy and use schedules for the facility and specific equipment.
- g) Facility improvements, past and planned.

**3.2.8.2** Inspect major energy-using equipment including, but not limited to the following.

- a) Lighting (indoor and outdoor).
- b) Heating and heat distribution systems.
- c) Cooling systems and related equipment.
- d) Temperature control systems and equipment.
- e) Air distribution systems and equipment.
- f) Outdoor ventilation systems and equipment.

- g) Exhaust systems and equipment.
- h) Hot water systems.
- i) Electric motors, transmission and drive systems.
- j) Special systems (kitchen/dining equipment, swimming pools, laundry equipment, etc.).
- k) Renewable energy systems.
- l) Other energy using systems.
- m) Water consuming systems (restroom fixtures, water fountains, irrigation systems, etc.).

**3.2.8.3** Perform “late-night” surveys outside of normal business hours or on weekends to confirm building system and occupancy schedules, if deemed necessary.

**3.2.8.4** Develop a preliminary list of potential energy and water saving measures considering the following for each system.

- a) Energy use, loads, proper sizing, efficiencies and hours of operation.
- b) Current operating condition.
- c) Comfort and maintenance problems.
- d) Remaining useful life.
- e) Feasibility of system replacement.
- f) Outdoor ventilation systems and equipment.
- g) Hazardous materials and other environmental concerns.
- h) Facility Owner’s future plans for equipment replacement or building renovations.
- i) Facility operation and maintenance procedures that could be affected.
- j) Indoor air quality.

**3.2.8.5** Facility Owner will allow Contractor reasonable access to facility staff to ensure understanding of existing systems and opportunities. Contractor agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed.

**3.2.8.6** Contractor shall meet with Facility Owner to present results of in initial assessment of energy use, savings potential, retrofit opportunities, and potential for developing an energy performance contract.

**3.2.9 Establish base year consumption and reconcile with end use consumption estimates.**

**3.2.9.1** Analyze utility bills for the most recent thirty-six (36) months and establish base year consumption for electricity, gas, steam, water, etc. in terms of energy units (kWh, kW, ccf, Therms, gallons, or other units used in bills) and in terms of dollars per square foot and in terms of BTUs per square foot. Identify the base year and describe the process used to determine the base year (averaging, selecting most representative contiguous 12 months, etc.). Consult with facility personnel to account for any anomalous billings that could skew the base year representation. Account for periods of time when equipment was broken or malfunctioning in calculating the base year.

**3.2.9.2** Estimate loading, usage and/or hours of operation for all major end uses of total facility consumption including, but not limited to the following items.

- a) Lighting.
- b) Heating.
- c) Cooling.
- d) HVAC motors (fans and pumps).
- e) Plug loads.
- f) Kitchen equipment.
- g) Other energy or water using equipment.

**3.2.9.3** Where loading or usage are highly uncertain (including variable loads such as cooling), Contractor will use its best judgment, spot measurements or short-term monitoring. Contractor should not assume that equipment run hours equal the operating hours of the building(s) or facility staff estimates.

**3.2.9.4** Reconcile annual end-use estimated consumption with the annual base year consumption to within five percent for electricity (kWh), fuels and water. Also reconcile electric peak demand (kW) for each end use within five percent. The miscellaneous category can be no greater than five percent. This reconciliation will place reasonable limits on potential savings.

**3.2.9.5** Propose adjustments to the baseline for energy and water saving measures that will be implemented in the future.

**3.2.10 Develop a preliminary analysis of potential energy and water saving measures.**

**3.2.10.1** Preliminary analysis shall be compiled and submitted to Facility Owner within 45 calendar days of the execution of this Contract.

**3.2.10.2** List all potential opportunities, whether cost-effective or not. Consider technologies in a comprehensive approach including, but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems, other special equipment, irrigation systems, and water saving devices.

**3.2.10.3** Identify measures which appear likely to be cost effective and therefore warrant detailed analysis.

**3.2.10.4** For each measure, prepare a preliminary estimate of energy or water cost savings including description of analysis methodology, supporting calculations and assumptions used to estimate savings.

**3.2.10.5** For each measure, prepare a preliminary estimate of implementation costs. Markups and fees shall be as defined in Attachment C, Cost and Pricing Elements.

**3.2.11 Present preliminary analysis to Facility Owner.**

**3.2.11.1** Present results of preliminary analysis including assessment of energy use, savings potential, retrofit opportunities, and potential for developing an energy performance contract. Describe how the projected project economics meet Facility Owner's terms for completing the requirements of the audit report.

**3.2.11.2** Develop a list of recommended measures for further analysis. Facility Owner's rejection of calculations of savings, potential savings allowed, or project recommendations shall be at the risk of Contractor.

**3.2.12 Analyze each Energy Conservation Measure (ECM).**

- 3.2.12.1** For the Investment Grade Audit and Project Development, Contractor shall analyze savings and costs for each energy and other cost saving measure including water saving.
- 3.2.12.2** Follow the methodology of ASHRAE or other nationally-recognized authority following the engineering principle(s) identified for each retrofit measure.
- 3.2.12.3** Utilize assumptions, projections and baselines which best represent the true value of future energy or operational savings. Include accurate marginal costs for each unit of savings at the time the audit is performed, documentation of material and labor cost savings, adjustments to the baseline to reflect current conditions at the facility, calculations which account for the interactive effects of the recommended measures.
- 3.2.12.4** Use best judgment regarding the employment of instrumentation and recording durations so as to achieve an accurate and faithful characterization of energy use.
- 3.2.12.5** Use costs, markups and fees as defined in Attachment C, Cost and Pricing Elements.
- 3.2.12.6** Develop a proposed measurement and verification plan for each measure.
- 3.2.12.7** Develop a proposed training program for Facility Owner's staff on operations and maintenance of each measure.
- 3.2.12.8** Identify potential financing arrangements, rebates, incentives, grants, etc.
- 3.2.12.9** Prepare a detailed report following the additional guidelines for analysis and report preparation described in Section 3.2.14 below.

**3.2.13 Conduct Project Development Meetings.**

- 3.2.13.1** Due to the considerable amount of issues that must be covered and the close interaction required, Contractor and Facility Owner shall schedule meetings and focused workshops as required to cover specific elements of the Investment Grade

Audit and Project Proposal development. This format allows concentration on specific issues in each workshop. Workshops shall cover the following proposal elements:

- a) Energy Conservation Measures.
- b) Energy Baseline and Adjustments to the Baseline.
- c) Measurement and Verification.
- d) Financial.
- e) Construction.
- f) Performance Period Services.

**3.2.13.2** Contractor shall create an agenda and submit it to Facility Owner within a reasonable time before each meeting or workshop and shall be responsible for the capture and publication of meeting notes to all parties.

**3.2.14 Prepare a Draft Investment Grade Audit Report and Energy Performance Contract Project Proposal.** The Investment Grade Audit Report provides an engineering and economic basis for developing a potential Energy Performance Contract and a proposal for implementing the project. A draft version of this report shall be completed within **90** calendar days of the date of execution of this Contract. The report shall include all of the items described in the following sections in the order given.

**3.2.14.1 Overview Section.**

This section shall be an executive summary of the proposed project and will include the following in the order shown.

- a) Contact information.
- b) Summary table of recommended energy and water saving measures, with itemization for each measure of total design and construction cost, annual maintenance costs, the first year cost avoidance (in dollars and energy units), simple payback and equipment service life.
- c) Summary of annual energy and water use by fuel type and costs of existing or base year condition.
- d) Calculation of cost savings expected if all recommended measures are implemented and total percentage savings of total facility energy cost.
- e) Description of the existing facility, mechanical and electrical systems.
- f) Summary description of measures, including estimated costs and savings for each as detailed above.

- g) Explanation of how savings will be calculated and adjusted due to weather (such as heating or cooling degree days), occupancy changes or other factors.
- h) Preliminary analysis of energy performance contract terms to include:
  - 1. Interest rate used in the analysis.
  - 2. Expected contract term (in number of years.)
  - 3. Analysis of annual cashflow for Facility Owner during the contract term.
- i) Description of how the project will be financed including available interest rates and financing terms, based on interest rates likely available to Facility Owner at this time, and based on available lock options.
- j) Discussion of measures considered but not investigated in detail.
- k) Conclusions and recommendations.

#### **3.2.14.2 Base Year Energy Use Section.**

This section shall contain detailed information on development of the energy baseline and shall include the following in the order shown:

- a. Description and itemization of current billing rates, including schedules and riders.
- b. Summary of all utility bills for all fuel types and water.
- c. Identification and definition of base year consumption and description of how established.
- d. Reconciliation of estimated end use consumption (i.e. lighting, cooling, heating, fans, plug loads, etc) with base year including discussion of any unusual findings.

#### **3.2.14.3 Energy and Water Conservation Measures Section.**

This section shall contain full written descriptions of each energy and water conservation measure, and savings calculations as described in the following sections and in the order given.

- a) **Full written description of each energy or water conserving measure to include:**
  - 1. Description of existing conditions.
  - 2. Sequential measure identification using numbering per categories described in Paragraph 3.2.1 (e.g. ECM 1.1 Lighting Improvements, ECM 1.2 Lighting Controls, etc.).
  - 3. Detailed description of measure.

4. Discussion of facility operations and maintenance procedures that will be affected by installation/implementation.
  5. Plan for installing or implementing the recommendation.
  6. Estimated energy or water savings.
- b) Savings calculations including:**
1. Base year energy use and cost.
  2. Post-retrofit energy use and cost.
  3. Annual savings estimates including analysis methodology. The cost savings for all energy saving measures must be estimated for each year during the Contract period. Savings must be able to be achieved each year. Reporting average annual savings over the term of the Contract shall not be acceptable.
  4. Annual energy or water savings for each measure shall be illustrated within each measure description by utilizing tables as shown below (Example shown for Electrical/Gas Savings – Other energy or water shall be similar).

Table (#) Proposed Annual Energy Savings

	Electrical Consumption (kWh)	Electrical Demand (kW)	Nat. Gas Consumption (MMBTU)
Baseline			
Proposed			
Savings			

5. Annual cost savings in dollars for each measure shall be illustrated within each measure description by utilizing tables as shown below (Example shown for Electrical/Gas Savings – Other energy or water shall be similar).

Table (#) Proposed Annual Energy Cost Savings

	Electrical	Nat. Gas	Total
Baseline			
Proposed			
Savings			

6. Savings estimates must be limited to savings allowed by Facility Owner as described in Section 3.2.4.
7. Percent cost-avoidance projected.

8. Description and calculations for any proposed rate changes.
9. Explanation of how a savings interaction between retrofit options is accounted for in calculations and how savings duplication or interaction between retrofit options is avoided.
10. Operation and maintenance savings, including detailed calculations and description. Maintenance savings shall only be those that can be clearly documented and shall only be applied during the lifetime of the particular equipment.
11. If computer simulation is used, include a short description and state key input data. If requested by Facility Owner, access will be provided to the program and all assumptions and inputs used, and/or printouts shall be provided of all input files and important output files and included in the Investment Grade Audit with documentation that explains how the final savings figures are derived from the simulation program output printouts.
12. If manual calculations are employed, formulas, assumptions and key data shall be stated.

#### **3.2.14.4 Management Plan Section.**

The Management Plan shall contain information on how the construction will be managed including items such as security and safety controls, staging areas, delivery routes, crane locations, and interfaces required at the site with the using agency. As part of the management plan the proposed project schedule indicating critical dates and other information in detail shall be submitted. The management plan should be concise and contain all of the items described in the following sections in the order given.

- a) **Approach.** Provide detailed information on Contractor's approach to managing the implementation of the Energy Performance Contracting project. Management, coordination, use of subcontractors, and engagement of the Wyoming Business Council, State Energy Office and Facility Owner in project implementation and post-construction activities must be described.
- b) **Organization.** Provide Contractor's organization chart (by name as available) for implementing and managing the project, to include the responsibilities of each individual element shown and the lines of authority within the overall

organization. Also identify what portions of the effort if any, are to be sub-contracted, and if so, provide the same information for subcontractor organization and personnel.

- c) **Subcontractors.** Discuss work that is proposed to be completed by Contractor or by a subcontractor and Contractor's approach to selection and management of subcontractors. Any subcontractors ESCo has already selected shall be identified and relationships between ESCo and subcontractors must be discussed. Facility Owner has final approval over any subcontractors.
- d) **Construction Management.** Discuss how Contractor will work with current building management and maintenance personnel in order to coordinate construction and avoid conflicts with the building's operation and use. Flexibility and/or any limitations regarding other possible Facility Owner activities such as management of additional energy and water projects and integration of other identified capital needs with other projects which may or may not contain energy and water saving opportunities should be included.
- e) **Preliminary Installation Schedule.** Show the order in which Contractor proposes to perform the work and the dates on which Contractor contemplates starting and completing all major milestones (including acquiring materials, equipment, permits). The schedule shall be in the form of a progress chart of suitable scale to indicate the amount of work scheduled for completion by any given date during the installation period.
- f) **Planned Service Interruptions.** Describe any utility services that must be discontinued temporarily to perform work, and indicate on the project installation schedule. The description shall include the length of the interruption, its time (date, day of week, time of day, etc.), and a justification.
- g) **Operations, Maintenance, Repair, and Replacement.** Show the organizational structure and describe the approach for performance of the proposed ECM operations, maintenance and repair and replacement requirements. Each ECM will identify the organization(s) (Facility Owner or Contractor/sub-contractor) responsible for operations and maintenance of Contractor-installed equipment. Detail how responsibilities are shared or reference where this information is located. Identify reporting requirements of Facility Owner or Contractor during the performance

period. Responsibilities and risks of operations shall be briefly defined in the Risk Assessment Matrix.

- h) Training.** Provide a detailed description of how training for each measure will be provided for Facility Owner personnel. Training should be customized to reflect the level of operations and maintenance responsibility to be assumed by Facility Owner personnel.
- i) Risk Assessment Matrix.** Contractor shall complete and submit with its proposal a Risk Assessment Matrix detailing its proposed approach or method to address each area of potential risk listed. The format and content of this Risk Assessment Matrix set out in the Risk Assessment Matrix (Attachment E).

### **3.2.14.5 Other information to be provided:**

- a)** Description of savings guarantee (in energy units and dollars).
- b)** Estimate of average useful service life of equipment proposed.
- c)** Proposed commissioning plan for equipment/systems to be installed.
- d)** Proposed Measurement and Verification Plan, following the International Performance Measurement and Verification Protocol (IPMVP), explaining how savings from each measure is to be measured and verified (stipulated by Contract, utility bill analysis, end-use measurement and calculation, etc.). The Preliminary M&V plan shall follow the Measurement and Verification Plan Guidelines (Attachment F) and the requirements detailed in the WYECIP Program Manual.
- e)** Discussion of impacts that facility would incur after Contract ends. Consider operation and maintenance impacts, staffing impacts, budget impacts, etc., and identify responsibilities for maintenance of installed measures.
- f)** Discussion of compatibility with existing systems. (e.g. Controls/BAS upgrades or replacements must be compatible with controls systems that are to remain).

### **3.2.14.6 Price Proposal Section.**

Contractor's price proposal will include a detailed scope of the construction work needed and all anticipated costs associated with installation and implementation as described below.

- a)** Detailed scope of the construction work needed, suitable for cost estimating.

- b) Project Cost is the total Guaranteed Maximum Price Owner will pay for the project and ESCo's services. A list of services that will be provided as related to each cost shall be included. Cost details must be provided for Owner review. Costs shall include all anticipated costs associated with installation and implementation including:
1. Engineering, designing, packaging, procuring, installing (from Investment Grade Audit Report results) costs.
  2. Financing costs (based on interest rates likely available to Facility Owner at this time).
  3. Contractor/vendor bids for labor, materials, equipment; include special provisions, overtime, etc., as needed to accomplish the work with minimum disruption to the operations of the facilities.
  4. Subcontractor bids and/or proposals (Minimum of three per subcontracted item unless otherwise agreed to by Owner). Subcontractor bids and/or proposals shall be consistent with WYECIP Guaranteed Maximum Price and Open Book Pricing requirements.
  5. Permit costs.
  6. Performance/payment bond costs.
  7. Construction management costs.
  8. Commissioning costs.
  9. Operation and /or maintenance costs.
  10. Training costs.
  11. Other costs.
  12. Company overhead/profit.
  13. Environmental costs or benefits (disposal, avoided emissions, handling of hazardous materials, etc.).
  14. Markups and costs used in the cost estimates shall not exceed those disclosed and negotiated as shown on Cost and Pricing Elements (Attachment C).
- c) Description of potential utility rebates or other incentives that may apply to the project.
- d) Proposed financing structure.
- e) Completed draft versions of EPC Schedules (Attachment G) as described in Section 3.2.15.4.

**3.2.14.7 Appendix material.**

Complete Appendix material that documents the data and assumptions used to prepare the analyses and describes how data was collected shall be provided with the Draft Investment Grade Audit Report and Project Proposal. At a minimum this material shall include

- f) Description of data collection methodology.
- g) Supporting calculations and assumptions used for developing savings estimates for **each** proposed measure.
- h) Specifications and manufacturer cut sheets for major mechanical components.
- i) Detailed lighting and water fixture counts.
- j) Subcontractor bids/cost proposals.
- k) Electronic copies of computer modeling data.

**3.2.15 Meet with Facility Owner to discuss Draft Investment Grade Audit Report and Energy Performance Contract Project Proposal.**

**3.2.15.1** Review the recommendations, savings calculations and impact of the measures on the operations of the facility. Describe how the projected project economics meet Facility Owner's terms for completing the Investment Grade Audit and Performance Contract Project Proposal. Discuss the willingness and capability of Facility Owner to make capital contributions to the project to improve the economics of the overall project.

**3.2.15.2** Contractor agrees that Facility Owner may specify certain energy conservation measures for which Facility Owner may provide the labor, equipment and supplies, but Facility Owner shall remain obligated for the audit costs related to that portion of the work.

**3.2.15.3** Review the proposed Project Cost and list of services to be provided to determine which additional services Facility Owner may want Contractor to provide.

**3.2.15.4** Develop mutual agreement on energy and water savings measures to be included, baseline, implementation plan, savings guarantee, measurement and verification approach, and project financials which are compatible with Facility Owner's investment and infrastructure improvement goals.

**3.2.16 Prepare Final Investment Grade Audit Report and Energy Performance Contract Project Proposal.** The Final Investment Grade Audit Report and Energy Performance Contract Project Proposal shall be completed within **120** calendar days of the date of execution of this Contract as follows.

- 3.2.16.1** Update and finalize the Draft Investment Grade Audit Report and Energy Performance Contract Project Proposal based upon the results of the review described in Section 3.2.15 above. Contractor shall make all changes in the draft document as reviewed and requested by Facility Owner.
- 3.2.16.2** Incorporate energy and water savings measures, baseline, implementation plan, savings guarantee, measurement and verification approach, project financials, capital contributions by Facility Owner and other items mutual agreed upon.
- 3.2.16.3** Final Investment Grade Audit Report and Energy Performance Contract Project Proposal shall include final iterations of **all** elements described in Section 3.2.13 above.
- 3.2.16.4** Include completed Contract Schedules (Attachment G) as follows:
- a) **Schedule CS-1 Proposed Implementation Cost by Energy Conservation Measure.**
1. Schedule CS-1 presents the implementation period investment for each ECM included in a specific Energy Performance Contract project. It reflects the equipment proposed for installation for each ECM indicated along with its implementation price and the calculation of the total estimated implementation price, or investment, for all proposed ECMs for the Energy Performance Contract project.
  2. Additionally, this schedule presents the first year annual cost savings proposed from the Investment Grade Audit and a simple payback in years for each ECM indicated along with the calculation of the total first year annual cost savings for all proposed ECMs and aggregate simple payback for the Energy Performance Contract project. This information will correlate with the information provided on Schedule CS-2.
  3. Both the ECM and category numbers shall be provided, in accordance with the numbering described in Section 3.2.1 of this Contract. The ECM numbers indicated in this Schedule shall be consistent throughout Contractor's proposal, both technical and price.
  4. The total bonded amount on CS-1 will be used to establish performance and payment bond requirements for the ECM implementation period, if applicable, in accordance with the Energy Performance Contract document.

**b) Schedule CS-2 Proposed First Year Annual Cost Savings.**

1. Schedule CS-2 shall be submitted to present a summary of the proposed estimated annual cost savings that will be achieved following the installation of the ECMs included in the Energy Performance Contract Project proposal. Both the ECM and category numbers shall be provided, in accordance with the numbering described in Section 3.2.1 of this Contract.
2. The annual cost savings presented for each ECM shall be broken down into energy, water and O&M cost savings. The energy savings shall be presented in the energy type consumed by the equipment as listed in the columns on Schedule CS-2. Subsequent demand and dollar savings shall be derived from the project site utility rates provided for the Investment Grade Audit.
3. The building square footage affected by the project shall be included in the Schedule and total energy savings shall be converted to KBtu's per square foot per year for a project summary.
4. Contractor shall provide adequate supporting documentation for the estimated annual cost savings submitted in Schedule CS-2, to include whatever detail is pertinent to the project.

**c) Schedule CS-3 Proposed Performance Period Cash Flow.**

1. Schedule CS-3 presents the proposed project cash flow for the project. Development of this schedule will require Contractor to coordinate information with the financial services provider. The schedule is divided into three sections as follows:
  - i. The Project Capitalization section contains the implementation price (which should correlate with Schedule CS-1), plus any financing procurement costs, less any pre-performance period payments, resulting in the total amount financed.
  - ii. The Term section illustrates the debt service stream on that investment, including any annual capital contribution from Facility Owner.
  - iii. The Performance Period section pertains to the total expenses associated with the services Contractor supplies to manage the project, and maintain and verify ECM performance during the performance

period of the Energy Performance Contract project term.

2. Contractor shall propose the estimated cash flows for each year of the proposed Energy Performance Contract project term. The pricing provided in this schedule shall be traceable to the information provided in Schedules CS-2 and CS-4.
  3. Contractor shall specify the Applicable Financial Index used with its source and date, the financing term of the project (in years), the index rate (derived for the project's term from the financial index), any added premium being applied to amortize the investment, and the resultant Project Interest Rate. The date through which the proposed Project Interest Rate is effective through must be identified on the Schedule.
  4. Additional sheets shall be provided for this Schedule as needed to reflect the actual number of years in the Energy Performance Contract project term. Totals for each row over the term shall be calculated and shown in the far right column.
- d) Schedule CS-4 Proposed Guaranteed Annual Cost Savings and Annual Payments.**
1. Schedule CS-4 presents Contractor's proposed annual cost savings, guaranteed annual energy savings, and the annual financing payments. The values submitted on Schedule CS-4 are for 12-month periods, beginning with the Construction Period (Year 0) and continuing for all contract years after completion by Contractor of the implementation period for all ECMs, and acceptance by Facility Owner. The annual cost savings proposed and Contractor's guaranteed annual cost savings for each year of the Energy Performance Contract performance period shall be based on the results of the Investment Grade Audit and correlate with the other Contract Schedules required for submission.
  2. Schedule CS-4 shall specify any applicable escalation rates that will be used for utilities during the Energy Performance Contract's period of performance. The estimated annual cost savings shall be based on the specified rates for utilities and any applicable escalation.
  3. The total annual financing payments proposed shall be for each year of the proposed performance period after

ECM implementation and acceptance by Facility Owner. Payments will be structured based upon the negotiated annual fixed payment schedule and included in the Energy Performance Contract award. This represents the Energy Performance Contract cost and will be supported by the information submitted in the other CS schedules submitted with the Energy Performance Contract Project Proposal.

**e) Schedule CS-5 Proposed Annual Termination Ceiling.**

1. Schedule CS-5 shall be submitted for all Energy Performance Contract Project Proposals that include financing. Development of this schedule will require Contractor to coordinate information with the financial services provider.
2. The column headed “Total Termination Ceiling,” is a presentation of proposed, and later negotiated, annual cancellation ceilings to establish the maximum termination liability in the event of Contract cancellation or termination. Actual termination charges will be negotiated as part of any cancellation or termination settlement, per established State of Wyoming requirements.
3. The column headed “Outstanding Capital Investment,” is a fixed subset of the Total Termination Ceiling. It constitutes the remaining unamortized principal on Total Amount Financed for each time period specified in the Schedule CS-5, plus any prepayment charges as negotiated and included in the pricing (including financing) of the project.

**3.2.16.5** Prepare material for the Energy Performance Contract documents. Include materials in editable format (Microsoft Word<sup>®</sup>, Excel<sup>®</sup>, Project<sup>®</sup>, etc.) for creation of the Energy Performance Contract documents by WYECIP.

**3.2.17 Facility Owner Review and Acceptance of the Final Investment Grade Audit Report and Energy Performance Contract Proposal.**

**3.2.17.1** Facility Owner shall carefully review the Final Investment Grade Audit Report and Energy Performance Contract Project Proposal. If acceptable, Facility Owner shall issue a Notice of Acceptance of Investment Grade Audit Report (Attachment H) The Notice of Acceptance of Investment Grade Audit Report is



for acceptance of the report only and does not constitute agreement with proposed pricing, acceptance of all proposed measures, or a notice to proceed with construction. Acceptance of ESCo’s Project Proposal will be via the Energy Performance Contract following final negotiations.

**3.3 SUMMARY OF DELIVERABLES.** The following summarizes the deliverables associated with this Contract and due dates for those deliverables:

<b>Deliverable</b>	<b>Due Date</b>
Contractor Certificates of Insurance	At Contract execution
Preliminary Analysis of Potential Measures	<b>45</b> days after Contract execution
Draft Investment Grade Audit and Energy Performance Contract Project Proposal	<b>90</b> days after Contract execution
Final Investment Grade Audit and Energy Performance Contract Project Proposal	<b>120</b> days after Contract execution



**Wyoming Energy Conservation Improvement Program  
Investment Grade Audit and Project Development Contract**

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**4.0 Signatures.** In witness thereof, the parties to this Contract, either personally or through their duly authorized representatives, have executed this Contract on the days and dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Contract.

**(FACILITY OWNER NAME)**

\_\_\_\_\_

**(Printed Name) , (Title)**

\_\_\_\_\_

**Date**

**ATTEST:**

\_\_\_\_\_

**(If needed) (Printed Name) , (Title)**

\_\_\_\_\_

**Date**

**Reviewed as to form by (if applicable):**

\_\_\_\_\_

**(Printed Name) , (Title)**

\_\_\_\_\_

**Date**

**CONTRACTOR NAME**

\_\_\_\_\_

**(Printed Name), (Title)**

\_\_\_\_\_

**Date**