Scotia-Glenville Central School District Scotia, New York

To:

Susan Swartz. Superintendent

From:

Drew Giaquinto, Business Manger

Subject:

Energy costs for plan year May 2023 - April 2024

Date:

November 14, 2024

Attached please find the annual analysis of energy costs per building in the Scotia-Glenville CSD for the consortium plan year May 2023 - April 2024. Overall, energy increased by \$21,523 or 6.10% after decreasing by 16.09% in the prior period. Increases are as follows:

	23-24 v 22-23	23-24 v 22-23	22-23 v 21-22
	\$ Increase	% Increase	Comparison
Electric	+\$10,681	+ 5.42%	\$(33,000)
Gas	+ 5,504	+ 5.09%	\$(19,000)
Oil	+ 5,338	+ 11.15%	\$(15,000)
TOTAL	+\$21,523	+ 6.10%	\$(67,000)

The per square foot cost (PSF) increased by \$.03 from \$.53 PSF to \$.56 PSF. The prior year comparison displayed a \$.10 decrease from \$.63 PSF to \$.53 PSF.

The district benefits from locked-in rates through a consortium bid on Gas and Electric as well as solar energy credits. Oil is purchased through the New York State contract and prices vary month to month.

Gas and electric supply rates were locked in through April 30, 2024. In November of 2023, the Board approved our continued participation in the New York School Municipal Energy Consortium (NYSMEC). At that time, we were informed that the electricity and natural gas commodity prices had increased significantly since the prior NYSMEC bid award in 2021. It was also noted then that the 2021 contract had offered historically low prices, resulting in significant savings for NYSMEC participants over the last three years.

These new rates are locked in for two years, rather than the usual three, which will allow NYSMEC to reevaluate the market in 2026. This 23/24 analysis represents the final year of the lower rates established in the 2021 bid award. We anticipate additional increases in the 24/25 analysis under NYSMEC's new bid award which went into effect in May of 2024. The transportation/ delivery rates are based on approved rates from the Public Service Commission.

The District continues to invest in energy enhancements, as noted below:

- new heating system at Glen Worden (2022 Capital project);
- High School replacement of a dozen exterior doors in the 20/21 and 21/22 \$100K projects;
- High School and Glendaal (new boiler systems, conversion to hot water from steam);
- Middle School (new roof top units);
- HVAC controls and LED lighting through the last Energy Performance contract:
- High School replacement of 5 old air handlers with 5 new high efficiency air handlers with all new variable frequency drives; and
- new heating system at Lincoln (anticipated summer of 2025 through the 2024/25 capital improvement project).

We have also benefited from very mild-to-moderate winters. We continue since 2017-18 to benefit from the solar meters in operation at remote sites. SL Empire Solar has replaced Monolith as our solar provider and meter usage has stabilized under their ownership. Solar savings for the May 2023 through April 2024 period totaled \$50,311.

For the 23/24 fiscal year (Jul-June as compared to the plan year of May-April), utility expenses totaled \$450,976. We received a \$48,740 reconciliation refund from NYSMEC in August of 2024. The prior year utility expenses totaled \$510,965 (offset by an \$81,000 reconciliation refund from NYSMEC).

Significant savings were experienced this year at the High School, largely due to the replacement of the air handler upgrades

mentioned above. Costs at the Middle School increased, largely due to summer school being housed there and the associated costs of running the air conditioning and ventilation all summer long (chillers, rtus, air handlers, exhaust fans, and pumps).

The following analyses are attached:

- Summary by building of total energy costs with related cost per square foot;
- Summary by building of electric costs with related cost per square foot and comparison to prior year expenses;
- Summary by building of gas and oil (Glendaal) costs with related cost per square foot and comparison to prior year expenses; and
- Comparison of the total energy costs per square foot by building over the past fourteen years. Please note the significant decrease in PSF energy costs at each building from the highs in 2010/2011 and 2011/2012 to the more recent substantially lower costs.

Please let me know if you have questions or require additional information.

AG/cc

Attachments

Electric and Gas and Oi	l										
NYSM	EC 2	3-24 Plan Yea	ır (Transporta	tio	n and Supplier C	osts	by Facility)				
					Costs for Electri						
		2023/24	2023/24		2023/24						
Facility		Total	Sq. Footage	(Cost per SqFt.		22/23	hex.	22/23	inc/(decr)	% inCR/(DECR)
Beukendaal Field	\$	489.36			030	\$	525.70			\$ (36.34)	
HS admin parking light	\$	1,025.85				\$	980.06			\$ 45.79	4.67%
Bus Garage	\$	7,774.58	7,000	\$	1.11	\$	7,270.89	\$	1.04	\$ 503.69	6.93%
Concession Stand	\$	2,141.98				\$	2,347.44			\$ (205.46)	-8.75%
District Office	\$	10,522.07	9,500	\$	1.11	\$	10,418.91	\$	1.10	\$ 103.16	0.99%
Field House	\$	2,217.77			19	\$	2,647.38			\$ (429.61)	-16.23%
Glendaal ES	\$	69,220.10	47,367	\$	1.46	\$	63,443.34	\$	1.34	\$ 5,776.76	9.11%
Glen-Worden ES	\$	29,201.58	46,971	\$	0.62	\$	31,148.87	\$	0.66	\$ (1,947.29)	-6.25%
High School	\$	99,946.76	297,618	\$	0.34	\$	109,994.46	\$	0.37	\$ (10,047.70)	-9.13%
Lincoln ES	\$	29,362.31	42,089	\$	0.70	\$	25,470.44	\$	0.61	\$ 3,891.87	15.28%
Middle School	\$	84,390.39	149,425	\$	0.56	\$	65,310.93	\$	0.44	\$ 19,079.46	29.21%
Solar Meters	\$	23.86				\$	_			\$ 23.86	#DIV/0!
Solar Company	\$	-				\$	-			\$ -	#DIV/0!
Parking Lot Lighting	\$	815.32				\$	764.33			\$ 50.99	6.67%
Sacandaga ES	\$	37,121.07	63,524	\$	0.58	\$	32,407.19	\$	0.51	\$ 4,713.88	14.55%
	\$	374,253.00	663,494	\$	0.56	\$	352,729.94	\$	0.53	\$ 21,523.06	6.10%

Facility	Type	Period	Т	ransportation Amount		Supplier Amount		Total	Sq. Footage	Co	st per SqFt.				22/23	2:	2/23	- i	inc/(decr)
Beukendaal Field	Electric		\$	390.24	\$	99.12	\$	489.36						\$	525.70			\$	(36.34
HS admin parking light	Electric	5/23-4/24	\$	795.18			\$	1,025.85						\$	980.06			\$	45.79
Bus Garage	Electric	5/23-4/24	\$	1,202.90			\$	3,867.49	7,000	\$	0.55			\$	4,154.31	\$	0.59	\$	(286.82
Bus Garage Fuel Pump	Electric	5/23-4/24	\$	369.95			\$	454.69						\$	451.04			\$	3.65
Concession Stand	Electric	5/23-4/24	\$	1,358.51	_		\$	2,141.98						\$	2,347.44			\$	(205.46
District Office	Electric	5/23-4/24	\$	3,818.24	_		\$	6,335.72	9,500	\$	0.67			\$	6,542.61	\$	0.69	\$	(206.89
Field House	Electric	5/23-4/24	\$	566.32		221.76	\$	788.08						\$	894.37			\$	(106.29
Glendaal ES	Electric	5/23-4/24	\$	7,085.89	_	8,911.32	\$	15,997.21	47,367	\$	0.34			\$	15,558.34	\$	0.33	\$	438.87
Glen-Worden ES	Electric	5/23-4/24	\$	10,558.35		8,427.98	\$	18,986.33	46,971		0.40			\$	20,118.57	\$	0.43	\$	(1,132.24
High School	Electric	5/23-4/24	\$	3,031.54	\$		\$	62,900.10	297,618		0.21			\$	71,044.01	\$	0.24	\$	(8,143.91
Lincoln ES	Electric	5/23-4/24	\$	3,594.68		7,678.12	\$	11,272.80	42,089		0.27			\$	9,686.44	\$	0.23	\$	1,586.36
Middle School	Electric	5/23-4/24	\$	17,278.79			\$	63,049.49	149,425		0.42			\$	45,904.10	\$	0.31	\$	17,145.39
Parking Lot Lighting	Electric	5/23-4/24	\$	579.87		235.45	\$	815.32		-				\$	764.33			\$	50.99
solar meters	Electric	5/23-4/24	\$	22.68	_	1.18		23.86						\$	<u>1</u>	\$:=:	\$	23.86
Solar company			\$	-	\$		\$	-						\$	-			\$	-
Sacandaga EŚ	Electric	5/23-4/24	\$	8,236.95	\$	11,066.93	\$	19,303.88	63,524	\$	0.30			\$	17,799.93	\$	0.28	\$	1,503.95
Totals			\$	58,890.09	\$	148,562.07	\$	207,452.16	663,494	\$	0.31	\$	e	\$	196,771.25	\$	0.30	\$	10,680.91 5.43%
Facility	Type	Period	T	ransportation Amount		Supplier Amount		Total	Sq. Footage	Со	est per SqFt.	15	- 1- 1	71	22/23	2	2/23		inc/(decr)
Beukendaal Field	Gas	5/23-4/24	\$	-	\$	-	\$	-						\$	(#)				
Bus Garage	Gas	5/23-4/24	\$	2,066.33	\$	1,386.07	\$	3,452.40	7,000	\$	0.49			\$	2,665.54	\$	0.38	\$	786.86
Concession Stand		5/23-4/24	\$		\$	-	\$	-						\$	120			\$	-
District Office	Gas	5/23-4/24	\$	2,462.61	\$	1,723.74	\$	4,186.35	9,500	\$	0.44			\$	3,876.30	\$	0.41	\$	310.05
Field House	Gas	5/23-4/24	\$	1,024.69	\$	405.00	\$	1,429.69						\$	1,753.01			\$	(323.32
Glendaal ES	Gas	5/23-4/24					\$	-	47,367	\$	-			\$, e			\$	-
Glen-Worden ES	Gas	5/23-4/24	\$	5,010.25	\$	5,205.00	\$	10,215.25	46,971	\$	0.22			\$	11,030.30	\$	0.23		(815.05
High School	Gas	5/23-4/24	\$	18,395.52	\$	18,651.14	\$	37,046.66	297,618	\$	0.12			\$	38,950.45	\$	0.13		(1,903.79
Lincoln ES	Gas	5/23-4/24	\$	9,195.20	\$	8,894.31	\$	18,089.51	42,089	\$	0.43			\$	15,784.00	\$	0.38		2,305.51
Middle School	Gas	5/23-4/24	\$	10,080.18	\$	11,260.72	\$	21,340.90	149,425	\$	0.14			\$	19,406.83	\$	0.13		1,934.07
Parking Lot Lighting		5/23-4/24																\$	-
Sacandaga ES	Gas	5/23-4/24	\$	9,016.87	\$	8,800.32	\$	17,817.19	63,524	\$	0.28			\$	14,607.26	_	0.23	_	3,209.93
Totals			\$	57,251.65	\$	56,326.30	\$	113,577.95	663,494	\$	0.17	\$	-	\$	108,073.69	\$	0.16	\$	5,504.2 0
			Т	ransportation		Supplier			1 4, 40		305 9			1					0.00
Facility	Туре	Period		Amount		Amount		Total	Sq. Footage	Co	ost per SqFt.				22/23	1 2	22/23	E	inc/(decr)
Glendaal ES (Oil heat)	Oil	5/23-4/24	1	7 HIII WIII	\$	53,222.89	\$	53,222.89	47,367		1.12			\$	47,885.00		1.01	\$	5,337.89
			_		Ė		Ė			T				1				W.T.	11.15
Totals							\$	374,253.00	663,494	\$	0.56			\$	352,729.94	\$	0.53	\$	21,523.00

Facility	Sq. Footage	23/24		22/23		21/22		20/21		19/20		18/19		17/18		16/17	1	5/16		14/15
Bus Garage	7,000	\$ 1.11	\$	1.04	\$	1.08	\$	1.04	\$	0.78	\$	1.04	\$	1.04	\$	1.43	\$	1.58	\$	1.83
District Office	9,500	\$ 1.11	\$	1.10	\$	1.10	\$	1.10		1.06	\$	1.10	\$	1.46	\$	1.48	\$	1.51		1.66
Glendaal ES	47,367	\$ 1.46	\$	1.34	\$	1.73	\$	1.34		0.69	\$	1.34	\$	1.55	\$	0.83	\$	0.86	\$	1.47
Glen-Worden ES	46,971		2 \$	0.66	\$	0.74	\$	0.66		0.52	\$	0.66	\$	0.76	\$	0.73	\$	0.71	\$	0.78
High School	297,618	\$ 0.34	1 \$	0.37	\$	0.38	\$	0.37		0.32	\$	0.37	\$	0.42	\$	0.49	\$	0.49		0.56
Lincoln ES	42,089	\$ 0.70) \$	0.61	\$	0.77	\$	0.61		0.55	\$	0.61	\$	0.72	\$	0.72	\$	0.73	\$	0.79
Middle School	149,425	\$ 0.56	\$	0.44	\$	0.65	\$	0.44		0.48	\$	0.44	\$	0.83	\$	0.85		0.86		0.88
Sacandaga ES	63,524	\$ 0.58	3 \$	0.51	\$	0.60	\$	0.51		0.51	\$	0.51	\$	0.65	\$	0.63	\$	0.63	\$	0.59
	663,494																			
		7,000		9,500		47,367	111	46,971		297,618		42,089		149,425		63,524				663,494
		Bus Garag	е	District Office		Glendaal ES	G	len-Worden		High School		Lincoln ES	Mid	dle School	S	acandaga ES				663,494
	23/24		1 \$	1.11	\$	1.46	\$	0.62	\$	0.34	\$	0.70	\$	0.56	\$	0.58				
	22/23	\$ 1.04	1 \$	1.10	\$	1.34	\$	0.66	\$	0.37	\$	0.61	\$	0.44	\$	0.51				
	21/22	\$ 1.08	3 \$	1.10	\$	1.73	\$	0.74	\$	0.38	\$	0.77	\$	0.65	\$	0.60				
	20/21	\$ 0.93	3 \$	1.04	\$	1.02	\$	0.64	\$	0.33	\$	0.70	\$	0.53	\$	0.60				
	19/20	\$ 0.78	3 \$	1.06	\$	0.69	\$	0.52	\$	0.32	\$	0.55	\$	0.48	\$	0.51				
	18/19	\$ 0.93	3 \$	1.04	\$	1.02	\$	0.64	\$	0.33	\$	0.70	\$	0.53	\$	0.60				
	17/18	\$ 1.04	4 \$	1.46	\$	1.55	\$	0.76	\$	0.42	\$	0.72	\$	0.83	\$	0.65				
	16/17	\$ 1.43	3 \$	1.48	\$	0.83	\$	0.73	\$	0.49	\$	0.72	\$	0.85	\$	0.63				
	15/16	\$ 1.5	3 \$	1.51	\$	0.86	\$	0.71	\$	0.49	\$	0.73	\$	0.86	\$	0.63				
	14/15	\$ 1.8	3 \$	1.66	\$	1.47	\$	0.78	\$	0.56	\$	0.79	\$	0.88	\$	0.59				
	13/14	\$ 2.3	5 \$	2.41	\$	2.11	\$	0.80	\$	0.62	\$	0.93	\$	0.92	\$	0.63				
	12/13	\$ 2.3	B \$	4.04	\$	2.18	\$	0.87	\$	0.61	\$	0.97	\$	0.99	\$	0.66				
	44440	A 0.5	2 \$	4.83	\$	1.98	\$	1.42	\$	0.99	\$	1.52	\$	1.56	\$	0.98				
	11/12	\$ 3.5	_ ψ	7.00	Ψ	1.00	Ψ		4	0.00	1		-		-		_		_	