STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-3272-PET

Petition of Vermont Department of Public Service to initiate an EEU Demand Resource Plan proceeding for the 2021-2023 performance period	

Affidavit of Timothy Perrin

I, Timothy Perrin, being duly sworn, hereby depose and state as follows:

Background

1. I am employed by Vermont Gas Systems, Inc. (VGS), as the Energy Efficiency & Innovation Manager.
2. I am familiar with Case No. 19-3272-PET regarding VGS's Demand Resource Plan (DRP) proceeding for 2021-2023 and the Commission's directive to evaluate and propose a performance incentive mechanism that rewards performance relative to efficiency goals rather than spending.
3. VGS has modeled a Basis Point Reduction structure and a Percent of Budget structure and evaluated each with the Department of Public Service (Department).
4. Below, I describe the evaluation VGS has done to date on possible options for a performance incentive mechanism.
5. Please see **Attachment A** for several tables and charts identified as Figures 1-5, which describe parts of our evaluation.

Basis Point Reduction

6. Our initial evaluation centered around a performance award that offered a zero-point reduction on the Return on Equity (ROE) component of the return on our efficiency investments versus the 100-basis point reduction approved in the October 22, 2020 Final Order.
7. The investment amounts were highest during 2024-2026 and accordingly incurred the highest potential award with a zero-point reduction, offering almost $540,000 over 15 years or approximately $35,000 annually when spread over the lifetime of the loan.
8. Even with the next Triennial Plan (2024-2026) offering the largest potential award due to the size of the investment capital during that three-year period, from VGS's perspective, the amount is insignificant when divided over the 15-year lifetime of the investment.

9. Additionally, the annual amount also varies greatly because it is based on total amount under investment in a given year, so it would be difficult to use as an effective incentive.
10. VGS used the assumption that a 100-basis point reduction on ROE would act as the baseline in determining any potential awards.
11. Figures 1 and 2 use the 100-basis point reduction on ROE and compare it to a scenario using a zero-basis point reduction.
12. Figure 1 reflects the total potential award over the 15-year lifetime of the investment, showing cumulative award amounts in a given triennial period, while Figure 2 reflects the resulting average annual award (total potential award of using zero-basis point reduction versus 100-basis point reduction divided by 15 years). Figure 3 provides the same data in table format.
13. The total annual potential awards when using a zero-basis point reduction versus a 100-basis point reduction on ROE are reflected in Figure 4, with subsequent three-year DRP plans layered over one another to reflect the potential award in any given year. [1]
14. The higher the capital investment amount, the higher the award. As the investment is slowly paid down, so is the potential award.

Percent of Budget

15. VGS also evaluated an incentive model based on the percent of budget using the baseline of 100-basis point reduction on ROE during the DRP.
16. The data in Figure 5 reflects the overall effect on Energy Efficiency Charges (EEC) based on the different performance incentive mechanism models.[2]
17. VGS is focused on affordability for its customers, and the percent of budget award has the biggest impact on both residential and commercial rates.

No Award

18. Finally, we considered the possibility that the best option for our customers may be no performance award at all.
19. The approved DRP has the least impact to customer rates without any type of award and we currently believe this is the best fit for our customers.
20. Ramping up of EEU activities to meet VGS's Climate Action Plan goals will already lead to increases in the EEC charge, so layering additional collections to support a performance award would exacerbate the year-to-year increase.
21. Keeping the rate impact to customers as stable as possible appears most appropriate at this stage.

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[1] The Figure 4 data utilizes the capital investment amounts approved by the Commission in the Oct. 22, 2020 Final Order.

[2] The Figure 5 data utilizes the capital investment amounts and budgets approved by the Commission in the Oct. 22, 2020 Final Order.

22. Further, VGS is consistently meeting most of its QPIs and is highly motivated to maintain its EEU Order of Appointment in excellent standing, so we do not believe a performance incentive mechanism would add substantial benefit. VGS is further motivated by its commitment to meet its own Climate Action Plan goals, of which meeting efficiency targets is an essential component.
23. Finally, the administrative work required to track multiple investments would be burdensome and inefficient.

Further Evaluation and Coordination with the Department

24. While our evaluation over the last several months has informed an opinion that no performance award may be the best fit for our customers, we believe there is potential to evaluate additional options in the context of VGS's next DRP proceeding and VGS is open to continuing to collaborate and brainstorm with the Department, and other stakeholders as appropriate.

I declare that the above statement is true and accurate to the best of my knowledge and belief. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Burlington, Vermont, this 19th day of July 2021.

TJP 07/19/2021

Timothy Perrin

Attachment A

Figure 1

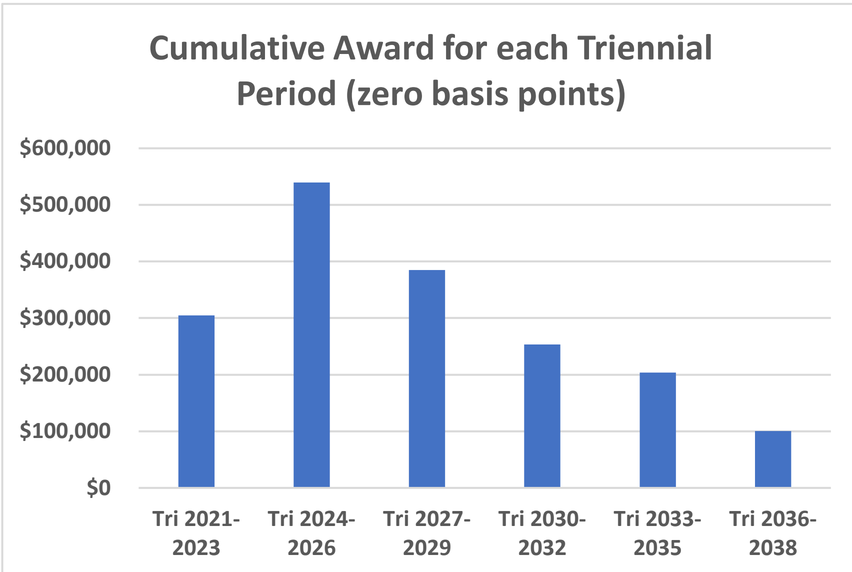

Figure 2

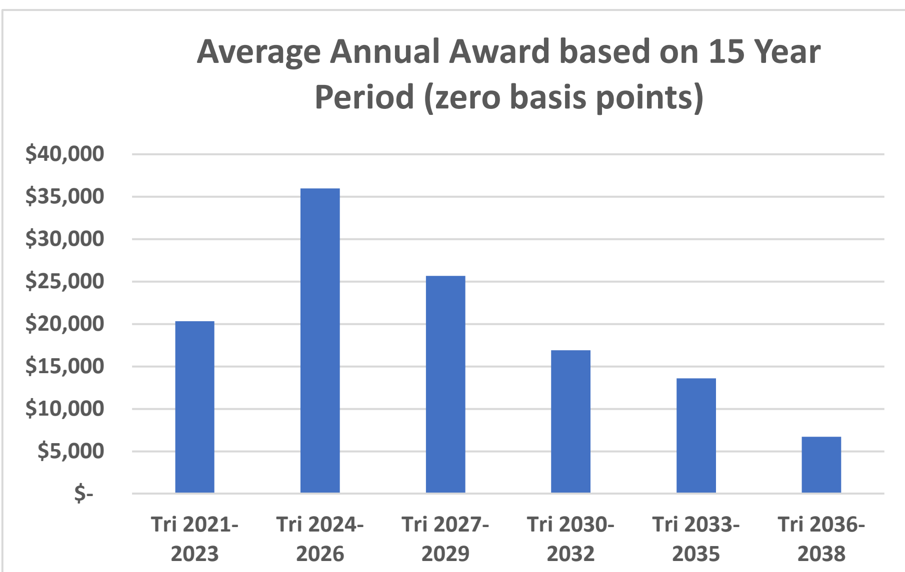

Figure 3

	Zero Basis Pts over 15 Yrs	RA Program Budget	Percent of RA Budget	Avg annual award (over 15 yrs)	Investment Level
Tri 2021-2023	$304,632	$14,112,218	2.2%	$ 20,309	$ 5,872,077
Tri 2024-2026	$539,311	$16,719,036	3.2%	$ 35,954	$ 10,395,766
Tri 2027-2029	$384,911	$12,937,496	3.0%	$ 25,661	$ 7,419,552
Tri 2030-2032	$253,680	$11,537,731	2.2%	$ 16,912	$ 4,889,935
Tri 2033-2035	$203,760	$12,651,564	1.6%	$ 13,584	$ 3,927,679
Tri 2036-2038	$100,863	$14,323,677	0.7%	$ 6,724	$ 1,900,034

Figure 4

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
award with 0 PtsTri 2024-2026	$ -	$ -	$ -	$ 22,721	$ 45,632	$ 64,689	$ 59,895	$ 55,101	$ 50,308	$ 45,514	$ 40,720	$ 35,926
award with 0 Pts Tri 2027-2029	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,480	$ 34,283	$ 45,810	$ 42,389	$ 38,968	$ 35,546
award with 0 Pts Tri 2030-2032	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,322	$ 21,543	$ 30,376
award with 0 Pts Tri 2033-2035	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
award with 0 Pts Tri 2036-2038	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ -	**$ -**	**$ -**	**$ 22,721**	**$ 45,632**	**$ 64,689**	**$ 79,375**	**$ 89,384**	**$ 96,118**	**$ 99,225**	**$ 101,231**	**$ 101,848**
3 Year Avg		$ -			$ 44,348			$ 88,292			$ 100,768	

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
award with 0 PtsTri 2024-2026	$ 31,132	$ 26,338	$ 21,544	$ 16,750	$ 11,956	$ 7,163	$ 3,152	$ 769	$ (0)	$ (0)	$ (0)	$ (0)
award with 0 Pts Tri 2027-2029	$ 32,125	$ 28,703	$ 25,282	$ 21,860	$ 18,439	$ 15,017	$ 11,596	$ 8,175	$ 4,753	$ 2,003	$ 482	$ (0)
award with 0 Pts Tri 2030-2032	$ 28,121	$ 25,866	$ 23,611	$ 21,356	$ 19,101	$ 16,847	$ 14,592	$ 12,337	$ 10,082	$ 7,827	$ 5,572	$ 3,317
award with 0 Pts Tri 2033-2035	$ 9,601	$ 17,796	$ 24,327	$ 22,516	$ 20,705	$ 18,894	$ 17,082	$ 15,271	$ 13,460	$ 11,649	$ 9,838	$ 8,026
award with 0 Pts Tri 2036-2038	$ -	$ -	$ -	$ 6,112	$ 10,138	$ 11,629	$ 10,827	$ 9,950	$ 9,074	$ 8,198	$ 7,322	$ 6,446
	$ 100,979	**$ 98,703**	**$ 94,765**	**$ 88,595**	**$ 80,340**	**$ 69,549**	**$ 57,249**	**$ 46,502**	**$ 37,369**	**$ 29,677**	**$ 23,214**	**$ 17,789**
3 Year Avg		$ 98,149			$ 79,495			$ 47,040			$ 23,560	

	2045	2046	2047	2048	2049	2050	2051	2052	2053
award with 0 PtsTri 2024-2026	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
award with 0 Pts Tri 2027-2029	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
award with 0 Pts Tri 2030-2032	$ 1,452	$ 358	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
award with 0 Pts Tri 2033-2035	$ 6,215	$ 4,404	$ 2,593	$ 1,113	$ 269	$ (0)	$ (0)	$ (0)	$ (0)
award with 0 Pts Tri 2036-2038	$ 5,569	$ 4,693	$ 3,817	$ 2,941	$ 2,065	$ 1,189	$ 523	$ 222	$ 148
	$ 13,237	**$ 9,455**	**$ 6,410**	**$ 4,054**	**$ 2,334**	**$ 1,189**	**$ 523**	**$ 222**	**$ 148**
3 Year Avg		$ 9,701			$ 2,525			$ 298	

Figure 5

Potential Awards	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
100 Basis Pt Reduction												
0 Basis Pt Reduction	$ 22,721	$ 45,632	$ 64,689	$ 79,375	$ 89,384	$ 96,118	$ 99,225	$ 101,231	$ 101,848	$ 100,979	$ 98,703	$ 94,765
3% of VGS budget	$ 137,800	$ 157,878	$ 172,957	$ 188,036	$ 188,117	$ 173,198	$ 158,280	$ 143,363	$ 135,946	$ 128,531	$ 132,216	$ 136,010
VGS Budget	$ 4,593,333	$ 5,262,600	$ 5,765,226	$ 6,267,878	$ 6,270,557	$ 5,773,263	$ 5,275,995	$ 4,778,755	$ 4,531,543	$ 4,284,358	$ 4,407,202	$ 4,533,674
0 Basis Pt Reduction	0.49%	0.87%	1.12%	1.27%	1.43%	1.66%	1.88%	2.12%	2.25%	2.36%	2.24%	2.09%
3% of VGS budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Variance 2020 to 2030	2030 End yr	100 Basis Pt Reduction	2024	2025	2026	2027	2028	2029	2030
$ 24.23	$ 64.06	Residential	$ 47.13	$ 49.57	$ 52.28	$ 55.22	$ 58.03	$ 61.01	$ 64.06
$ 21.64	$ 57.22	Low Income	$ 42.10	$ 44.28	$ 46.69	$ 49.33	$ 51.83	$ 54.49	$ 57.22
$ 42.92	$ 113.49	G1 Class	$ 83.50	$ 87.83	$ 92.62	$ 97.84	$ 102.81	$ 108.09	$ 113.49
$ 42.09	$ 111.28	G2 Class	$ 81.87	$ 86.11	$ 90.81	$ 95.93	$ 100.80	$ 105.98	$ 111.28
$ 314.77	$ 832.04	G3 Class	$ 612.15	$ 643.86	$ 679.00	$ 717.26	$ 753.68	$ 792.39	$ 832.04
$ 462.90	$ 1,223.65	G4 Class	$ 900.26	$ 946.89	$ 998.58	$ 1,054.85	$ 1,108.40	$ 1,165.33	$ 1,223.65
$ 8,034.98	$ 21,250.32	Interruptible	$ 15,634.33	$ 16,444.11	$ 17,341.72	$ 18,318.86	$ 19,248.96	$ 20,237.50	$ 21,250.32

Variance 2020 to 2030	2030 End yr	0 Basis Pt Reduction	2024	2025	2026	2027	2028	2029	2030
$ 24.95	$ 64.78	Residential	$ 47.33	$ 49.98	$ 52.84	$ 55.90	$ 58.76	$ 61.75	$ 64.78
$ 22.29	$ 57.86	Low Income	$ 42.28	$ 44.64	$ 47.20	$ 49.93	$ 52.48	$ 55.16	$ 57.86
$ 44.20	$ 114.77	G1 Class	$ 83.86	$ 88.55	$ 93.62	$ 99.03	$ 104.10	$ 109.41	$ 114.77
$ 43.34	$ 112.53	G2 Class	$ 82.22	$ 86.82	$ 91.80	$ 97.10	$ 102.07	$ 107.27	$ 112.53
$ 324.14	$ 841.41	G3 Class	$ 614.78	$ 649.14	$ 686.35	$ 726.00	$ 763.14	$ 802.07	$ 841.41
$ 476.68	$ 1,237.42	G4 Class	$ 904.12	$ 954.66	$ 1,009.38	$ 1,067.69	$ 1,122.31	$ 1,179.56	$ 1,237.42
$ 8,274.15	$ 21,489.50	Interruptible	$ 15,701.36	$ 16,578.92	$ 17,529.20	$ 18,541.89	$ 19,490.50	$ 20,484.74	$ 21,489.50

Variance 2020 to 2030	2030 End yr	3.0 % perf award on VGS budg	2024	2025	2026	2027	2028	2029	2030
$ 26.03	$ 65.86	Residential	$ 48.70	$ 51.37	$ 54.25	$ 57.36	$ 60.17	$ 62.98	$ 65.86
$ 23.25	$ 58.83	Low Income	$ 43.50	$ 45.88	$ 48.45	$ 51.24	$ 53.74	$ 56.25	$ 58.83
$ 46.12	$ 116.69	G1 Class	$ 86.28	$ 91.01	$ 96.11	$ 101.63	$ 106.60	$ 111.58	$ 116.69
$ 45.22	$ 114.41	G2 Class	$ 84.60	$ 89.24	$ 94.23	$ 99.65	$ 104.52	$ 109.40	$ 114.41
$ 338.17	$ 855.44	G3 Class	$ 632.55	$ 667.21	$ 704.58	$ 745.07	$ 781.50	$ 817.99	$ 855.44
$ 497.32	$ 1,258.06	G4 Class	$ 930.27	$ 981.24	$ 1,036.20	$ 1,095.74	$ 1,149.31	$ 1,202.99	$ 1,258.06
$ 8,632.62	$ 21,847.97	Interruptible	$ 16,155.39	$ 17,040.55	$ 17,995.02	$ 19,029.02	$ 19,959.35	$ 20,891.50	$ 21,847.97