Annual Savings (Costs)		Units	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Entered Value	Project Capital Cost	$ per year	$ 279,905	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Electric Savings (Costs)	$ per year	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Heating Saving (Costs)	$ per year	$4,222	$4,593	$4,845	$5,196	$5,671	$6,113	$6,527	$6,899	$7,232	$7,473	$7,714
	Transportation Savings (Costs)	$ per year	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Savings (Costs)	**$ per year**	$4,222	$4,593	$4,845	$5,196	$5,671	$6,113	$6,527	$6,899	$7,232	$7,473	$7,714
	Net Benefit	**$ per year**	**($275,684)**	**$4,593**	**$4,845**	**$5,196**	**$5,671**	**$6,113**	**$6,527**	**$6,899**	**$7,232**	**$7,473**	**$7,714**

Annual Savings (Costs)		Units	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Entered Value	Project Capital Cost	$ per year	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Electric Savings (Costs)	$ per year	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Heating Saving (Costs)	$ per year	$7,920	$8,094	$8,235	$8,316	$8,333	$8,312	$8,244	$8,115	$7,932	$7,753	$7,554
	Transportation Savings (Costs)	$ per year	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Savings (Costs)	**$ per year**	$7,920	$8,094	$8,235	$8,316	$8,333	$8,312	$8,244	$8,115	$7,932	$7,753	$7,554
	Net Benefit	**$ per year**	**$7,920**	**$8,094**	**$8,235**	**$8,316**	**$8,333**	**$8,312**	**$8,244**	**$8,115**	**$7,932**	**$7,753**	**$7,554**

Annual Savings (Costs)		Units	2035	2036	2037	PV
Entered Value	Project Capital Cost	$ per year	$ -	$ -	$ -	**$271,753**
	Electric Savings (Costs)	$ per year	$0	$0	$0	**$0**
	Heating Saving (Costs)	$ per year	$7,381	$7,441	$7,504	**$119,948**
	Transportation Savings (Costs)	$ per year	$0	$0	$0	**$0**
	Total Savings (Costs)	**$ per year**	$7,381	$7,441	$7,504	**$119,948**
	Net Benefit	**$ per year**	**$7,381**	**$7,441**	**$7,504**	**($151,805)**

Heating		Units	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposed													
	Renewable Heat	gallons displ	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Entered Value	Renewable Heat Scheduled Re	$ per year	$ 300	$ 303	$ 306	$ 309	$ 312	$ 315	$ 318	$ 322	$ 325	$ 328	$ 331
Entered Value	Renewable Heat O&M	$ per year	$ 12,361	$ 12,485	$ 12,610	$ 12,736	$ 12,863	$ 12,992	$ 13,122	$ 13,253	$ 13,385	$ 13,519	$ 13,654
Entered Value	Renewable Fuel Use Quantity (	cords	49	49	49	49	49	49	49	49	49	49	49
Entered Value	Renewable Fuel Cost	$ per unit	$300.00	$303	$306	$309	$312	$315	$318	$322	$325	$328	$331
	Total Renewable Fuel Cost	$ per year	$ 14,700	$ 14,847	$ 14,995	$ 15,145	$ 15,297	$ 15,450	$ 15,604	$ 15,760	$ 15,918	$ 16,077	$ 16,238
	Remaining Fuel Oil (supplemen	gallons rema	650	650	650	650	650	650	650	650	650	650	650
	Total Fuel Cost (supplement)	$ per year	$ 3,404	$ 3,474	$ 3,532	$ 3,601	$ 3,684	$ 3,764	$ 3,840	$ 3,913	$ 3,981	$ 4,040	$ 4,099
	Proposed Heat Cost	**$ per year**	**$ 30,765**	**$ 31,109**	**$ 31,443**	**$ 31,791**	**$ 32,156**	**$ 32,520**	**$ 32,885**	**$ 33,248**	**$ 33,609**	**$ 33,964**	**$ 34,322**
Base													
	Fuel Use	gallons per y	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
	Fuel Cost	$ per gallon	$5.24	$5.35	$5.43	$5.54	$5.67	$5.79	$5.91	$6.02	$6.13	$6.22	$6.31
Entered Value	Fuel Scheduled Repairs	$ per year	$ 200	$ 202	$ 204	$ 206	$ 208	$ 210	$ 212	$ 214	$ 217	$ 219	$ 221
Entered Value	Fuel O&M	$ per year	$ 750	$ 758	$ 765	$ 773	$ 780	$ 788	$ 796	$ 804	$ 812	$ 820	$ 828
	Fuel Cost	$ per year	$ 34,036	$ 34,743	$ 35,319	$ 36,008	$ 36,839	$ 37,635	$ 38,403	$ 39,128	$ 39,813	$ 40,398	$ 40,987
	Base Heating Cost	**$ per year**	**$ 34,986**	**$ 35,702**	**$ 36,288**	**$ 36,987**	**$ 37,827**	**$ 38,634**	**$ 39,412**	**$ 40,147**	**$ 40,842**	**$ 41,437**	**$ 42,037**

Heating		Units	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Proposed													
	Renewable Heat	gallons displ	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850	5,850
Entered Value	Renewable Heat Scheduled Re	$ per year	$ 335	$ 338	$ 341	$ 345	$ 348	$ 352	$ 355	$ 359	$ 362	$ 366	$ 370
Entered Value	Renewable Heat O&M	$ per year	$ 13,791	$ 13,929	$ 14,068	$ 14,209	$ 14,351	$ 14,494	$ 14,639	$ 14,786	$ 14,933	$ 15,083	$ 15,234
Entered Value	Renewable Fuel Use Quantity (	cords	49	49	49	49	49	49	49	49	49	49	49
Entered Value	Renewable Fuel Cost	$ per unit	$335	$338	$341	$345	$348	$352	$355	$359	$362	$366	$370
	Total Renewable Fuel Cost	$ per year	$ 16,400	$ 16,564	$ 16,730	$ 16,897	$ 17,066	$ 17,237	$ 17,409	$ 17,583	$ 17,759	$ 17,937	$ 18,116
	Remaining Fuel Oil (supplemen	gallons rema	650	650	650	650	650	650	650	650	650	650	650
	Total Fuel Cost (supplement)	$ per year	$ 4,154	$ 4,206	$ 4,255	$ 4,297	$ 4,333	$ 4,365	$ 4,391	$ 4,412	$ 4,427	$ 4,442	$ 4,456
	Proposed Heat Cost	**$ per year**	**$ 34,680**	**$ 35,037**	**$ 35,394**	**$ 35,748**	**$ 36,098**	**$ 36,448**	**$ 36,795**	**$ 37,140**	**$ 37,482**	**$ 37,828**	**$ 38,175**
Base													
	Fuel Use	gallons per y	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
	Fuel Cost	$ per gallon	$6.39	$6.47	$6.55	$6.61	$6.67	$6.71	$6.76	$6.79	$6.81	$6.83	$6.86
Entered Value	Fuel Scheduled Repairs	$ per year	$ 223	$ 225	$ 228	$ 230	$ 232	$ 235	$ 237	$ 239	$ 242	$ 244	$ 246
Entered Value	Fuel O&M	$ per year	$ 837	$ 845	$ 854	$ 862	$ 871	$ 879	$ 888	$ 897	$ 906	$ 915	$ 924
	Fuel Cost	$ per year	$ 41,540	$ 42,061	$ 42,548	$ 42,972	$ 43,329	$ 43,646	$ 43,914	$ 44,119	$ 44,266	$ 44,422	$ 44,559
	Base Heating Cost	**$ per year**	**$ 42,599**	**$ 43,131**	**$ 43,629**	**$ 44,064**	**$ 44,432**	**$ 44,760**	**$ 45,039**	**$ 45,255**	**$ 45,414**	**$ 45,581**	**$ 45,729**

Heating		Units	2035	2036	2037	PV
Proposed						
	Renewable Heat	gallons displ	5,850	5,850	5,850	
Entered Value	Renewable Heat Scheduled Re	$ per year	$ 373	$ 377	$ 381	**$5,813**
Entered Value	Renewable Heat O&M	$ per year	$ 15,386	$ 15,540	$ 15,695	**$239,497**
Entered Value	Renewable Fuel Use Quantity (	cords	49	49	49	
Entered Value	Renewable Fuel Cost	$ per unit	$373	$377	$381	
	Total Renewable Fuel Cost	$ per year	$ 18,297	$ 18,480	$ 18,665	
	Remaining Fuel Oil (supplemen	gallons rema	650	650	650	
	Total Fuel Cost (supplement)	$ per year	$ 4,473	$ 4,516	$ 4,560	
	Proposed Heat Cost	**$ per year**	**$ 38,530**	**$ 38,913**	**$ 39,301**	**$600,310**
Base						
	Fuel Use	gallons per y	6,500	6,500	6,500	
	Fuel Cost	$ per gallon	$6.88	$6.95	$7.02	$7.08
Entered Value	Fuel Scheduled Repairs	$ per year	$ 249	$ 251	$ 254	**$3,875**
Entered Value	Fuel O&M	$ per year	$ 934	$ 943	$ 952	**$14,531**
	Fuel Cost	$ per year	$ 44,728	$ 45,160	$ 45,599	**$701,852**
	Base Heating Cost	**$ per year**	**$ 45,911**	**$ 46,355**	**$ 46,805**	**$720,258**

Life cycle cost analysis (LCCA) for School

Life Cycle Costs of Project Alternatives Ruby School	
Project:	Cluster #1
Project No.	NA
Study Period:	20
Discount Rate:	3.50%

	Alternative #1 (low)	Alternative #2 (high)
Initial Investment Cost	$ 242,213	$ 279,905
O&M and Repair Cost	$ 199,703	$ 196,928
Replacement Cost	$ 166,792	$ 166,792
Residual Value	$ 27,772	$ 55,261
Total Life Cycle Cost	$ 636,481	$ 698,887
GSF of Project	29,916	29,916
Initial Cost/ GSF	$ 8.10	$ 9.36
LCC/ GSF	$ 21.28	$ 23.36

YEAR		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Alt. 1		Discount Rate		3.50%																	
		Gen'l Inflation for O&M		1.50%																	
	NPV																				
O&M	$199,703	$ 12,361	$ 12,546	$ 12,735	$ 12,926	$ 13,120	$ 13,316	$ 13,516	$ 13,719	$ 13,925	$ 14,134	$ 14,346	$ 14,561	$ 14,779	$ 15,001	$ 15,226	$ 15,454	$ 15,686	$ 15,921	$ 16,160	$ 16,403
Replacement	$166,792	$ -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ 224,644
Residual	$27,772	$ -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ 55,261
Alt 2		Discount Rate		3.50%																	
		Gen'l Inflation for O&M		1.50%																	
	NPV																				
O&M	$196,928	$ 12,361	$ 12,361	$ 12,546	$ 12,735	$ 12,926	$ 13,120	$ 13,316	$ 13,516	$ 13,719	$ 13,925	$ 14,134	$ 14,346	$ 14,561	$ 14,779	$ 15,001	$ 15,226	$ 15,454	$ 15,686	$ 15,921	$ 16,160
Replacement	$166,792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ 224,644
Residual	$55,261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ 55,261