## Energy Lifecycle Cost Analysis Summary Form

|  |  |  |  |
| --- | --- | --- | --- |
| Date: | Click here to enter a date. | Project Architect: |       |
| Project No.: |       | Mechanical Engineer: |       |
| Project Name: |       | Computer Program: |       |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Scheme Name: |  | Narrative: |
| Schemes: | A. |       |  |       |
|  | B. |       |  |       |
|  | C. |       |  |       |
|  | D. |       |  |       |

Attach continuation pages when needed.

**Building Parameters: Prepared by:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Thermal transmittance of exterior walls | **U =** |       Btuh/sq.ft - °F |  | **Name:** |       |
| Thermal transmittance of roof | **U =** |       Btuh/sq.ft - °F |  |  |  |
| Thermal transmittance of glazing | **U =** |       Btuh/sq.ft - °F |  | Signature: |
| Glazing shade coefficient | **SC=** |       |  | Date: |       |
| Building Area (Gross) | **A =** |       Sq. Ft. |  | Phone: |       |

|  |  |
| --- | --- |
| **Item** | **Energy Data** (MBtu/sq.ft. - year) (MBtu = Thousands or BTUs) |
| Scheme **A** | Scheme **B** | Scheme **C** | Scheme **D** |
| Interior lights |       |       |       |       |
| Heating Primary |       |       |       |       |
| Cooling Primary |       |       |       |       |
| Terminal Systems |       |       |       |       |
| Other Uses \* |       |       |       |       |
| **Total** |  |  |  |  |

\* List Other Uses: e.g., Hot Water Heating, Exhaust Fans, Elevators, Exterior Lights.

|  |  |
| --- | --- |
| **Life CycleCost Item** | **Cost Value** (Present Value Dollars) |
| Scheme **A** | Scheme **B** | Scheme **C** | Scheme **D** |
| Initial Cost |       |       |       |       |
| Replacement Costs |       |       |       |       |
| Energy Costs |       |       |       |       |
| O&M Costs |       |       |       |       |
| Total for 25 Years |       |       |       |       |
| Energy Cost/Year |       |       |       |       |

**File:** PSG-Exhibit 7-Energy Lifecycle Cost Analysis Summary Form.docx

**USF PSG, 4.4.1.9**

Energy life cycle cost analysis complying with University requirements must be conducted:

1. when the project provides thirteen-thousand (**13,000**) or more new gross square feet or an estimated total new HVAC load of forty (**40**) tons or more; or,
2. when the project includes renovation of space and new HVAC air handling units for which the load is forty (**40**) tons or more.

**USF-FM Operations, 8/31/2017:**

1. **Utilities Rates (TECO & City of Tampa rates vary based on tiered system, provided rates are averaged)**
2. Electricity – Tied to USF System - $0.09/kWh
3. Electricity – Tied to TECO Directly - $0.11/kWh
4. Chilled Water - $10.8196/MMBTU
5. Hot Water - $11.7812/MMBTU
6. Domestic Water – Tied to USF System - $2.4734/kGal
7. Domestic Water – Tied to City of Tampa - $6/kGal
8. Sewage - $7.7785/kGal
9. Natural Gas - $4.73/MMBTU
10. **Labor Rates (Includes burden & supervision)**
11. Maintenance (General, Key Shop, Fire Safety) - $58.82/hr
12. Utilities (General, Energy, Plant) - $67.87/hr
13. Utilities High Voltage - $83.68/hr
14. Grounds - $49.13/hr
15. Custodial - $31.14/hr