

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

Case No. 18-0974-TF

Tariff filing of Green Mountain Power Corporation requesting a 5.45% increase in its base rates effective with bills rendered January 1, 2019, to be fully offset by bill credits through September 30, 2019

PREFILED DIRECT TESTIMONY OF

JACOB M. THOMAS

ON BEHALF OF THE

VERMONT DEPARTMENT OF PUBLIC SERVICE

August 10, 2018

Summary: Mr. Thomas presents the Department's adjusted cost-of-service model developed to reflect all adjustments recommended by Department witnesses.

**Mr. Thomas Sponsors the Following Exhibits:**

Exhibit PSD-JMT-1	Professional Resume of Jacob M. Thomas
Exhibit PSD-JMT-2	Department's Adjusted Cost-of-Service Model

Direct Testimony  
Of  
Jacob M. Thomas

1 **Q1. Please state your full name, address, and occupation.**

2 A1. My name is Jacob M. Thomas. My business address is 1850 Parkway Place, Suite  
3 800, Marietta, Georgia 30067. I am a Senior Project Manager of the firm GDS  
4 Associates, Inc. ("GDS"). I am a registered engineer in Georgia.

5

6 **Q2. Please outline your formal education.**

7 A2. I received a Bachelor of Science in Industrial Engineering from Georgia Institute of  
8 Technology in 2000. I received a Master of Business Administration with a  
9 concentration in Finance from Auburn University in 2006.

10

11 **Q3. Please state your professional experience.**

12 A3. I began working with GDS in June 1996 as a cooperative student while attending the  
13 Georgia Institute of Technology. After graduation in December 2000, I accepted a  
14 full-time position in GDS's Distribution Services department and have risen to my  
15 current position of Senior Project Manager in that department. In April 2018, I was  
16 elected to become a new shareholder of GDS effective January 1, 2019. In the past 20  
17 plus years, I have provided statistical, financial, and economic consulting to utilities  
18 and regulatory agencies nationwide.

19

1 In the area of statistics, I have provided services to clients with respect to load  
2 forecasting, market research, sample design, load research, measurement and  
3 verification, and other statistical modeling. I have produced dozens of load forecasts,  
4 participated in and managed all aspects of load research studies, managed customer  
5 survey processes, and performed impact evaluations of demand response and energy  
6 efficiency programs for several clients. I have also evaluated short-term and long-term  
7 price elasticity of demand for forecasting purposes.

8

9 In the areas of finance and economics, I specialize in retail and wholesale cost-of-  
10 service development and design, retail and wholesale rate design, financial forecasting,  
11 economic impact analysis, and benefit-cost analysis of demand response programs.

12

13 **Q4. Have you testified in Vermont in the past?**

14 A4. Yes. I testified in Docket No. 7440 on behalf of the Vermont Department of Public  
15 Service in 2008.

16

17 **Q5. Have you testified before any other regulatory commissions?**

18 A5. Other than in Vermont, I have submitted testimony before the following regulatory  
19 bodies:

- 20 • Indiana Utility Regulatory Commission
- 21 • Michigan Public Service Commission
- 22 • North Carolina Utilities Commission

- 1                   • North Dakota Public Service Commission
- 2                   • Utah Public Service Commission

3 I have also been co-author of reports filed or provided to regulators in cases before the  
4 Delaware Public Service Commission, the Kentucky Public Service Commission, and  
5 the Public Service Commission of Utah. In those joint reports, prepared in  
6 coordination with other GDS experts and presented as a single consultant report, I was  
7 tasked with focusing on demand response, load research, and load forecasting issues.

8

9 **Q6. What are your qualifications to provide testimony before the Commission?**

10 A6. I have over 20 years of professional experience developing cost-of-service (“COS”)  
11 models for cooperative and municipal utility clients and reviewing and revising COS  
12 models developed by Investor Owned Utilities for purposes of use by intervening  
13 parties in regulatory proceedings. My professional resume provides further details of  
14 my experience, provided as Exhibit PSD-JMT-1.

15

16 **Q7. For whom are you appearing?**

17 A7. I am testifying on behalf of the Vermont Department of Public Service (“Department”  
18 or “PSD”).

19

20 **Q8. Were your testimony and exhibits prepared by you or under your direct  
21 supervision and control?**

22 A8. Yes, they were.

1 **Q9. Please summarize the purpose of your testimony.**

2 A9. I have developed a revised COS model reflecting all adjustments to Green Mountain  
3 Power's ("GMP") filed COS as recommended by all other PSD witnesses. In my  
4 testimony I will show a table of each adjustment and which PSD witnesses support  
5 those adjustments. I will describe how I made the adjustments starting from the  
6 spreadsheet-based COS model provided by GMP in their working papers to arrive at  
7 the PSD adjusted COS results. The PSD adjusted results and supporting schedules are  
8 provided in Exhibit PSD-JMT-2.

9

10 **Q10. Can you please identify and summarize the major cost-of-service adjustments**  
11 **reflected in your COS model?**

12 A10. The PSD witnesses have supported nine (9) adjustments to GMP's filed adjusted COS.  
13 The following table summarizes the adjustments and indicates which witnesses  
14 provide support for each adjustment. The list of adjustments are also depicted in  
15 Schedule 5 of Exhibit PSD-JMT-2.

<b>Adj. Number</b>	<b>Description</b>	<b>PSD Witness(es)</b>
PSD1	Tesla PowerWall 2.0	Mr. McNamara, Mr. Dawson
PSD2	Heat Pump Water Heaters	Mr. McNamara, Mr. Winn
PSD3	Distribution Line Blankets	Mr. Mara
PSD4	Distribution Lines Large	Mr. Mara

PSD5	Transmission Lines	Mr. Mara
PSD6	Capital Structure	Mr. Baudino
PSD7	Power Supply Cost	Mr. McNamara
PSD8	Renewable Energy Certificates	Mr. McNamara
PSD9	ADIT Adj. on PSD Adjustments 1-5	

1

2 **Q11. Please explain adjustment PSD1 – Tesla Powerwall 2.0.**

3 A11. Several adjustments are made to the COS to reflect the PSD1 adjustment, which is to  
4 remove the Tesla PowerWall 2.0 innovative program from the COS. All components  
5 of the adjustment are shown in Exhibit PSD-JMT-2 Schedule 6. Adjustments include  
6 removal of sales and lease revenue; removal of plant in service and accumulated  
7 depreciation from rate base; and adjusting test year depreciation expense. ADIT  
8 adjustments are included in adjustments PSD9, in which the cumulative impact on  
9 ADIT in rate base is estimated. PSD witnesses Mr. McNamara and Mr. Dawson  
10 discuss the Tesla PowerWall 2.0 program and make the recommendation to remove  
11 the program from the COS.

12

13 **Q12. Please explain adjustment PSD2 – heat pump water heaters.**

14 A12. Several adjustments are made to the COS to reflect the PSD2 adjustment, which is to  
15 remove the Heat Pump Water Heater innovative program from the COS. All  
16 components of the adjustment are shown in Exhibit PSD-JMT-2 Schedule 7.

17 Adjustments include removal of sales and lease revenue; removal of plant in service

1 and accumulated depreciation from rate base; and adjusting test year depreciation  
2 expense. ADIT adjustments are included in adjustments PSD9, in which the  
3 cumulative impact on ADIT in rate base is estimated. PSD witness Mr. Winn  
4 recommends removal of the Heat Pump WH program.

5

6 **Q13. Please explain adjustment PSD3 – Distribution Line Blankets.**

7 A13. PSD witness Mr. Mara recommends a \$12,158,446 reduction in Distribution Line  
8 Blanket work order costs, as shown in his Exhibit PSD-KJM-11. The adjustment  
9 requires removal of plant in service, accumulated depreciation, and depreciation  
10 expense for the test year. The adjustments are reflected in Exhibit PSD-JMT-2  
11 Schedule 8. ADIT adjustments are included in adjustments PSD9, in which the  
12 cumulative impact on ADIT in rate base is estimated.

13

14 **Q14. Please explain adjustment PSD4 – Distribution Lines Large.**

15 A14. PSD witness Mr. Mara recommends a \$4,595,459 reduction in Distribution Lines  
16 Large capital costs, as shown in his Exhibit PSD-KJM-5. The adjustment requires  
17 removal of plant in service, accumulated depreciation, and ADIT for the test year. The  
18 adjustments are reflected in Exhibit PSD-JMT-2 Schedule 9. ADIT adjustments are  
19 included in adjustments PSD9, in which the cumulative impact on ADIT in rate base is  
20 estimated.

21

22



1 **Q15. Please explain adjustment PSD5 – Transmission Lines.**

2 A15. PSD witness Mr. Mara recommends a \$1,482,011 reduction in Transmission Line  
3 capital costs, as shown in his Exhibit PSD-KJM-4. The adjustment requires removal of  
4 plant in service, accumulated depreciation, and ADIT for the test year. The  
5 adjustments are reflected in Exhibit PSD-JMT-2 Schedule 10. ADIT adjustments are  
6 included in adjustments PSD9, in which the cumulative impact on ADIT in rate base is  
7 estimated.

8

9 **Q16. Please explain adjustment PSD6 – Capital Structure.**

10 A16. PSD witness Mr. Baudino recommends a minor adjustment to GMP's Capital  
11 Structure based on recommended reduction of the cost of debt from 5.07% to 5.03%  
12 (3.81% for the 9-month rate period). Accordingly, the adjustment is reflected in my  
13 COS model, Exhibit PSD-JMT-2 Schedule 3. The revised cost of capital is used to  
14 reflect the PSD adjusted COS in PSD-JMT-2 Schedule 4, column (3).

15

16 **Q17. Please explain adjustments PSD7 – Power Supply Costs and PSD8 – Renewable**  
17 **Energy Certificates.**

18 A17. PSD witness Edward McNamara makes two recommendations with respect to power  
19 supply in his testimony. Mr. McNamara recommends a \$397,682 downward  
20 adjustment to power supply costs related to Regional Network Service rates. That  
21 adjustment is reflected in exhibit PSD-JMT-2, Schedule 5, Line 7 and flows through  
22 the COS as a downward adjustment in transmission costs. Mr. McNamara also

1 recommends that GMP not be entitled to receive a return on 95% of the Renewable  
2 Energy Certificate (REC) inventory average balance. The result is a downward  
3 adjustment of \$4,080,000. This adjustment is reflected in the PSD adjusted COS  
4 model in exhibit PSD-JMT-2, Schedule 5, Line 8, and impacts the rate base on exhibit  
5 PSD-JMT-2, Schedule 2, Page 1 of 2.

6

7 **Q18. Please explain adjustment PSD9 – ADIT Adjustment on PSD Adjustments 1-5.**

8 A18. The Department did not have access to detailed ADIT balances for individual capital  
9 projects. Therefore, I had to estimate the amount of ADIT adjustment to make to  
10 reflect removal of capital projects associated with PSD Adjustments 1 through 5.  
11 Exhibit PSD-JMT-2, Schedule 12 provides the details of my estimate for ADIT. I  
12 computed the percent of plant-related ADIT to gross plant in service as filed by GMP  
13 in its adjusted COS as 7.158%. PSD witnesses are recommending a total downward  
14 adjustment of gross plant in service of just under \$34 million. By applying the 7.158%  
15 factor to the total gross plant adjustment, I estimate a downward adjustment on ADIT  
16 in rate base of \$2.434 million. That adjustment is also reflected in Schedule 5 of my  
17 exhibit 2 and on Schedule 2, page 2 of 2.

1 **Q19. What are the resultant COS impacts that result from the PSD adjustments you**  
2 **have presented above?**

3 A19. The total impact of all the adjustments recommended by PSD witnesses is a reduction  
4 in adjusted total cost to serve of \$3.426 million, as shown on Schedule 1 of Exhibit  
5 PSD-JMT-2, resulting in a required base rate revenue adjustment of 4.70%, compared  
6 to the 5.45% increase recommended by GMP. When the one-time bill credit for  
7 corporate tax reform is taken into account, the PSD COS shows a 1.24% reduction in  
8 bottom-line net revenues, compared to a 0.50% reduction as reported by GMP.

9  
10 **Q20. Does this conclude your direct testimony?**

11 A20. Yes.