STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 18-0974-TF

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 September 30, 2019	)

GREEN MOUNTAIN POWER'S POST-HEARING BRIEF

Green Mountain Power ("GMP") submits the following brief, together with the attached Proposed Findings of Fact and Order ("PFD"), in support of its rate request for the 2019 rate period. GMP proposes a rate adjustment of 5.43% along with a one-time return of tax savings to customers which will result in a net decrease of -0.90% on customer bills during the 2019 rate period. The evidence in this case shows that these proposed adjustments will result in just and reasonable rates. GMP respectfully requests that the Vermont Public Utility Commission ("PUC" or the "Commission") approve the request and issue an order authorizing rates and the associated bill credit for customers to go into effect with bills rendered no later than January 3, 2019.[1]

I. Summary of Issues in Dispute

This traditional rate case was filed April 13, 2018 and has been extensively litigated over the past seven months, through several rounds of prefiled testimony and multiple rounds of discovery. The Department of Public Service ("DPS" or the "Department") and GMP have not resolved all of the issues presented in this case, but the testimony offered by each party reflects basic agreement on many issues. GMP and the Department presented independent analysis from

[1] GMP's petition initially requested that the rate increase take effect January 1, 2019. However, due to weekend days and holidays, GMP's last billing cycle of 2018 will end on January 2, 2019. Therefore, GMP's first billing cycle of 2019 will begin on January 3, 2019.

separate cost of capital experts, but those witnesses agree that the capital structure, cost of debt, and rate of return proposed in this case are appropriate. DPS and GMP witnesses also agree that the use of forecasted loads and revenues is the best approach in this particular case, given the current environment of flat or declining loads, and given that this traditional case is intended to serve as the bookend for a proposed multi-year regulation plan, which is under separate consideration in Case No. 18-1633-PET. This testimony also confirms that it is proper to include capital costs associated with serving new customer growth because the forecast includes new customer revenue. Similarly, after thorough review, DPS's witnesses agree that GMP's proposed one-time return of accumulated deferred income taxes ("ADIT") is correctly calculated and that it is appropriate to return this money to customers in this rate period.

GMP's proposed rate request also takes into account the Term Contract and settlement agreement between GMP and GlobalFoundries U.S. 2 LLC ("GlobalFoundries"). This agreement has the effect of increasing the bill credit returned to GMP customers during the rate period, as GlobalFoundries has agreed to forgo its share of the ADIT return, which more than offsets the value of the GlobalFoundries rate freeze during the rate period. Both GlobalFoundries and the Department support approval of the Term Contract and agree that it has been properly incorporated into the rate period.

The only remaining dispute between DPS and GMP relates to GMP's proposed 2019 capital projects. Both parties have made good faith efforts to narrow the contested issues in this area but fundamental disagreements remain over a handful of important projects—namely two of GMP's innovative energy projects, and some of GMP's Transmission and Distribution ("T&D") infrastructure investments.

With respect to GMP's innovation projects, GMP and DPS disagree on whether the Tesla

Powerwall 2.0 pilot program should be included in rates in the 2019 rate period. This program is a key part of the innovative energy transformation efforts GMP has been diligently pursuing over the past several years on behalf of customers. Through this work, GMP seeks to address the challenges of the current energy landscape by providing new solutions to combat rising costs and declining sales and by offering new energy products and services that enhance GMP's customer experience. The Powerwall pilot is well underway and has proved immensely popular with GMP's customers. It demonstrates that new thinking and creative partnerships between GMP and its customers can provide meaningful benefits for all of GMP's customers, including those who do not directly participate in the program. The evidence offered in this proceeding is based, in part, on the actual performance of already installed Powerwall units that delivered quantifiable, important savings this past summer. That data shows that the proposed approach to dispatching these distributed resources in a coordinated manner during peak periods can successfully reduce capacity and transmission costs for customers. And the financial analysis of the program—which relies on the same methodology, expert information, and assumptions GMP uses for other resource evaluations—demonstrates that the program will provide a net present benefit to customers over its life. As discussed further below, the concerns raised by DPS do not justify delaying inclusion of this program in rates and instead send a message discouraging additional investments in these types of innovation efforts.

GMP and DPS also disagree on the rate treatment for GMP's heat pump hot water heater ("HPHW") program, which will transition to a tariff during the rate period. With respect to this innovative program, the testimony and briefing in this case indicate that DPS's remaining concern can be resolved with a condition that requires GMP to ensure that all HPHWs installed and rate based in 2019 are controllable, which GMP is willing to accept.

The Department and GMP also disagree on the treatment of three of GMP's standard T&D blankets for equipment and distribution lines, and three individual T&D projects. The Department's argument over blanket work orders calls into question a fundamental regulatory framework employed in Vermont for decades to provide for necessary expenditures for critical infrastructure equipment and upgrades. The PUC has traditionally approved blankets based upon 5-year average spending to address the need for equipment for year-to-year maintenance of the system, or in areas of outages or other required work in the rate period, but where the exact location of the work cannot be specified at the time of filing. DPS requests that the Commission substitute the judgment of the DPS expert, who has independently attempted to determine a budget based on his narrow view of the work he believes may be required during the rate period, rather than relying upon GMP's judgment and long-established methodologies. This change is not warranted or justified, particularly in light of PUC precedent and the Memorandum of Understanding ("MOU") GMP and DPS executed in the 2018 Rate Case, which clearly contemplates the continued use of blankets, and was intended to serve as a guide for the development of known and measurable documentation for this case.

As discussed further below, DPS's proposed adjustments to individual T&D projects are similarly not supported by the record. GMP's documentation demonstrates the need for these projects and explains why the expenditures are in customers' best interest and therefore should be included in 2019 rates.[2]

[2] DPS filed its post-hearing brief early, along with its final proposed adjustments to GMP's T&D blankets. GMP has not had an opportunity since receiving this information to update Exhibit GMP-ER-17 (Rev.) to reflect these further changes to show the relative rate impact of each of the items remaining in dispute. GMP will consult with DPS in an effort to file another revision of GMP-ER-17 (Rev.), or a similar document, before the reply brief deadline for the Commission's informational purposes. For general context, and subject to developing the final cost of service reflecting the Commission's final

II. Tesla Powerwall Program

GMP has been focused on developing and implementing the Tesla Powerwall 2.0 program over the past year in an effort to confront the changing energy landscape with new, innovative programs that will help control costs and provide meaningful benefits for customers. The program was proposed in the summer of 2017 as a pilot program under GMP's Regulation Plan, which encourages GMP to pursue non-tariffed innovative programs that advance the state's energy goals, reduce fossil fuel usage, expand service choices, improve the quality of service and reliability, and create lasting value for customers.[3] GMP is pursuing the Powerwall program because it advances these goals and because these types of transformative energy projects are critical, in GMP's view, to controlling the trajectory of rates for customers over the long term, particularly in the present environment of flat or declining loads.[4] Furthermore, it provides GMP with a valuable grid asset that will help manage the continued growth of distributed energy on the system as GMP works towards meeting the goals of its customers and Vermont's Comprehensive Energy Plan.[5] The statute underlying GMP's 2018 Regulation Plan speaks directly to addressing these challenges, when it requires that all plans "offer incentives for

decision in this case, the remaining capital projects have the following relative rate impacts: DPS's proposed Tesla Powerwall adjustment would remove approximately $15.2 million of spending from the interim and rate period, plus the revenue and power supply benefits of this program. Together the net impact of excluding these costs and benefits accounts for the majority of the difference between DPS's current position of 5.30% and GMP's current position of 5.43%. DPS's proposed T&D blanket adjustment would remove approximately $9.1M of spending from the rate period, resulting in a rate reduction on the order of several basis points. DPS's individual T&D adjustments would collectively remove approximately $767,055 of spending in the rate period and result in a rate change of near or under one basis point. DPS's adjustment to the HPHW program would slightly increase the rate need by a basis point or two, as the revenues associated with this program are greater than the capital-associated costs in the rate period.

[3] *See In re Green Mountain Power*, Case No. 17-3232-PET, Final Order at ¶¶ 19, 34, 38, 39 (Nov. 29, 2017).

[4] Castonguay pf. at 5-6; Castonguay rebuttal pf. at 5.

[5] Castonguay rebuttal pf. at 17.

innovations and improved performance that advance state energy policy such as increasing reliance on Vermont-based renewable energy and decreasing the extent to which the financial success of distribution utilities between rate cases is linked to increased sales to end use customers and may be threatened by decreases in those sales."[6] The evidence in this proceeding demonstrates that the Powerwall program will meet these important purposes—it develops a new source of revenue to benefit all customers (in the form of payments from host customers) and provides meaningful reduction of regional costs pressures for customers that are otherwise largely outside GMP's control (in the form of reduced Regional Network Service ("RNS") and capacity costs).[7]

GMP's regulation plan does not automatically guarantee rate recovery for all innovative pilot programs, and that is appropriate. But the Regulation Plan specifically contemplates that the Commission may approve rate recovery of these programs, providing that "[a]ny rate filing in which GMP seeks to reflect the costs and revenues of Innovative Pilots shall include a schedule setting forth the costs and revenues of all Innovative Pilots offered and shall be subject to Department review and Commission approval."[8] When, as here, the evidence demonstrates a particular pilot program will produce benefits for customers over the life of the program, it is entirely consistent with the intent of the Regulation Plan, and the relevant statutory guidance, for the Commission to include that program's costs and associated benefits in rates. The Commission has previously approved costs for other pilot programs in rates during the pilot period, including the heat pump and heat pump hot water heater programs that were included in

[6] 30 V.S.A §218d(4); *see also* §218d(6) (encouraging "innovation in the provision of service.").
[7] Castonguay rebuttal pf. at 5.
[8] 2018 Interim Regulation Plan (approved in Case No. 17-3232-PET, Final Order at Attachment 1 (Nov. 29, 2017) ("2018 Regulation Plan").

rates last year. Given the evidence presented in this case on the benefits of the Powerwall program for customers, GMP seeks the same treatment for the Powerwall program in this case.

The Powerwall program meets all of the regulatory requirements that would typically apply to a decision to include utility investments in rate base. DPS does not dispute that the costs of the program are known and measurable; indeed, as noted above, GMP has already begun incurring costs associated with the program, despite the fact that the program is not yet included in rates.[9] And the evidence demonstrates that the full 2,000 units will be installed before the end of the 2019 rate period, and therefore will be available to generate benefits for customers during the rate period.[10] GMP has successfully dispatched the fleet of installed Powerwalls over the past year during peak periods and has shown that the program can provide the anticipated benefits for customers, in the form of both reduced power supply costs, as well as through increased revenues through monthly or one-time payments from participating customers.[11] These benefits are not hypothetical, they are real, and they are already accruing to customers now and will continue in the rate period. The program has reduced GMP's RNS costs in 2018, and the savings associated with the discharge of the batteries during the ISO-NE peak day on August 29, 2018 will provide customers savings through reduced capacity charges in the 2019 rate period.[12]

The Department acknowledges the important nature of this energy transformation work, and expresses support for the program generally, but argues that the decision to include the

[9] Castonguay rebuttal pf. at 12 (noting that GMP has already invested $5.14M in the program as of August 2018); Exh. GMP-JC-1 (noting that GMP will invest a total of $9.7M through the interim period ending 12/31/2018).
[10] Castonguay rebuttal pf. at 4-5.
[11] Castonguay rebuttal pf. at 10-12.
[12] *Id.*

program in rates should be delayed until a potential future tariff proceeding, raising concerns with GMP's modeling and seeking unspecified additional information to further demonstrate the program's anticipated benefits.[13] The effect of DPS's position would remove not only the costs of the Powerwall program from 2019 rates, but also the anticipated new revenue and power supply benefits of the program from 2019 rates.[14]

To support its request for delay, DPS raises two specific concerns regarding GMP's program modeling. On its first concern, DPS's expert, Mr. Dawson, initially testified that he did not believe the GMP model accounted for degradation of the batteries over the life of the program.[15] In response to this testimony, Mr. Castonguay, who was responsible for development of the Powerwall program at GMP, explained how the GMP/Tesla model did in fact take degradation into account. He described how the model incorporated a sophisticated hourly dispatch model, based on actual historic ISO-NE peak data, and evaluated the ability of the automated dispatch algorithm to discharge the batteries to hit these actual peaks. This analysis showed that the fleet of batteries could be successfully dispatched to hit FCM peaks 100% of the time, and to hit RNS peaks 99-98% of the time, even assuming 3% battery degradation each year over 15 years.[16] Mr. Castonguay also explained that the degradation assumption included in the model was conservative compared to the likely use case for these batteries, which will require far fewer cycles than accounted for in the Tesla modeling.[17] In addition to degradation assumptions, GMP also included other de-rating factors in the model that were levelized over the life of the

[13] DPS Brief at 6.
[14] Thomas supp. pf. at 4
[15] Dawson pf. at 41.
[16] 10/25/18 Tr. at 81-82 (Castonguay).
[17] 10/25/18 Tr. at 92 (Castonguay).

batteries to provide a conservative evaluation of the program's benefits.[18] Actual performance of the batteries to-date shows the system performing above the assumptions in the model.[19]

Following Mr. Castonguay's testimony, Mr. Dawson acknowledged on the stand that he did not fully understand how degradation was considered in the model when he prepared his prefiled testimony.[20] He also acknowledged that the hourly dispatch model used by GMP was a sophisticated way to evaluate this issue, and he conceded that he did not have any basis to know if the degradation assumption was conservative or not.[21] As a result, Mr. Dawson's testimony does not provide a reasonable basis to conclude that degradation was not adequately evaluated, and it certainly does not justify excluding the Powerwall program from rates.[22]

DPS's second stated concern relates to how GMP modeled avoided RNS and FCM costs over the life of the Powerwall program. DPS did not dispute GMP's cost estimates, nor did it conduct its own independent projections of RNS and FCM costs to rebut GMP's evidence.[23] Instead, DPS asserts that GMP should have considered how potential variability in these projected values might affect the overall viability of the project through a sensitivity analysis. But this generic concern does not provide a compelling basis to delay including the program and its benefits in rates. There is no evidence that GMP's cost estimates are fundamentally wrong, somehow unreasonable or inappropriate, or different than the approach it takes when analyzing

[18] 10/25/18 Tr. at 85-86 (Castonguay).
[19] Castonguay rebuttal pf. at 11.
[20] 10/25/18 Tr. at 155 (Dawson).
[21] 10/25/18 Tr. at 156-57 (Dawson).
[22] Any concerns over degradation are also further addressed by the performance guarantee GMP negotiated with Tesla related to the Powerwall program. This comprehensive agreement incorporates the modeling assumptions regarding the battery system's ability to hit peaks and provides that Tesla will make GMP whole for underperformance of the system against the modeled peak reduction performance, up to $3 million over the ten years of the program. This provides customers reasonable assurances that the benefits of the program will not vary due to physical performance of the batteries, including any potential degradation beyond the already 3% degradation included in the model.
[23] DPS brief at 9; 10/25/18 Tr. at 163 (Dawson).

other resources. To the contrary, GMP explained that it used the same basic methodology for analyzing the benefits of this project that it has used for other potential generation projects and PPAs in the past several years.[24] GMP's avoided cost forecasts are based on the same internally developed market outlooks used in other situations – which are built on a review of regional wholesale market conditions and anticipated market price drivers for each of the key products (i.e., energy, capacity, and renewable energy certificates or RECs).[25] These forecasts are informed by GMP's review of market price forecasts and publications from consultants who focus on the New England markets, and by GMP interviews of the experts who develop those forecasts.[26] GMP's basis for forecasting potential avoided costs for the Powerwall program should not be held to a higher standard than its other resource decisions that relied on these same assumptions and methodologies.

GMP's witness Mr. Smith also explained that GMP considered whether to perform further sensitivity analysis in this case but did not believe that such analysis was warranted, based on the relative market risks for these resources (which includes known capacity pricing for the initial years of the program), the relatively small scale of the program, and the fact that the output of the Powerwalls will be offsetting far larger transmission and capacity costs that GMP must incur to serve the needs of its customers.[27]

The record also does not support the Department's underlying assertion that there is significant, unanalyzed risk associated with the anticipated benefits of this program. In fact, the evidence shows that the primary source of power supply benefits – RNS savings – is not likely to

[24] Smith rebuttal pf. at 13.
[25] *Id.*
[26] *Id.*
[27] 10/25/18 Tr. at 117 (Smith); Smith rebuttal pf. at 29-30.

be very volatile over the life of the program.[28] The Department's witness acknowledges that the price for this transmission obligation will likely continue to increase during the 10-year term of the Program.[29] Mr. Dawson's only proposed adjustment to GMP's estimates for this category of benefits was his suggestion that GMP use a more modest annual growth assumption based on the rate of inflation for RNS prices, instead of the 3.25% annual growth incorporated into GMP's model.[30] But Mr. Dawson acknowledged in testimony (and GMP witness Smith confirmed during cross examination) that this change would not have a material impact on the anticipated benefits in the model.[31] Mr. Dawson also agreed that the other primary source of power supply benefits, capacity prices, have already been essentially locked for the first several years of the program.[32] Given these facts, it is not clear why the Department believes additional delay is necessary, or how the proposed delay will meaningfully inform the already extensive analysis provided in this proceeding related to the future value of the Program's benefits.[33]

It is also important to note that, regardless of the Powerwall program, GMP will have the obligation to pay significant capacity and transmission charges on behalf of customers.[34] GMP is developing the proposed Powerwall program as part of a portfolio of demand response resources to help manage these capacity and transmission costs, which are outside of GMP's

[28] 10/25/18 Tr. at 166 (Dawson); 10/25/18 Tr. at 120-121 (Smith).
[29] 10/25/18 Tr. at 166 (Dawson);
[30] Dawson pf. at 29.
[31] 10/25/18 Tr. at 167 (Dawson).
[32] 10/25/18 Tr. at 166 (Dawson).
[33] The Department also expresses some concern over the scale of the Powerwall program, but DPS did not comment on the scope of the pilot when it was proposed in 2017, and it does not take a position in this case on what scale would be appropriate. Of course, any reduction in the size of the program would also reduce the scope of anticipated benefits for customers, and as DPS acknowledges, there is no basis to limit the scope now given that GMP has already made significant progress in installing the 2,000 Powerwalls. DPS Brief at fn. 27.
[34] Smith rebuttal pf. at 29-30.

control.[35] In evaluating options for providing these types of services, GMP considered a range of alternatives, specifically looking at other residential battery storage options, which were more expensive.[36] GMP also considered other demand resources and load management mechanisms, including curtailable critical peak riders, other pilots, and other utility-scale battery storage programs.[37] GMP is pursuing many of these resources already, as each has unique benefits and drawbacks, and many are limited in scale based on customer adoption, and therefore the scale of benefits varies.[38]

The Tesla Powerwall program represents a particularly good option within a broader portfolio in GMP's view because it provides a flexible, year-round resource that can reduce GMP's capacity obligations at a scale that other demand resources cannot consistently provide.[39] It also offers unique benefits to the host customers, in the form of improved reliability during grid outages, which other programs cannot provide.[40] These benefits encourage customers to participate as hosts, which generates revenues in the form of customer payments, and also provides the mechanism through which GMP can develop a distributed, but controlled, system of batteries that can be leveraged to benefit all non-participating customers.[41] The fact that this particular program is anticipated to provide a net benefit for customers over its lifetime is unique from other methods GMP could pursue for meeting its capacity obligations, such as simply securing additional capacity PPAs, because those resources are typically priced in the

[35] *Id.;* Castonguay rebuttal pf. at 19-20.
[36] Exh. GMP-BO-8 (Tesla Powerwall Capital Folder, and alternative analysis contained therein).
[37] Castonguay rebuttal pf. at 19-25.
[38] Castonguay rebuttal pf. at 19-20; 10/25/18 Tr. at 73 (Castonguay) (noting that absolute value of some programs may be smaller even if the dollar/kilowatt month is higher because of the available scale of the resource).
[39] Castonguay rebuttal pf. at 23-24.
[40] *Id.* at 6, 23-24.
[41] *Id.* at 6.

market such that they appear breakeven from a net present benefit perspective when purchased, making the Tesla Powerwall program an extremely beneficial tool to reduce transmission and capacity costs for customers.[42]

Taking all of these factors into consideration, the record in this case provides compelling justification for including the Powerwall program in rates now, so that the benefits of the program can begin flowing to customers. The performance of the installed systems over the past year demonstrates that the program provides the benefits that were anticipated, and the supporting financial analysis shows that the program will generate a net positive benefit for customers. While not all innovative pilots will meet these standards, for those like the Tesla Powerwall program that do, the Commission should support them by allowing GMP to treat them in the same manner as other utility investments. Therefore, GMP requests that the Commission include the costs and benefits of the Powerwall program in rates in 2019.

III. Heat Pump Hot Water Heater Program

The other innovative program still at issue in this case is GMP's heat pump hot water heater program. GMP proposes a relatively modest amount of capital to continue this innovative work during the rate period under a tariff that GMP will soon file for these resources. The costs and benefits associated with the prior HPHW pilot program were included in rates in the 2018 case, and the question before the Commission is therefore limited to whether to include in rates the proposed costs and benefits of these units in the 2019 rate period. As the Department notes, the HPHW program has a small rate reducing effect in this case because the revenue associated

[42] 10/25/18 Tr. at 122 (Smith).

with the program outweighs its limited capital costs in the rate period.[43] Removing the program would therefore marginally increase the rate need in the 2019 period.

The Department is concerned that the program will not provide all of the anticipated benefits to non-participating customers unless the installed units can be controlled by GMP to provide peak shaving benefits.[44] It is also GMP's goal to control these units in order to provide maximum benefits for all customers, and therefore GMP and the Department are aligned with respect to the desired outcome for this program. To that end, GMP has worked diligently on several options to implement control features on HPHWs, and has successfully developed a program with one manufacturer, Rheem, which now provides an integrated control option on its devices.[45] GMP's program will be focused on installing these units in the 2019 rate period. DPS supports including the program in rates so long as GMP requires that the units be controllable, and GMP has agreed to include a control requirement in its proposed tariff.[46] As a result, GMP believes the program should remain in 2019 rates, conditioned on the requirement that installations under the new tariff program require controllable devices.

IV. Transmission & Distribution Blanket

The Department's recommendations on GMP's T&D blanket work orders relate to three specific blankets – namely the Distribution Lines, Transformers, and Regulator & Capacitor blankets. The Department agrees that GMP's other blanket work orders are appropriate, but with respect to these three blankets DPS seeks significant adjustments in spending that are fundamentally inconsistent with the PUC's well-established precedent and would limit GMP's

[43] DPS Brief at 14.
[44] *Id.* at 13.
[45] Castonguay rebuttal pf. at 19.
[46] 10/25/18 Tr. at 58 (Castonguay).

ability to address customer needs during the rate period.

The Department acknowledges that the PUC has historically held that blankets meet the known and measurable standard.[47] In fact, the PUC has authorized the use of blankets for T&D projects for at least 25 years – including the very same three blankets in dispute here, namely GMP's distribution, transformer, and regulator blankets. See, e.g. *In re Green Mountain Power Corp.*, Case No. 5428, Final Order at §(A)(3) (Jan. 4, 1991) (authorizing spending in GMP's distribution, transformer, and regulator blankets). The PUC has also traditionally relied on historical averages as the appropriate measure for establishing the level of spending in each blanket, taking into account inflation. See, e.g., *In re Green Mountain Power Corp.*, Case No. 5983, Final Order at 48 (Feb. 27, 1998) (using a seven-year historical average as the base for calculating the distribution blanket and applying a three-percent inflation factor).

GMP used this approved methodology when it developed its T&D blanket work orders last year, establishing budgets based on the five-year average of actual spending in each blanket category.[48] This approach was accepted by DPS last year and approved in the 2018 Rate Case. GMP has used the exact same methodology in this case, subject only to the agreed-upon changes to include growth-related spending this year and the removal of projects above $250,000 from the blankets, consistent with the 2018 DPS/GMP MOU.[49] The use of five-year averages for developing these blankets budgets is important because spending can fluctuate from year to year based on varying system needs, equipment failures, lead times, and customer requests.[50] As GMP's testimony explains, the five-year average approach has worked well to address these

[47] Mara pf. at 43; Winn pf. at 16.
[48] Fiske pf. at 21; Fiske rebuttal pf. at 26.
[49] Fiske pf. at 22; Fiske rebuttal pf. at 24-25.
[50] Fiske rebuttal pf. at 26.

spending fluctuations by smoothing out the impact in any given year.[51] Moreover, consistent with past practice, GMP compares the five-year averages to the actual budgeted number for each blanket in each rate period and includes the lesser amount in the rate filing which results in a higher probability that these dollars will actually be spent.[52]

DPS argues that it is not seeking to dramatically change the PUC's approach to blanket spending in this case, but its recommended methodology would do just that. DPS does not argue that the five-year averages prepared by GMP in this case for each blanket are incorrect; rather, it argues that the Commission should abandon the use of historical five-year averages altogether for these discrete blankets, and instead rely on the judgement of its independent expert to set a new blanket budget, based on his opinion regarding the appropriate items to include in the rate period.

The evidence indicates that the alternative methodology advanced by the Department's witness, Mr. Mara, is arbitrary and does not take into account all of the types of projects that GMP will need to address during the rate period. For example, Mr. Mara's recommendation on the regulator and capacitor blanket only allows spending based on his independent calculation of potential new customers in the rate period and excludes spending on regulators or capacitors that are needed for feeder backup, circuit reconfiguration, or power quality complaints, which are typically addressed under this blanket.[53] As Mr. Fiske explains, these expenditures are not discretionary, and Mr. Mara's arbitrary calculation would exclude spending on these types of projects that are necessary to ensure adequate system voltages and system operation for GMP's

[51] *Id.*
[52] *Id.*
[53] Fiske rebuttal pf. at 28.

customers.[54]

The Department's approach also ignores the rationale for using a five-year average for developing these blankets, which is intended to smooth out variations that may occur year to year in individual projects, setting a stable, more consistent budget for customers.[55] Mr. Mara's recommendation for the Transformer Blanket, for example, relies on a number of independent judgments (e.g., the number of three-phase units, single-phase units, failed transformers, etc.) that in actuality will differ from year to year.[56] To the extent Mr. Mara's unsupported assumptions are incorrect, GMP will still be required to make expenditures to meet these necessary customer obligations. The long-accepted averaging approach accounts for these variations resulting in more consistent and predicable costs for customers over time.[57]

With respect to the largest blanket for distribution lines, Mr. Mara acknowledges that GMP will need to spend capital to meet specific anticipated needs on projects he has nevertheless excluded from the blanket, such as reliability projects, and road relocation projects requested by state and municipal authorities.[58] And, while Mr. Mara recognizes that GMP will still need to meet these other obligations, he nevertheless proposes a draconian adjustment to this blanket, cutting 63% of the 5-year average of historical spending for the 2019 rate period.[59] Despite the fact that this estimate is based on an average of spending, Mr. Mara would require GMP to absorb the additional necessary spending and seek to recover in some future rate case,

[54] *Id.*
[55] *Id.* at 29.
[56] *Id.*
[57] *Id.* at 26.
[58] Mara pf. at 46.
[59] Exhibit PSD-KJM-10 (Revised 11/9/18) (recommending $8.1 million reduction to 2019 Distribution Line Blanket).

which would just stack costs for customers down the road.[60] This will not result in just and reasonable rates and is not in customers' best interests.[61] Simply put, the record in this case does not provide a compelling basis to reverse more than 25 years of precedent on how blanket projects are documented in traditional rate cases in Vermont.

V. Individual Transmission & Distribution Projects

DPS's remaining individual T&D adjustments relate to two motor operated air break ("MOAB") switch projects, and one distribution line project.[62]

Regarding the two proposed MOAB projects, the evidence demonstrates that the spending has a high probability of occurring in the rate period, and DPS does not dispute that the spending is known and measurable. GMP has explained that these proposed projects are part of a programmatic effort to upgrade and modernize its grid, and the record demonstrates that the proposed projects will provide improved reliability benefits for customers and improved safety benefits for GMP's line crews.[63] The remote operation of these switches allows GMP to resolve faults at substations faster and with less risk to line crews, reducing the duration of outages that would impact the large number of customers fed by these substations.[64] The justification and need for these projects was thoroughly documented in the capital folders for each project. For

[60] Mara pf. at 46.
[61] Mr. Mara also acknowledges that his proposal to require GMP to break out these types of distribution line projects below $250,000 as individual projects is expressly inconsistent with the MOU the parties reached last year. Mara pf. at 46 ("I recognize that these projects may not exceed $250,000 as provided in the 17-3232 MOU…") That MOU was intended to guide the development of GMP's future traditional rate filings, including this case. GMP prepared its 2019 rate filing to conform with the specific requirements of the 2018 MOU, which only required removal of projects above $250,000 from blanket work orders.
[62] DPS Brief at 18.
[63] Fiske rebuttal pf. at 3, 6.
[64] *Id.*

example, with respect to the Castleton MOAB project, GMP explained that the project:

> is part of an ongoing reliability improvement initiative with like in kind replacement of manually operated air break switches at critical sectionalizing points on the GMP subtransmission system with SCADA-controlled motor-operated load break switches. Motorizing these switches will significantly improve the operability and reliability of the system by facilitating remote fault isolation and sectionalization of the subtransmission system for disturbances and faults. Motorizing these switches increases worker safety by eliminating the need for workers to access the switch location and manually operate the switch.
>
> Presently, an outage to the Castleton substation results in the loss of one distribution circuits (G37). There are no feeder backup ties that can carry this circuit for all times of the year. This impacts over 930 customers in a number of towns, including a University campus. This project will improve reliability for the customers on these circuits.[65]

The justification for the Newbury MOAB project provides a similar rationale for that proposed investment.

It is important to note that DPS's objection to these projects did not assert that the projects are unnecessary; rather DPS proposed deferral of the costs associated with these projects to a later time, in order to smooth out the overall rate impact of the investments.[66] Thus, the question raised by DPS is not whether GMP should proceed with this work at all, but rather when the work should be done, and when the costs should be included in rates. Given the customer reliability and safety benefits provided by the projects, GMP does not believe delay is warranted or in customer's best interests. To the extent the projects are delayed and pursued later, the reliability and safety benefits would also be delayed. The delay of these projects would

[65] The capital folders for the Castleton and Newbury MOAB projects were provided to DPS at the beginning of this case but have not been moved into the record. In the event the Commission determines that review of these folders would be beneficial, they have been provided in electronic format to the Commission with this filing. GMP has consulted with the parties on this issue and no party objects to including these folders in the record.

[66] Mara pf. at 17 ("I recommend all these [MOAB] projects be deferred until the next rate period…. The reason for the deferment is to balance the increase in reliability spending across several years.")

also mean that they may need to be accommodated with the capital spending cap in GMP's proposed multi-year plan, or the recovery on the expense may lag for several years, an unreasonable outcome for projects with such clear reliability benefits for customers. The record supports including these projects in the 2019 case.

The dispute over the appropriate gauge wire as a component of the rebuild of Section I of Line 74 (Project #153588) is minor. The record demonstrates, however, that GMP's choice of covered tree wire was justified and appropriate for this project. GMP's capital documentation described how the line in question has experienced significant weather-related outages in the past and explained why the use of 336 wire was necessary to accomplish the intended storm-hardening on this line. In particular, Mr. Fiske explained the justification for the project in detail in Exhibit GMP-JRF-2:

> [this] Project is located off the Hewitt Road G38 circuit and will address aging infrastructure and improve reliability by moving line to road. Mr. Mara testified line rebuild should have used 1/0 wire rather than 336 tree wire. As explained in the financial analysis, adding 336—covered wire—and bringing poles to the road will significantly improve the reliability of this line. This circuit/line is on GMP's worst circuits list and serves a very rural area prone to major weather events. The project is an effort to storm-harden the entire Line 7 in conjunction with other projects in various stages on this circuit, and use of 336 rather than 1/0 wire is necessary to accomplish this goal. With these efforts, GMP can achieve greater reliability to the Lincoln and Starksboro area. There are many benefits associated with a larger conductor such as improved fault current and voltage drop. The project also has the potential for a future feeder backup for which the larger 336 conductor would be necessary.[67]

This analysis is supported by the description in the financial analysis provided in the capital folder for this project, which further explains that "[t]he project will significantly improve

[67] Exhibit GMP-JRF-2.

reliability to the Lincoln-Ripton area by reducing the frequency and duration of outages on this line. Every time there is an outage, up to 192 customers may be affected. In the past 4 years, we have seen 9 outages causing 68,131 customer hours out, a very high average. Upon completion of this project, we expect that the frequency and duration of outages will be significantly reduced for customers."[68]

Mr. Mara disagrees with GMP's judgment on the value of this expense, but beyond this general disagreement his testimony does not provide a compelling rationale for why the expense should be disallowed or rebut GMP's well-documented justification for installing this type of wire. As a result, the expense associated with the use of covered 336-gauge wire should be included in the rate period. GMP provided the documentation and justifications required to include all of these projects in 2019 rates and therefore respectfully requests the Commission reject DPS's recommended adjustments.

VI. Conclusion

For the reasons discussed above, GMP respectfully requests that the Commission approve the proposed rate adjustment of 5.43%, along with a one-time return of tax savings to customers, which will result in a net decrease of -0.90% on customer bills during the 2019 rate period.

[68] The capital folder for Project #153588, the rebuild of Section I of Line 74, was provided to DPS at the beginning of this case but has not been admitted to the record here. The folder has been provided to the Commission in electronic format in the event the Commission determines that review of the folder would be beneficial. GMP has consulted with the parties on this issue and no party objects to including this folder in the record.

Dated at Burlington, Vermont, this 16th day of November, 2018.

GREEN MOUNTAIN POWER

By: _____

Geoffrey H. Hand, Esq.
Elizabeth H. Miller, Esq.
Victoria M. Westgate, Esq.
Dunkiel Saunders Elliott Raubvogel & Hand, PLLC
91 College Street
Burlington, VT 05402
(802) 860-1003
ghand@dunkielsaunders.com
emiller@dunkielsaunders.com
vwestgate@dunkielsaunders.com