

February 5, 2025

via RESS & EMAIL

Ms. Nancy Marconi Registrar Ontario Energy Board 2300 Yonge Street P.O. Box 2319 Suite 2700 Toronto, ON M4P 1E4 Email: Boardsec@oeb.ca

Dear Ms. Marconi:

Re : EB-2024-0021 – ERTH Power ICM Application (the "Application"): Correction to Interrogatory Responses

ERTH Power has included in Attachment 1 to this letter, corrections to ERTH Power's interrogatory responses filed January 7, 2025. Changes to the written evidence are noted with a "/U" and are as follows:

SEC-6 & VECC-6

In response to SEC-6 and VECC-6, ERTH Power prepared tables detailing rental expenses that had an incorrect starting figure of \$217,260, and 217,000 respectively (using 2018 actuals) instead of the amount from ERTH Power's settlement agreement of \$222,995. This corrected amount was increased by inflation based upon IRM increased until 2025 and then prorated between the Bell St and Elm St properties to come to a rent rebate amount of \$225,640 which will further be inflated by IRM increased until ERTH Power's next rebasing. The Language in the Draft Accounting Order for ERTH Avoided Rent Deferral Account ("EARDA") will also need to be revised to include IRM inflation until the next rebasing. The following revised table is an update to both SEC-6 and VECC-6:

Your Hometown Utility

Rent	IRM	Bell	Elm	Total
COS		137,702	85,293	222,995
2019	1.95%	140,387	86 <mark>,</mark> 956	227,343
2020	0.72%	141,398	87 <mark>,</mark> 582	228,980
2021	3.40%	146,205	90,560	236,766
2022	6.80%	156,147	96,718	252,866
2023	3.90%	162,237	100,490	262,727
2024	2.80%	166,780	103,304	270,084
2025	3.30%	172,284	106,713	278,997
2025 Rent DVA		172,284	53,356	225,640

SEC-13 – Part A

The square footage SEC included in the comparison for ERTH Power of 50,624 is incorrect. As per the response to SEC-12-part D, while 50,624 sq. ft. will be allocated for use by the LDC, the entire building is 57,170 sq. ft. This results in a corrected cost per sq. ft. of \$585, not \$661 as the tale incorrectly shows.

SEC-13 – Part C

In its response, ERTH Power noted that approximately \$2.5M is incremental to the cost of the building's heating and cooling system. This amount was based upon an incorrect understanding of the cost of a conventional natural gas heating system to serve the new facility. Overall when comparing the current designed geothermal system versus a high efficiency natural gas-fired system, the costs are similar due to its larger size and additional requirement, such as gas piping, venting, and combustion air.

Additionally, a natural gas-based system necessitates an external heat rejection system for cooling, typically a fluid cooler or air-cooled condenser. The true incremental cost of the geothermal system over a traditional system is the cost of the Geo Field. The initial Geo Field was planned to be perpendicular pipping, however, in order to save money and mitigate risks, ERTH Power and its consulting firm determine that three horizonal Geo Field would be equally efficient and more cost effective reducing the carried cost estimate of \$491K to \$410K.

Furthermore, the incremental cost of the Geo Field is also reduced by the fact the Geo Field adder allows for the associated equipment to be sized smaller because it does not work as hard, saving money on the equipment costs, structural re-enforcement costs



(less weight to support structurally), and ongoing operations and maintenance costs with a more efficient system. Given all noted above, the incremental cost to add the Geo Field is estimated to be \$300K providing a zero emissions system that is four times more efficient than a conventional gas system.

If you have any questions or concerns please do not hesitate to contact me at 519-485-1820 ext 254 or at Graig.Pettit@erthpower.com.

Yours Truly,

Graig Pettit Vice President & General Manager ERTH Power Corporation

cc: John Vellone



Attachment 1: ERTH Power IRR Corrections



1	RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES
2	
3	INTERROGATORY SEC-6
4	
5	[2025 IRM Application Part 1, Appendix A, ICM Application, p. 15]
6	ERTH Power states: "ERTH Power recognizes that the cost of rent is currently embedded within its
7	approved rates. ERTH Power is open to innovative ways to recognize the savings on rentcharges
8	within the confines of an ICM application."
9	
10	Please propose an approach as part of this ICM application to recognize both,
11	
12	a) avoided rent paid for the Bell St. and Aylmer properties already included in rates, and
13	b) expected rent paid to ERTH Power from ERTH CORP for their use of the New Facility.
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15	
16	RESPONSE:
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18	ERTH Power proposes to use two new deferral accounts and one variance account to record rent
19	amounts included in its rates which are no longer being paid, future rental income it receivesfrom
20	ERTH CORP, and variances in other OM&A costs resulting from the transition to the New Facility.
21	ERTH Power has included three draft Accounting Orders as part of its proposal as Attachments 4,5,
22	and 6 to this response; all of which are proposed as 1508, Other Regulatory Assets sub-accounts.
23	
24	ERTH Avoided Rent Deferral Account: ERTH Power will credit \$225,640 of rent which is /u LINE 24
25	currently included in its rates. This amount will be credited annually to ratepayers in the ERTH
26	Avoided Rent Deferral Account ("EARDA"), pro-rated for any partial years, and will be subject to
27	carrying charges at OEB prescribed rates. The following table details how the rent was calculated:
28	

ERTH Power Corporation EB-2024-0021 Interrogatory Responses SEC-6 FILED: January 7, 2025 Page 2 of 2

Rent	IRM	Bell	Elm	Total
COS		137,702	85,293	222,995
2019	1.95%	140,387	86,956	227,343
2020	0.72%	141,398	87,582	228,980
2021	3.40%	146,205	90,560	236,766
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2025	3.30%	172,284	106,713	278,997
2025 Rent DVA		172,284	53,356	225,640

/U TABLE

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Rental Income Deferral Account: ERTH Power has not determined the amount of rent it forecasts
to charge ERTH CORP at this time. ERTH Power expects to determine the fees it will charge ERTH
CORP in 2025 by hiring a third-party real estate firm to conduct a comparative market-based
evaluation. ERTH Power and ERTH CORP plan to execute a Rental Service Agreement compliant
with the OEB's Affiliate Relationship Code requirements prior to the New Facility being placed inservice and commence debiting monthly rental income amounts in the Rental Income Deferral
Account ("RIDA") in 2025, subject to carrying costs at OEB prescribed rates.

10

ERTH New Facility OM&A Costs Variance Account: As highlighted by OEB staff in Staff-6, variances in rent are expected to be accompanied by variances in other OM&A costs, such as property taxes, heating and cooling, snow removal, ground maintenance, security and other operating and maintenance costs. ERTH Power will establish baseline values for OM&A costs directly related to its facilities based on status quo operations at the Bell St. and Aylmer locations, and will debit or credit variances to these baselines in the ERTH New Facility OM&A Costs Variance Account ("ENFOCVA"), subject to carrying costs at OEB prescribed rates.

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- 19 ERTH Power proposes to bring forward substantiating evidence and dispose of the balances in the
- 20 EARDA, RIDA, and ENFOCVA in its next rebasing application planned for 2028 rates.

ERTH Power Corporation . EB-2024-0021 Interrogatory Responses VECC-6 FILED: January 7, 2025 Page **1** of **2**

1						
2	RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION					
3	INTERROGATORIES					
4						
5	INTERROGATORY VECC-6					
6						
7	Ref: Appendix A p.15					
8						
9	ERTH Power discusses the ability to reduce the cost of rent (Bell St. Property to 0%, Aylmer					
10	Property to 50% for use as job and emergency staging) through consolidated operations. ERTH					
11	Power recognizes that the cost of rent is currently embedded within its approved rates. ERTH					
12	Power is open to innovative ways to recognize the savings on rent charges within the confines of an					
13	ICM application.					
14						
15	a) Please provide the savings on rent charges calculation.					
16						
17	b) Please provide a breakdown of the rent costs embedded in approved rates.					
18						
19	c) Please explain further the job and emergency staging related to the 50% rent proposal of the					
20	Aylmer property.					
21						
22						
23	RESPONSE:					
24	a) Please see the following table that shows the expected rent savings of \$225,640. / U LIN					

/ U LINE 24

ERTH Power Corporation EB-2024-0021 Interrogatory Responses VECC-6 FILED: January 7, 2025 Page 2 of 2

/U TABLE

Rent	IRM	Bell	Elm	Total
COS		137,702	85,293	222,995
2019	1.95%	140,387	86,956	227,343
2020	0.72%	141,398	87,582	228,980
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2025	3.30%	172,284	106,713	278,997
2025 Rent DVA		172,284	53,356	225,640

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2 b) As noted in the table above, rental amounts included in ERTH Power's Rates at its last rebasing

was \$222,995, inflated for IRM increases is \$278,997 and prorated for 50% of Elm is \$225,640.

4 c) Please see responses to OEB Staff-IR #8.

/U LINE 3

1	RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES
2	
3	INTERROGATORY SEC-13
4	
5	
6	[2025 IRM Application Part 1, Appendix A, ICM Application, Table 5 and Figure 13]
7	

8 a. Based on the data in Table 5, the \$/square footage of the five facilities is as follows:

	Algoma	Milton	Waterloo	InnPower	ERTH
Adjusted	15,361	24,594	57,839	19,129	33,439
Cost (\$000)					
Squared	41,703	91,828	104,000	36,172	50,624
footage					
\$/square	368	268	556	529	661
footage					

/U TABLE

	A	lgoma	Milton		Waterloo		InnPower		ERTH	
Adjust Cost										
(\$000)	\$	15,361	\$	24,594	\$	57,839	\$	19,129	\$	33,439
Square										
Footage		41,703		91,828		104,000		36,172		57,170
\$/Square										
Footage	\$	368	\$	268	\$	556	\$	529	\$	585

10 Please explain why the cost per square foot for ERTH Power's New Facility is 54% greater than the

11 average of the other four buildings.

b. Please provide the actual costs and the inflation factors which were applied to produce the total

13 costs shown for each facility.

14 c. Please provide the total cost for the ERTH Conventional Energy facility.

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16	RESPONSE:
17	a. ERTH Power expects the individual costs of each comparator building will be informed by
18	the individual specifics of the facility and utility in question, as noted by the wide variance
19	amongst the comparator utilities on a \$/ft2 basis. By way of example, Figure 8 of Appendix
20	A of ERTH Power's application shows there is a variance by facility with respect to the
21	proportion of ft2 dedicated to office, operations and storage space, which drives variances
22	in overall expenditure. Similarly, variances could be expected regarding local land costs,
23	construction costs, and utility physical infrastructure requirements for the building.
24	
1	With respect to ERTH Power's position relative to the comparators on a \$/ft2 basis, one
2	driver is the recent government and OEB focus on promoting distributed energy
3	resources, ¹ such as ERTH Power's proposed solar photovoltaic installation. This component
4	of the new facility may not be a design requirement with the \$/ft2 analysis presented
5	above. The same is true of ERTH Power's geothermal heating and cooling system.
67	
8	b. Please see below the actual OEB-approved costs applicable to each comparator building.
9	For explanation and annual values associated with the construction cost and land index
10	used to escalate historical building costs please see response to SEC-12 a.
1112	

Distributor	Year	OEB-Approved CAPEX	Inflation-Adjusted CAPEX (2025 \$)	
Algoma Power	2022	12,690,000	15,361,196	
Milton Hydro	2016	13,565,000	24,593,593	
Waterloo North ²	2011	26,681,739	58,235,569	
InnPower	2015	10,337,704	19,129,266	
ERTH Power	2025	33,439,250	33,439,250	

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c. The total cost assumed for the purpose of providing an ERTH Conventional Energy Facility
 comparator in the benchmarking analysis was \$29.6 million. This figure was derived by
 removing the cost of the solar photovoltaic system (approximately \$1.5 million) and a
 portion of the geothermal system costs (approximately \$2,500,000) to approximate the

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ERTH Power Corporation EB-2024-0021 Interrogatory Responses SEC-13 FILED: January 7, 2025 Page 3 of 3 18 costs of the building with a conventional natural gas heating and electrical air conditioning.

However, after further review with consultants and contractors it has been determined that the true incremental costs of the geothermal is actually \$300,000. This \$2,500,000 amount was based upon an incorrect understanding of the cost of a conventional natural gas heating system to serve the new facility. Overall when comparing the current designed geothermal system vs a high efficient natural gas-fired system the costs are similar due to its larger size and additional requirements, such as gas piping, venting, and combustion air. Additionally, a natural gas-based system necessitates an external heat rejection system for cooling, typically a fluid cooler or aircooled condenser. The true incremental costs of the geothermal system over a traditional system is the cost of the geo field. The initial Geo field was planned to be perpendicular piping, however in order to save money and to mitigate risks ERTH and its consulting firm determined that three horizontal Geo fields would be equally efficient and more cost effective reducing the carried cost estimate of \$491,000 to \$410,000. This incremental costs of the Geo field is also reduced by the fact that the Geo Field adder allows for the associated equipment to be sized smaller because it does not have to work as hard saving money on equipment costs, structural re-enforcement costs (less weight to support structurally) and ongoing operations and maintenance costs with a more efficient system. Given all noted above the incremental cost to add the Geo Field is estimated to be \$300,000 providing a zero emissions system that is 4 X more efficient than a conventional gas system.

/U LINE 19-20

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² The initial analysis presented in evidence inadvertently used an OEB-approved value of \$26,500,000 for Waterloo North Hydro's new building. On re-examining the settlement proposal in EB-2010-0144 during interrogatory response preparation, ERTH Power notes the actual value approved was \$26,681,739 per page 12 of the Settlement Proposal appended to the OEB's Decision and Order

- 1 system. For clarity, ERTH Power did not prepare technical plans, engineering, or vendor-
- 2 endorsed cost estimates for the purpose of this illustration.