EA PREREQUISITE 2: MINIMUM ENERGY PERFORMANCE

Project # 1000022379 H-E-B Austin Mueller

All fields and uploads are required unless otherwise noted.

THRESHOLD ATTEMPTED

Points Attempted: 0

ALL OPTIONS

TARGET FINDER

The following fields are required, but the values have no bearing on EA Prerequisite 2 compliance. Use the Target Energy Performance Results calculator on the ENERGY STAR website to generate the values. If using prescriptive compliance paths (Options 2 or 3), leave the Design energy consumption and cost values blank in the Target Finder website, and set the Design values equal to the Target values in this form.

	Design	Target
Energy performance rating(1-100):	100	100
CO_2-eq emissions (metric tons/year):	1,955	2,708
CO_2-eq emissions reduction:	64 %	50 %

Upload EAp2-1. Provide the Target Finder Energy Performance Results for the project building (a screen capture or other documentation containing the same information). (Optional)

Upload *Files: 1*

☐ The building is not able to get a Target Finder score because the tool does not support the primary building type of the project building and/or the project is not located in the United States (Optional)

PREREQUISITE COMPLIANCE

Total gross square footage: 83,587 sf

Principal project building activity: Retail: Grocery Store/Food Market

The content highlighted in yellow above is linked to PIf3 & EAc1.

Save Form

Select a compliance path:

- (●) **Option 1. Whole Building Energy Simulation.** The project team will document improvement in the proposed building performance rating as compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 or California Title 24-2005 Part 6.
- ( ) **Option 2. Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide.** The project team will document compliance with the ASHRAE Advanced Energy Design Guide.
- ( ) **Option 3. Prescriptive Compliance Path: Advanced Buildings Core Performance Guide.** The project team will document compliance with the Advanced Buildings™ Core Performance™ Guide.

The content highlighted in yellow above is linked to EAc1, EAc2 & EAc6.

OPTION 1. WHOLE BUILDING ENERGY SIMULATION

Complete the following sections:

Section 1.1A - General Information
Section 1.1B - Mandatory Requirements
Section 1.2 - Space Summary
Section 1.3 - Advisory Messages
Section 1.4 - Comparison of Proposed Design Versus Baseline Design Energy Model Inputs
Section 1.5 - Energy Type Summary
Section 1.6 - Performance Rating Method Compliance Report
Section 1.7 - Exceptional Calculation Measure Summary (if applicable)
Section 1.8 - On-Site Renewable Energy (if applicable)
Section 1.9A - Total Building Performance Summary
Section 1.9B - Reports & Metrics

SECTION 1.1A - GENERAL INFORMATION

☒ **Compliant energy simulation software:** The energy simulation software used for this project has all capabilities described in EITHER section "G2 Simulation General Requirements" in Appendix G of ASHRAE 90.1-2007 OR the analogous section of the alternative qualifying energy code used.

☒ **Compliant energy modeling methodology:** Energy simulation runs for both the baseline and proposed building use the assumptions and modeling methodology described in EITHER ASHRAE 90.1-2007 Appendix G OR the analogous section of the alternative qualifying energy code used.

Simulation program:	eQuest
Principal heating source:	Fossil Fuel
Energy code used:	ASHRAE 90.1-2007

List the ASHRAE addenda used in the modeling assumptions, if any. (Optional)

Zip/Postal Code:	78723

The content highlighted in yellow above is linked to EAc1.5 & SSc1.

Weather file:	USA_TX_Austin-Mueller.Muni.AP.722540_TMY3.BIN
Climate zone:	2A

List the climatic data from ASHRAE Standard 90.1-2007 Table D-1. Specify if another source is referenced for HDD & CDD data.

Heating Degree Days:	1,688
Cooling Degree Days:	7,171
HDD and CDD data source, if other than ASHRAE: (Optional)	From ASHRAE 90.1 2

New construction gross square footage:	83,587
Existing, renovated gross square footage:	0
Existing, unrenovated gross square footage:	0
Total gross square footage:	83,587
New construction percent:	100 %
Existing renovation percent:	0 %
Existing unrenovated percent:	0 %

The content highlighted in yellow above is linked to PIf2 & MRc2.

Gross square footage used in the energy model, if different than gross square footage above: (Optional) 82,013

SECTION 1.1B - MANDATORY REQUIREMENTS

Signatory EAp2-1.

For all elements included in the Architect's scope of work for the project building, the project building design complies with all ASHRAE Standard 90.1-2007 mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4), and the information provided regarding the proposed case energy model in Section 1.4 is consistent with the building design.

Select one of the following:

(●) **Signature.** Provide a digital signature affirming the required signatory statement in gray directly above.

Initial here: JS

Janet Selser; Architect; April 9, 2013

OR

( ) **Upload EAp2-S1.** Provide a document with the signatory statement, copied directly from the form, signed and dated on letterhead.

Signatory EAp2-2.

For all elements included in the Mechanical Engineer's scope of work for the project building, the project building design complies with all ASHRAE Standard 90.1-2007 mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4), and the information provided regarding the proposed case energy model in Section 1.4 is consistent with the building design.

Select one of the following:

(●) **Signature.** Provide a digital signature affirming the signatory statement in gray directly above.

Initial here: KM

Kevin Manhen; HVAC Engineer; March 19, 2013

OR

( ) **Upload EAp2-S2.** Provide a document with the signatory statement, copied directly from the form, signed and dated on letterhead.

Signatory EAp2-3.

For all elements included in the Electrical Engineer's scope of work for the project building, the project building design complies with all ASHRAE Standard 90.1-2007 mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4), and the information provided regarding the proposed case energy model in Section 1.4 is consistent with the building design.

Select one of the following:

(●) **Signature.** Provide a digital signature affirming the signatory statement in gray directly above.

Initial here: SA

SERGIO ANDERMANN; MEP Engineer; April 5, 2013

OR

( ) **Upload EAp2-S3.** Provide a document with the signatory statement, copied directly from the form, signed and dated on letterhead.

SECTION 1.2 - SPACE SUMMARY

Table EAp2-1. Space Usage Type

Space Name / Description	Space Usage Type	Gross Area (sf)			Typical Hours/Week in Operation		
		Space Total	Regularly Occupied	Unconditioned			
Bakery	Bakery	2,117	2,117	0	126	+	-
Bathroom	Bathroom	813	813	0	126	+	-
Breakroom	Breakroom	738	738	0	126	+	-
Cash	Cash	214	214	0	126	+	-
Checkstands	Checkstands	5,078	5,078	0	126	+	-
Conference	Conference	670	670	0	126	+	-
Cooler	Cooler	6,602	6,602	0	126	+	-
Corridor	Corridor	1,157	1,157	0	126	+	-
Customer Service	Customer Service	551	551	0	126	+	-
Deli	Deli	900	900	0	126	+	-
Electrical	Electrical	90	90	0	126	+	-
Elevator	Elevator	133	0	133	126	+	-
Floral	Floral	919	919	0	126	+	-
General Merchandise	General Merchandise	23,541	23,541	0	126	+	-
Janitor	Janitor	47.7	47.7	0	126	+	-
Kitchen	Kitchen	2,994	2,994	0	126	+	-
Market	Market	8,226	8,226	0	126	+	-
Office	Office	1,025	1,025	0	126	+	-
Pharmacy	Pharmacy	1,269	1,269	0	126	+	-
Produce	Produce	10,431	10,431	0	126	+	-
Receiving	Receiving	3,006	3,006	0	126	+	-

Space Name / Description	Space Usage Type	Gross Area (sf)			Typical Hours/Week in Operation		
		Space Total	Regularly Occupied	Unconditioned			
Seafood	Seafood	2,814	2,814	0	126	+	-
Seating	Seating	1,524	1,524	0	126	+	-
Stairs	Stairs	214	214	0	126	+	-
Storage	Storage	410	410	0	126	+	-
Vestibule	Vestibule	1,438	1,438	0	126	+	-
Wareroom	Wareroom	6,337	6,337	0	126	+	-
Total		83,258.7	83,125.7	133			
Percentage of total (%)			99.84	0.16			

SECTION 1.3 - ADVISORY MESSAGES

Complete Table EAp2-2 based on information from the energy simulation output files.

Table EAp2-2. Advisory Messages

	Baseline Design (0° Rotation)	Proposed Design
Number of hours heating loads not met [1]	33	42
Number of hours cooling loads not met [1]	0	36
Total	33	78
Difference [2] *(Proposed minus baseline)*	45	
Number of warning messages		
Number of error messages		
Number of defaults overridden		
Unmet load hours compliance	Y	

Notes:
1 Baseline design and proposed design unmet load hours each may not exceed 300
2 Unmet load hours for the proposed design may not exceed the baseline design by more than 50 hours.

SECTION 1.4 - COMPARISON OF PROPOSED DESIGN VERSUS BASELINE DESIGN ENERGY MODEL INPUTS

Download, complete, and upload "EAp2 Section 1.4 table.xls" (found under "Credit Resources") to document the Baseline and Proposed design energy model inputs for the project. All energy modeling inputs should be entered in this table except for Exceptional Calculation Measures (documented in Section 1.7), On-Site Renewable Energy (documented in Section 1.8), and energy consumption for equipment listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 credit requirements (documented in Upload EAp2-4). Documentation should be sufficient to justify the energy and cost savings numbers reported in Section 1.6.

Upload EAp2-3. Provide the completed EAp2 Section 1.4 Tables available under "Credit Resources."

Upload *Files: 3*

Does project include process equipment listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 credit requirements, (commercial kitchen equipment*, supermarket refrigeration equipment*, walk-in coolers and freezers, and/or commercial kitchen ventilation equipment)?

(•) Yes ( ) No

Upload EAp2-4. Provide the completed "EAp2/EAc1 Section 1.4 Table 1-4 Process Efficiency Measures, Option 1" spreadsheet (found under "Credit Resources") to document the Table 1 - 4 inputs, energy consumption, and costs for the project.

Upload *Files: 1*

SECTION 1.5 - ENERGY TYPE SUMMARY

List the energy types used by the project (i.e. electricity, natural gas, purchased chilled water or steam, etc.) for the baseline and proposed designs. *If revising the values in Table EAp2-3, reselect energy type in all affected rows in Table EAp2-4 and Table EAp2-5 to ensure that the revised values from Table EAp2-3 are propagated and that Table EAp2-4 and Table EAp2-5 calculations are refreshed.*

Table EAp2-3. Energy Type Summary

Energy Type	Utility Company Name	Utility Rate and Description of Rate Structure[1]	Baseline Virtual Rate [2] ($ per unit energy)	Proposed Virtual Rate [2] ($ per unit energy)	Units of Energy	Units of Demand
Electricity	Austin Energy	Secondary Voltage Greater than 50kW	0.0741	0.072	kWh	kW
Natural Gas	Texas Gas Servic	Monthly charges were given to the des	0.4594	0.4457	therms	therms/hr

+ -

Notes:

1 Per ASHRAE 90.1-2007 G2.4, project teams are allowed to use the state average energy prices published by DOE's EIA for commercial building customers, available on EIA's website (www.eia.gov). If project uses backup energy for on-site renewable energy, please specify the rate of backup source energy.

2 List the virtual energy rate from the baseline and proposed design energy model results or from manual calculations. This rate is defined as the total annual charge divided by the metered energy from the plant for each resource.

If the proposed and baseline rates vary significantly, describe the building input parameters (e.g. demand reduction measures) leading to the variation in energy rates, and provide detailed information regarding the utility rate structure including all demand and energy charges, and the seasonal and time-of-use structure of the utility tariff. (Required when proposed and baseline rates vary by more than 10%)

Upload EAp2-5. Provide any documentation to support the proposed/ baseline rate variance narrative. (Optional)

Upload *Files: 0*

SECTION 1.6 - PERFORMANCE RATING METHOD COMPLIANCE REPORT

List each energy end use for the project (including all end uses reflected in the baseline and proposed designs), then list the energy consumption and peak demand for each end-use for all four baseline design orientations.

Table EAp2-4. Baseline Performance - Performance Rating Method Compliance

End Use	Process Load?	Design Energy Type	Units of Annual Energy & Peak Demand		0° rotation	90° rotation	180° rotation	270° rotation	Building Results
Interior Lighting		Electricity	Energy Use	kWh	757,997	757,997	757,997	757,997	757,997
			Demand	kW	359.19	359.19	359.19	359.19	359.19
Exterior Lighting		Electricity	Energy Use	kWh	247,726	247,726	247,726	247,726	247,726
			Demand	kW	48.48	48.48	48.48	48.48	48.48
Space Heating		Natural Gas	Energy Use	therms	25,368	25,504	25,241	25,217	25,332.5
			Demand	therms/h	36	36	36	36	36
Space Cooling		Electricity	Energy Use	kWh	359,583	347,933	358,764	349,862	354,035.5
			Demand	kW	292.24	283.51	288.18	283.98	286.98
Pumps		Electricity	Energy Use	kWh	42,481	42,343	42,373	42,398	42,398.75
			Demand	kW	6.24	6.24	6.23	6.23	6.24
Heat Rejection		Electricity	Energy Use	kWh	0	0	0	0	0
			Demand	kW	0	0	0	0	0
Fans-Interior		Electricity	Energy Use	kWh	427,691	425,069	427,081	426,242	426,520.75
			Demand	kW	86.91	88.25	101.8	98.12	93.77
Fans - Parking Garage	X		Energy Use						
			Demand						
Service Water Heating		Natural Gas	Energy Use	therms	34,797	34,795	34,795	34,797	34,796
			Demand	therms/h	10.1	10.1	10.1	10.1	10.1
Receptacle Equipment	X	Electricity	Energy Use	kWh	395,081	395,081	395,081	395,081	395,081
			Demand	kW	68.82	68.82	68.82	68.82	68.82
Interior Lighting - Process	X	Electricity	Energy Use						
			Demand						
Refrigeration Equipment[1]	X	Electricity	Energy Use						
			Demand						
Cooking	X	Natural Gas	Energy Use	therms	15,216	15,216	15,216	15,216	15,216
			Demand	therms/h	17.37	17.37	17.37	17.37	17.37

Industrial Process	☒		Energy Use						
			Demand						
Elevators and Escalators	☒	Electricity	Energy Use	kWh	2,348	2,348	2,348	2,348	2,348
			Demand	kW	5.76	5.76	5.76	5.76	5.76
Commercial Kitchen Equipment*	☒		Energy Use						
			Demand						
Supermarket Refrigeration*	☒	Electricity	Energy Use	kWh	1,473,554	1,473,554	1,473,554	1,473,554	1,473,554
			Demand	kW	233.5	233.5	233.5	233.5	233.5
Walk-in Coolers and Freezers*	☒		Energy Use						
			Demand						
Commercial Kitchen Ventilation*	☒		Energy Use						
			Demand						
	☐		Energy Use						
			Demand						
Baseline - Total Energy Use (MMBtu/yr)					20,184.54	20,148.78	20,166.4	20,131.05	20,157.69
Baseline - Annual Process Energy (MMBtu/yr)									7,905.39
Process Energy Modeling Compliance [2]									**Y**

+ -

Notes:

1 For any refrigeration equipment explicitly listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 credit requirements, use rows below. For all other refrigeration equipment, use this row.

** Energy savings from energy use or consumption attributable to process equipment NOT listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 must be claimed via Section 1.7 Exceptional Calculation Methodology.*

2 Annual process energy costs must be at least 25% of the total energy costs for the proposed design. This form determines compliance using cost calculations from Section 1.9. Process Energy Costs should be modeled to accurately reflect the proposed building. Process Energy must be the same in the baseline and proposed cases, unless an exceptional calculation is used. Process energy costs must be at least 25% of the total baseline energy costs. Any exceptions must be supported by a narrative and/or other supporting documentation.

List the energy consumption and peak demand for each end-use for all four proposed design orientations.

Table EAp2-5. Performance Rating - Performance Rating Method Compliance

		Baseline			Proposed			
End Use	Process Load?	Units of Annual Energy Consumption and Peak Demand		Building Results	Design Energy Type	Units of Annual Energy Consumption and Peak Demand		Building Results	Percent Savings
Interior Lighting		Energy Use	kWh	757997	Electricity	Energy Use	kWh	364,660	51.89
		Demand	kW	359.19		Demand	kW	53.02	
Exterior Lighting		Energy Use	kWh	247726	Electricity	Energy Use	kWh	121,066	51.13
		Demand	kW	48.48		Demand	kW	23.69	
Space Heating		Energy Use	therms	25332.5	Natural Gas	Energy Use	therms	9,187	63.73
		Demand	therms/hr	36		Demand	therms/hr	15.1	
Space Cooling		Energy Use	kWh	354035.5	Electricity	Energy Use	kWh	858,113	-142.38
		Demand	kW	286.98		Demand	kW	478.42	

Save Form

Pumps		Energy Use	kWh	42398.75	Electricity	Energy Use	kWh	295,957	-598.03
		Demand	kW	6.24		Demand	kW	18.2	
Heat Rejection		Energy Use	kWh	0	Electricity	Energy Use	kWh	24,457	0
		Demand	kW	0		Demand	kW	1.5	
Fans-Interior		Energy Use	kWh	426520.75	Electricity	Energy Use	kWh	157,828	63
		Demand	kW	93.77		Demand	kW	33.01	
Fans - Parking Garage	X	Energy Use				Energy Use		0	0
		Demand				Demand			
Service Water Heating		Energy Use	therms	34796	Natural Gas	Energy Use	therms	34,773	0.07
		Demand	therms/hr	10.1		Demand	therms/hr	10.1	
Receptacle Equipment	X	Energy Use	kWh	395081	Electricity	Energy Use	kWh	395,081	0
		Demand	kW	68.82		Demand	kW	68.82	
Interior Lighting - Process	X	Energy Use			Electricity	Energy Use	kWh	0	0
		Demand				Demand	kW	0	
Refrigeration[1] Equipment	X	Energy Use				Energy Use		0	0
		Demand				Demand			
Cooking	X	Energy Use	therms	15216	Natural Gas	Energy Use	therms	15,216	0
		Demand	therms/hr	17.37		Demand	therms/hr	17.37	
Industrial Process	X	Energy Use				Energy Use			0
		Demand				Demand			
Elevators and Escalators	X	Energy Use	kWh	2348	Electricity	Energy Use	kWh	2,348	0
		Demand	kW	5.76		Demand	kW	5.76	
Commercial Kitchen Equipment*	X	Energy Use				Energy Use			0
		Demand				Demand		0	
Supermarket Refrigeration*	X	Energy Use	kWh	1473554	Electricity	Energy Use	kWh	799,681	45.73
		Demand	kW	233.5		Demand	kW	98	
Walk-in Coolers and Freezers*	X	Energy Use				Energy Use			0
		Demand				Demand			
Commercial Kitchen Ventilation*	X	Energy Use				Energy Use			0
		Demand				Demand			
		Energy Use				Energy Use			0
		Demand				Demand			
Total Energy Use (MMBtu/yr)				20,157.69				16,219.08	
Process Energy (MMBtu/yr)				7,905.39				5,606.14	

Notes:

1 For any refrigeration equipment explicitly listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 credit requirements, use rows below. For all other refrigeration equipment, use this row.

** Energy savings from energy use or consumption attributable to process equipment NOT listed in Tables 1-4 of the LEED-NC for Retail EA Credit 1 must be claimed via Section 1.7 Exceptional Calculation Methodology.*

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Table EAp2-6. Section 1.6 Energy Use Summary

		Baseline		
Energy Type	Units	Process Subtotal	Total Energy Use	Proposed Energy Use
Electricity	kWh	1,870,983	3,699,661	3,019,191
Natural Gas	therms	15,216	75,344.5	59,176
		0	0	0
Totals	MMBtu	7,905.39	20,157.69	16,219.08

Table EAp2-7. Section 1.6 Energy Cost Summary (Automatic)

		Baseline		
Energy Type	Units	Process Subtotal	Total Energy Cost	Proposed Energy Cost
Electricity	$	138,639.84	274,144.88	217,381.75
Natural Gas	$	6,990.23	34,613.26	26,374.74
	$	0	0	0
Total	$	145,630.07	308,758.14	243,756.5

Select one of the following:

- (•) **Section 1.6 Automatic Cost Calculation:** Total building energy costs will be based on the "virtual" energy rate defined in Section 1.5.
- ( ) **Section 1.6 Manual Cost Input:** The project team will analyze the total building energy costs based on local utility rate structures. Costs will be input separately from the energy model.

Note: Energy cost savings are summarized in Section 1.9A Total Building Performance Summary.

SECTION 1.7 - EXCEPTIONAL CALCULATION MEASURE SUMMARY

Select one of the following:

- (•) The energy analysis includes exceptional calculation method(s) (ASHRAE 90.1-2007, G2.5).
- ( ) The energy analysis does not include exceptional calculation methods.

For each exceptional calculation method employed, document the predicted energy savings by energy type. If an end-use has an energy loss rather than an energy savings, enter it as a negative number.

Table EAp2-10. Exceptional Calculations

End Use	Exceptional Calculation Method Description	Energy Type(s)	Unit	Annual Energy Savings

End Use	Exceptional Calculation Method Description	Energy Type(s)	Unit	Annual Energy Savings
Miscellaneous	Please refer to memo. Savings have	Electricity	kWh	0
Electricity			kWh	0
Natural Gas			therms	0
				0
Total			MMBtu	0

Upload EAp2-7. Provide a narrative explaining the exceptional calculation method(s) performed, and theoretical or empirical information supporting the accuracy of the method(s). Reference any applicable Credit Interpretation Rulings.

Upload *Files: 2*

Table EAp2-11. Section 1.7 Energy Cost Savings Summary (Automatic)

Energy Type	Units	Proposed Energy Savings
Electricity	$	0
Natural Gas	$	0
	$	0
Total	$	0

Select one of the following: *Note: The same method has to be used for all the measures in this section*

- (•) **Automatic Cost Calculation:** Exceptional calculation measure cost savings will be based on the "virtual" energy rate defined in Section 1.5.
- ( ) **Manual Cost Input:** The project team will analyze exceptional calculation measure costs for each exceptional calculation measure based on local utility rate structures. Costs will be input separately from the energy model

Note: Energy cost savings are summarized in Section 1.9A Total Building Performance Summary. Calculated cost savings will be automatically subtracted from the proposed design energy model results when determining the Proposed Building Performance Rating.

SECTION 1.8 - ON-SITE RENEWABLE ENERGY

Select one of the following

- (•) The project uses on-site renewable energy produced on-site.
- ( ) The project does not use on-site renewable energy.

Table L-1. Renewable Energy Source Summary

Renewable Source	Renewable Energy Source Allocation	Renewable System Owner	Backup Energy Type[1]	Rated Capacity	Annual Energy Generated	Units	Annual Energy Cost ($) (Optional[2])		
PV	On-Site only	Building Owner	Electricity	169.07	234,800	kWh	16,882	+	-
Energy savings - Electricity					234,800	kWh	16,882		
Energy savings - Natural gas					0		0		
Energy savings -					0		0		
Total energy savings					801.14	MMBtu	16,882		

Notes:
1 Per ASHRAE 90.1 G2.4 Exception, baseline performance shall be based on the energy source used as backup energy or on the use of electricity if no backup energy source is specified.
2 Annual energy cost is required to document credit compliance with EA Credit 2, if attempted.

The content highlighted in yellow above is linked to EAc1 & EAc2.

Table EAp2-13 Section 1.8 Energy Cost Savings Summary (Automatic)

Energy Type	Units	Proposed Renewable Energy Savings
Electricity	$	16,905.6
Natural Gas	$	0
	$	0
Total	$	16,905.6

Select one of the following: *(Note that the same method has to be used for all the measures in this section)*

- (●) **Automatic Cost Calculation:** Renewable energy cost savings will be based on the "virtual" energy rate defined in Section 1.5.
- ( ) **Manual Cost Input:** The project team will analyze the renewable energy cost for on-site renewable sources based on local utility rate structures. Costs will be input separately from the energy model.
- ( ) **Energy Model Includes Renewables:** On-site renewable energy is modeled directly in the energy model. Renewable Energy Cost is already credited in the proposed design energy model results (i.e. the energy model already reflects zero cost for on-site renewable energy, and this form will NOT subtract the Renewable Energy Cost a second time.

Note: Energy cost savings are summarized in Section 1.9A Total Building Performance Summary. Calculated cost savings will be automatically subtracted from the proposed design energy model results when determining the Proposed Building Performance Rating UNLESS "Energy Model Includes Renewable is selected above.

SECTION 1.9A - TOTAL BUILDING PERFORMANCE SUMMARY

Table EAp2-15. Total Building Energy Use Performance

		Baseline		Proposed			
Energy Type	Units	Process Subtotal	Section 1.6 Total Energy Use	Section 1.6 Energy Use	Section 1.7 Energy Savings	Section 1.8 Renewable Energy Savings	Total Energy Use

Electricity	kWh	1,870,983	3,699,661	3,019,191	0	234,800	2,784,391
Natural Gas	therms	15,216	75,344.5	59,176	0	0	59,176
		0	0	0	0	0	0
Totals	MMBtu	7,905.39	20,157.69	16,219.08	0	801.14	15,417.94
						Energy use savings (%)	23.51

The values below are automatically calculated using the virtual energy rate from Section 1.5 unless the project team has opted to manually input costs in Section 1.6, 1.7, and/or 1.8. To modify these values and/or to see automatically calculated results for reference see Sections 1.6, 1.7 or 1.8.

Table EAp2-16. Total Building Energy Cost Performance

		Baseline		Proposed			
Energy Type	Units	Process Subtotal	Section 1.6 Total Energy Cost	Section 1.6 Energy Cost	Section 1.7 Energy Savings	Section 1.8 Renewable Energy Savings	Total Energy Cost
Electricity	$	138,639.84	274,144.88	217,381.75	0	16,905.6	200,476.15
Natural Gas	$	6,990.23	34,613.26	26,374.74	0	0	26,374.74
	$	0	0	0	0	0	0
Totals	$	145,630.07	308,758.14	243,756.5	0	16,905.6	226,850.9
Baseline process energy costs as percent of total energy costs (%)		47.17			Energy cost savings (%)		26.53
						EA Credit 1 points documented	8

The content highlighted in yellow above is linked to EAc1.

Table EAp2-17. Energy Use Intensity

	Baseline EUI	Proposed EUI
Electricity (kWh/sf)		
Interior Lighting	9.068	4.363
Space Heating	0	0
Space Cooling	4.236	10.266
Fans - Interior	5.103	1.888
Service Water Heating	0	0
Receptacle Equipment	4.727	4.727
Miscellaneous	21.127	14.876
Subtotal	44.261	36.12
Natural Gas (kBtu/sf)		
Space Heating	30.307	10.991
Service Water Heating	41.628	41.601
Miscellaneous	18.204	18.204
Subtotal	90.139	70.796
Other (kBtu/sf)		
Miscellaneous	0	0.001
Subtotal	0	0.001
Total Energy Use Intensity (kBtu/sf)		
Total	241.158	194.038

Table EAp2-18. End Use Energy Percentage

	Baseline Case (%)	Proposed Case (%)	End Use Energy Savings (%)
Interior Lighting	12.83	7.67	34.07
Space Heating	12.57	5.66	40.99
Space Cooling	5.99	18.05	-43.66
Fans - Interior	7.22	3.32	23.28
Service Water Heating	17.26	21.44	0.06
Receptacle Equipment	6.69	8.31	0
Miscellaneous	37.44	35.54	45.26

- (●) The project used DOE2, eQuest or Visual DOE.
- ( ) The project used EnergyPlus.
- ( ) The project team used EnergyPro.
- ( ) The project team used HAP.
- ( ) The project team used Trace.
- ( ) The project team used other modeling software.

Upload EAp2-8. Provide the input summary and the BEPS, BEPU, and ES-D reports. Upload *Files: 2*

ADDITIONAL DETAILS

☐ Special circumstances preclude documentation of prerequisite compliance with the submittal requirements outlined in this form.

☐ The project team is using an alternative compliance approach in lieu of standard submittal paths.

SUMMARY

EA Prerequisite 2: Minimum Energy Performance Compliance Documented: Y Check Compliance