STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Tariff filing of Green Mountain Power requesting a 5.45% increase in its base rates effective with bills rendered January 1, 2019, to be fully offset by bill credits through Sept. 30, 2019	))))	Case No. 18-0974-TF

PREFILED REBUTTAL TESTIMONY OF

EDMUND F. RYAN

ON BEHALF OF GREEN MOUNTAIN POWER

September 12, 2018

Summary of Testimony

Mr. Ryan responds to the Department of Public Service's recommended adjustments to GMP's cost of service, outlining those recommendations agreed to by GMP and GMP's suggested corrections and modifications. Mr. Ryan also responds to issues raised by DPS witnesses Mr. Myers, Mr. McNamara, and Mr. Winn, and discusses the implementation and costs of the recent settlement between GMP and GlobalFoundries. Mr. Ryan's testimony supports GMP's revised cost of service reflecting a revenue deficiency of $23,531,000 or a base rate increase of 5.43%. He explains that the 2019 Tax Reform bill credit will create a benefit to customers other than GlobalFoundries amounting to 6.33% of current base rates. Mr. Ryan explains that the net effect during the 2019 Rate Period, compared to current base rates, for all customers other than GlobalFoundries will be a decrease of 0.9%, which is greater than the decrease reflected in GMP's initial April 2018 filing.

Exhibit List

GMP-ER-1 (Rev.)	Revised Schedules 1, 2, & 3
GMP-ER-17	Summary of GMP's Proposed Adjustments to COS
GMP-ER-18	Summary of Impact of Rate Design Settlement with GF
GMP-ER-19	DPS Discovery Responses Q.GMP.1-78; Q.GMP.1-79; Q.GMP.1-82

Q1. Please state your name and position.

A1. My name is Edmund F. Ryan, and I am employed by Green Mountain Power ("GMP") as Controller.

Q2. Have you previously submitted testimony in this proceeding?

A2. Yes, I previously provided prefiled direct testimony in this proceeding dated April 13, 2018.

Q3. What is the purpose of your testimony today?

A3. First, I provide updates to the cost of service for some GMP adjustments and Department of Public Service ("Department" or "DPS") recommended adjustments agreed to by GMP. Second, I respond to issues raised by DPS witnesses Mr. Myers, Mr. McNamara, and Mr. Winn. Third, I discuss the implementation and costs of the recent settlement between GMP and GlobalFoundries. My testimony explains our revised cost of service, as updated to reflect our adjustments; DPS recommendations we are accepting; and the impact of the GlobalFoundries settlement rate freeze.

Q4. How is your testimony organized?

A4. My testimony is broken into three sections. In Section I, I make adjustments to my previous testimony, outline the adjustments GMP is proposing to accept in response to the Department's testimony and present a revised Cost of Service that takes into account the GMP adjustments, adjustments that GMP has accepted and the impact of the GlobalFoundries settlement rate freeze. In Section II, I respond to regulatory accounting issues raised by Mr. Myers and Mr. McNamara, including the treatment of Renewable Energy Credits ("RECs"), and the JV Storage projects. I also address Mr. Winn's discussion of rate drivers for this filing. In Section III, I explain the impacts and benefits GMP's recent settlement with GlobalFoundries will have on billings to other customers.

Q5. Can you please summarize the revised cost of service as reflected in your testimony?

A5. Yes. Our revised cost of service reflects a revenue deficiency of $23,531,000 or a base rate increase of 5.43%. During the 2019 Rate Period, this revenue deficiency will be more than offset by the Tax Reform bill credit of $27,400,000. Under the terms of GMP's recent settlement with GlobalFoundries, discussed in more detail in Section III below and in the testimony and exhibits of Kristin Carlson, GlobalFoundries will forgo its portion of that credit, thereby increasing the benefit to other customers to 6.33% of current billed base rates. The net effect during the 2019 Rate Period, compared to current base rates, will be a decrease of 0.9% for all customers other than GlobalFoundries.

SECTION I – ADJUSTMENTS & REVISED COST OF SERVICE

Q6. Can you please summarize the adjustments GMP is making to its previously filed 2019 rate period cost of service?

A6. GMP will be making the following adjustments to our previously filed 2019 rate period cost of service, as set forth in ***Exhibit GMP-ER-17***:

- Update to increase slightly the December 2018 Tax Reform Regulatory Liability line item;

- Adjust our Transco investment and equity in earnings of affiliates to reflect an additional investment in Transco;
- Adjust the cost of service and rate base to reflect the impacts of moving out the Tesla Powerwall program plant in service dates;
- Reduce the plant in service additions amounts for various “Distribution Line Projects Large” capital projects;
- Adjust the cost of long-term debt and the Regional Network Service (RNS) transmission cost to reflect actual costs, as recommended by the Department and accepted by GMP;
- Record a return on the REC inventory based on our short-term debt bank loan interest rate as recommended by the Department and accepted as modified by GMP; and
- Reflect the GMP-GlobalFoundries settlement rate freeze, as set forth in Section III below.

Q7. Please describe the adjustment you have made to the December 2018 Tax Reform Liability line item.

A7. The projected December 2018 Tax Reform Regulatory Liability of $177,351,898 in our April 2018 filing was an older estimate and when adjusted and updated it reflects a revised projected balance of $177,728,413. We advised the Department of this change in discovery. This adjustment reduces rate base, which results in a reduction to our rate request by 0.01%.

Q8. Please describe the additional Transco investment and associated equity in earnings of affiliates adjustment.

A8. GMP was recently notified by VELCO of the opportunity to make an additional $3.1M investment into Transco in December 2018. Transco investments are very favorable to our customers and this additional investment reduces our rate request by 0.05%.

Q9. Please describe the Tesla Powerwall in service date adjustment.

A9. We are moving out the Tesla Powerwall program plant in service dates a few months to reflect a revised installation schedule of Powerwall units. Mr. Castonguay discusses this adjustment in more detail in his Rebuttal Testimony. This adjustment reduces our rate request by 0.04%.

Q10. Please describe the adjustment to the plant in service additions amounts for various "Distribution Line Projects Large" capital projects.

A10. As more fully described in Mr. Fiske's Rebuttal Testimony, while we do not agree with all the adjustments DPS's witnesses propose, we are reducing the plant in service additions amounts for various Distribution Line Projects Large by $1.43M. The adjustment reduces our rate request by 0.01%.

Q11. Please describe the DPS adjustments which GMP is accepting.

A11. GMP is accepting the following DPS adjustments:

- Mr. Baudino recommended the interest rate on the September 2018 long-term debt issuance be updated to reflect the actual interest rate of the 2018 issuances (Baudino Direct Testimony page 35 lines 19-23) and the interest rate on the remaining two other projected long-term debt issuances be reduced to 4.50% (Baudino Direct Testimony page 36 lines 1-5). We agree. The as-filed 2019 rate period cost of service has been updated to reflect the actual interest rates on the September and December 2018 long-term debt issuances which GMP locked in on August 21, 2018 and a 4.50% interest rate on the remaining 2 other projected long-term debt issuances. This adjustment reduces our rate request by 0.10%.

- Mr. McNamara recommended the Regional Network Service ("RNS") transmission cost be reduced by $397,682 to reflect the actual RNS rate, which was not available when GMP was preparing the as-filed 2019 rate period cost of service (McNamara Direct Testimony page 7 lines 3-9). We agree. The as-filed 2019 rate period cost of service has been updated to reflect this recommendation. This adjustment reduces our rate request by 0.09%.
- Mr. McNamara recommended the removal of the REC inventory from Rate Base, the REC inventory earn a return based on our short-term debt bank loan interest rate and, on a going-forward basis, GMP recover its REC costs at the time it records the purchase power invoice which includes those REC costs. We agree to the REC inventory earning a return based on our short-term debt bank loan interest rate. This adjustment reduces our rate request by 0.05%. As discussed more fully below, we propose to work with the Department to develop a plan for rate-making purposes to transition to the expensing of

RECs when the invoice is paid, thereby eliminating the REC inventory, rather than making this transition immediately.

Q12. Have you updated your previously filed Exhibits to reflect all of the changes to the rate period cost of service contained in your rebuttal testimony?

A12. Yes. I have submitted ***Exhibit GMP-ER-1 Schedules 1, 2 & 3 (Rev.)***. I have also created a new ***Exhibit GMP-ER-17***, which provides a road map from our originally filed revenue deficiency and rate increase to our revised revenue deficiency and rate change. New ***Exhibit GMP-ER-18*** separately shows the overall dollar impact of the proposed 2.73% downward adjustment for GlobalFoundries, consistent with GMP's recent Rate Design filing which is discussed in Section III of this Testimony.

Overall, the changes previously discussed and the impact of the GlobalFoundries rate freeze discussed in Section III of this testimony result in a revenue deficiency of $23,531,000 or a base rate increase of 5.43%, lower than the 5.45% originally filed. During the 2019 Rate Period, this revenue deficiency will be more than offset by the Tax Reform bill credit of $27,400,000. Under the terms of the GlobalFoundries settlement, it will forgo its portion of that credit. Based upon that settlement and the other adjustments GMP recommends, the benefit to other customers from the Tax Reform bill credit will be 6.33%, compared to current billed base rates. The net effect during the 2019 Rate Period, compared to current billed base rates, for all customers other than GlobalFoundries will be a decrease of 0.9%, which is better than the 0.5% 2019 Rate Period decrease set forth in GMP's initial filing.

Q13. The DPS has proposed various adjustments to reduce GMP's rate request from 5.45% to 4.7%. Do you agree that the adjustments proposed by the DPS, if accepted, would result in a 4.7% rate request?

A13. No, the actual rate request that would result from accepting all DPS adjustments would not be 4.7%. The following corrections would need to be made to the DPS rate period cost of service to properly reflect the adjustments proposed by the DPS:

- Adjustments to Plant in Service were made using the nominal dollar amount not the rate period 10-month average amount;
- Plant retirements would need to be adjusted to reflect the impact of the removal of certain plant additions.

The DPS also identified the following additional adjustments in their discovery responses to GMP:

- The operational savings associated with the Powerwall program net of any costs associated with these benefits should have been removed from the cost of service when the DPS recommended removing the Powerwall program from the cost of service (responses to Q.GMP.1-78 and 1-79, *see* ***Exhibit GMP-ER-19***); and
- The REC inventory recommendation should have reflected an accrued return based on GMP's credit facility interest rate (response to Q.GMP.1-82, *see* ***Exhibit GMP-ER-19***).

Adjusting the DPS's proposed 2019 rate period cost of service for these corrections would result in a revenue deficiency of $22,895,280 and rate increase of 4.97%. As described elsewhere in my testimony, GMP does not agree with all of these adjustments from the DPS but summarizes these changes here to assist the Commission as it analyzes these recommendations.

In addition, the DPS's recommendation was made prior to completion of GMP's settlement with GlobalFoundries, described in greater detail in Section III below. If that settlement were accepted along with the other corrections above, the GlobalFoundries rate freeze would change DPS's recommendation to 5.29%, but would also increase the value of the Tax Reform bill credit for all customers other than GlobalFoundries, a line item with which DPS agrees.

SECTION II – RESPONSE TO REGULATORY ACCOUNTING ISSUES

Q14. Regarding PUC Request #10, the Commission asks for a detailed description of GMP's rate treatment of its REC inventory balance and why it is in rate base rather than accounted for as a power supply cost. Can you please review how GMP currently accounts for RECs and explain why it is treated this way?

A14. Under U.S. Generally Accepted Accounting Principles ("GAAP"), GMP is required to follow the matching principle which states that revenues and related expenses should be recorded in the same accounting period. Additionally, under GAAP, GMP is required to allocate the cost of its power purchase agreements to the various products being purchased whenever the cost of each product is not explicitly stated in the contract. This allocation is based on the relative fair values of the products at the time that the contract is entered into.

GMP applies these principles to its REC GAAP accounting and ratemaking. GMP incurs a REC cost at the time that the related power is purchased, and GMP charges that cost to a REC inventory account. When the RECs are later sold, typically about six months after the generation that produced the RECs, GMP records revenue from the sale of RECs and reduces the REC inventory balance by charging out the cost of the sold RECs. GMP records the cost of the RECs as an expense against the REC revenue. GMP has historically included the REC inventory in rate base because RECs function like an inventory item; inventories (Materials & Supplies, fuel inventory, etc.) represent longer-term assets funded by a company's capital structure and used in supplying utility service to customers.

Q15. Please respond to Mr. McNamara's recommendation that REC inventory be removed from Rate Base, the REC inventory earn a return based on GMP's short-term debt bank loan interest rate, and on a going-forward basis REC costs be recovered at the time the purchase power invoice which includes the REC costs are recorded.

A15. GMP supports the ratemaking proposal to move from an inventory approach to REC accounting and instead recover REC costs at the time the purchase power invoice which includes the REC costs is recorded. Since this change will ultimately result in the REC inventory being eliminated, we agree it is appropriate to accrue a return on this inventory balance based on our short-term debt bank loan interest rate, and we propose to work with the DPS to develop a plan to transition away from a REC inventory as part of our Multi-Year Rate Plan.

Q16. Mr. Myers raises issues with the accounting of the JV Solar/Storage projects. Can you please summarize these issues?

A16. In his testimony, Mr. Myers raises concerns about intergenerational equity, the partnership flip structure with respect to ITC, the tax investor being a valid partner, the allocation of partnership items, and finally GMP's treatment of ITC gains.

Q17. Do you agree with the intergenerational equity concern raised by Mr. Myers?

A17. No, I do not. Large utility capital projects almost always involve some degree of intergenerational inequity. This occurs because the project's annual return on rate base collected from customers over time declines as a result of the decline in rate base due to straight-line book depreciation, while a project's benefits typically increase over time due to general price increases in the economy. This usually results over the life of the project with costs initially exceeding benefits, or what is referred to as costs being front-end loaded. At a crossover point in the project's lifetime, the benefits begin to exceed costs, or what is referred to as benefits being back-end loaded. Because of this, you cannot assess intergenerational inequity based on a single asset but need to assess it in the context of a utility's cost of service as a whole to determine if intergenerational inequity is within reasonable bounds. In the case of the JV Solar/Storage projects, GMP is actually deciding to front-load the developer fee and day one gain benefits, which helps to mitigate the front loading of costs that would typically result from utility capital projects. Although I have not done a detailed intergenerational inequity analysis, my experience tells me it is reasonable to conclude the countering of front-loaded costs with front-loaded benefits reduces intergenerational inequity and continues to keep it within a reasonable bound. This is consistent with the modeling we performed, as reflected in ***Exhibit GMP-ER-15***, filed with my direct testimony.

Q18. Do you agree with Mr. Myers' concerns regarding the partnership flip structure with respect to ITC, the tax investor being a valid partner, and the allocation of partnership items?

A18. No, I do not. These concerns are generic to all Tax Equity Partnership Flip Structures and are addressed by GMP's use of Tax Equity Partnership specialists to properly design the Tax Equity Partnership Flip Structure and its governing documents. These JV Solar/Storage projects will not be GMP's first Tax Equity Partnership Flip Structure transactions. GMP previously used Tax Equity Partnership specialists to design the Tax Equity Partnership Flip Structure and governing documents for the already-completed GMP JV Solar project to make sure these concerns were addressed, and will do the same for these JV Solar/Storage projects. We also are continuing discussions with DPS regarding whether there are additional ways we can address these concerns raised by Mr. Myers.

Q19. Do you agree with Mr. Myers' IRS Normalization concerns about the GMP's treatment of the ITC gain?

A19. In order to respond to this question, I should first correct two misstatements in my Prefiled Testimony. In two places, I referred to the "day one gain" for these projects as related to the ITC.[1] These shorthanded references were incorrect – the "day one gains" for these projects are *not* ITC gains. Therefore, the concern raised by Mr. Myers should be considered resolved and I would not agree that these projects raise IRS Normalization Rule concerns. GMP will be receiving 1% of the JV Solar/Storage projects' ITC and the Tax Equity Partner will be receiving 99% of the projects' ITC. GMP will be following the IRS Normalization Rules for the 1% ITC it will be receiving from the project.

Because a Tax Equity Partnership's earnings and losses are not allocated to its partners in proportion to their capital accounts, the appropriate method for allocating a Tax Equity Partnership's earnings and losses is the Hypothetical Liquidation at Book Value Method (HLBV). The HLBV Method will result in GMP receiving a significant allocation of book accounting earnings from the JV Solar/Storage projects in its initial year of operations. These significant book accounting earnings are often referred to as a "day one gain." It is this book accounting "day one gain" which GMP is returning to customers all in one year, not the ITC GMP is receiving from JV Solar/Battery projects. Therefore, there should be no concern regarding IRS ITC Normalization Rule violation.

Q20. Are there any other issues raised by DPS witnesses that you would like to address?

A20. Yes, I would like to briefly respond to Mr. Winn's assessment of the rate drivers in this filing.

[1] The sentence on page 8 line 17-18 which starts with "The accelerated return of developer fees and 'day one' gain from the Investment Tax Credit provides…." should read "The accelerated return of developer fees and 'day one' gain ~~from the Investment Tax Credit~~ provides…."
The sentence on page 19 lines 6-8 which starts with "In the 2018 rate case, the Department noted that traditional accounting treatment of the developer fees and 'day one' ITC gains associated with…." should read "In the 2018 rate case, the Department noted that traditional accounting treatment of the developer fees and 'day one' ~~ITC~~ gains associated with…."

Q21. On pages 8-12 of his testimony, Mr. Winn discusses his assessment of the rate drivers in this filing. What is your response?

A21. I agree with Mr. Winn that there are numerous ways to combine the revenue and cost changes into a handful of primary rate drivers, and this can result in a wide range of interpretations of what the primary rate drivers are in any particular case. Reasonable minds can differ regarding how to compare and analyze that issue.

However, I disagree with Mr. Winn categorizing equity in earnings from affiliates related to Transco/VELCO as "transmission costs." Grouping equity in earnings from GMP's investment in Transco/VELCO with transmission costs without including the rate base impacts of the investment in Transco/VELCO would result in an incomplete analysis that would overstate GMP's "Rate Base Related Costs," while understating GMP's actual transmission costs. The higher equity in earnings from Transco/VELCO results directly from making a greater investment in Transco/VELCO. Without this investment, which leads to higher return on rate base, there would be no higher equity in earnings. It is important to note that GMP makes the investment in Transco/VELCO not only for the reliability needs these investments meet but also for the financial benefit to GMP's customers, since the equity in earnings received from these investments are greater than the return from including these investments in rate base. In other words, these investments create direct monetary benefits for customers. Rather than the way Mr. Winn has approached this issue, GMP believes that the appropriate rate drivers grouping for Transco/VELCO investments involves either: 1) separating the actual transmission operating expenses paid to ISO-NE and Transco/VELCO from the cost and returns created from GMP's ownership investments in Transco/VELCO (which is the way GMP looks at it as reflected in the chart that GMP showed in the rate case workshop); or 2) combining all three together in a single analysis.

SECTION III – GMP-GLOBALFOUNDRIES SETTLEMENT

Q22. Please describe the effects the GlobalFoundries settlement agreement will have on customers' bills during the 2019 rate period.

A22. There are three components of the GlobalFoundries settlement agreement, as reflected in the Term Contract filed for approval with the Public Utility Commission (see ***Exh. GMP-KC-1***), that will impact customers' bills during the 2019 rate period:

- The first component is the GlobalFoundries rate freeze. GlobalFoundries' rates are frozen at the current rates in effect. This will result in additional 2019 rate period revenue deficiency being collected from all other customers in the amount of $1,433,916.
- The second component is that GlobalFoundries has agreed to forgo their 2019 rate period tax reform bill credit of $1,670,082, to the benefit of all other customers.
- The third component is that the Term Contract calls for GlobalFoundries' base rates to be reduced by $767,004 or approximately (2.73%) in order to reflect GMP's recommended rate design allocation for Class 70 in Case No. 18-2850-TF (the "Rate Design Proceeding"). The Term Contract seeks this adjustment effective January 1, 2019, even though the Commission Order in the Rate Design Proceeding may not yet have been issued. Thus, this adjustment may occur at the same time as all other customer classes are adjusted based upon the Rate Design Proceeding, or it may precede those adjustments by some period of time if that

Rate Design Proceeding is not yet concluded. Since rate design by its nature is revenue neutral across all customer classes, other customers will absorb this adjustment for Class 70, either pro rata or based upon the total class allocation adjustments adopted in the Rate Design Proceeding.

In summary, the GlobalFoundries rate freeze cost of $1,433,916 in the 2019 rate period will be more than offset by the additional $1,670,082 of tax reform bill credit other customers will receive because of the GlobalFoundries settlement. The timing and impact on other customers of the 2.73% rate design downward adjustment for GlobalFoundries will depend upon whether GMP's proposed class reallocation is approved to be implemented at the same time as GMP's 2019 rates go into effect, or instead must be done on a standalone basis before the rate design docket concludes. For example, GMP is recommending a -0.44% rate design adjustment to Residential Class 1, which if implemented at the time of the base rate change, would help lower the impact of the base rate increase and GF settlement for this class. In either event, the overall impact of this reallocation is minimal (less than two-tenths of a percent if done on a pro-rata basis). ***Exhibit GMP-ER-18*** sets forth the overall dollar impact of the GlobalFoundries' downward adjustment in the 2019 Rate Period; the exhibit also replicates the chart of GMP-recommended class allocations as filed in our Rate Design petition. As noted, the manner in which this adjustment will affect other customer classes depends upon the timing of the PUC's rate design order and the final allocations for other classes that are approved.

GMP supports the Department's recent request to set a schedule in the Rate Design proceeding that would allow the Commission to issue an order on the class reallocations by the end of this year, so that all of those reallocations can go into effect at the same time as the 2019 base rate change. As described in the petition filed to approve the Term Contract, GMP and GlobalFoundries propose that the agreement remain in effect through FY2022. The settlement is discussed in more detail in Ms. Carlson's testimony and exhibits.

Q23. Does this conclude your testimony?

A23. Yes, it does.