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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

BRIAN E. WINN

ON BEHALF OF THE

VERMONT DEPARTMENT OF PUBLIC SERVICE

July 30, 2018

Summary: Mr. Winn provides an overview of the Department of Public Service's (the "Department") recommendation to reduce Green Mountain Power's requested revenue requirement by approximately xxx million. Mr. Winn also discusses in detail the Department's recommendation regarding appropriate rate treatment for Green Mountain Power's proposed growth-related capital spending, introduces the testimony of the Department's witnesses, and briefly discusses innovative services.

Mr. Winn Sponsors the Following Exhibits:

Exhibit PSD-BEW-1: Professional Resume of Brian E. Winn

Exhibit PSD-BEW-2: GMP Standard and Poor's Presentation

Exhibit PSD-BEW-3: Near-term Rate Driver Analysis

Q1. Please state your name, occupation, and business address.

A1. My name is Brian E. Winn. I am the Director of Finance & Economics at the Vermont Department of Public Service (the "Department" or "PSD"). My responsibilities include direction of Utility Finance and Economics group activities for the Department and the State of Vermont. My business address is 112 State Street, Montpelier, Vermont 05620.

Q2. Please describe your educational background and experience.

A2. I have a B.A. in Political Science from Purdue University, and a Master's of Science in Management from The Georgia Institute of Technology. I have worked at the Department since July, 2016. Prior to joining the Department, I was employed with Edison International or Southern California Edison, its regulated utility subsidiary, for over twenty years. During my tenure there I held various positions including: Director of Financial Planning and Analysis; Director of Business Analytics; Director of Performance Management and Measurement; Director of Nuclear Financial Management; and Director of SCE Budgets and Planning. Prior to Edison, I was a Utility Finance Consultant for Energy Management Associates. My professional resume is included as Exhibit PSD-BEW-1.

Q3. Have you ever testified before the Vermont Public Service Board?

A3. Yes, I have testified in Docket Nos. 8698/8710, 8827, 8871, 8881, 17-1238-INV, 17-3112-PET, 17-5003-PET, 18-0409TF, and 18-0491-PET

Q4. What is the purpose of your testimony?

A4. In my testimony I discuss the organization of the Department's case; summarize the Department's recommendations; discuss in detail the Department's recommended rate treatment for various Green Mountain Power capital projects, programs the proposed capital spending; recommend improvements to GMP processes related to analysis of capital projects and power procurement; discuss the Department's recommendations for power supply costs and short-term incentives and; introduce the Department's witnesses.

Q5. What has GMP requested in this proceeding?

A5. The filing with the Vermont Public Utility Commission (the "Commission") consists of a base rate increase of 5.45 percent which is offset by a onetime bill credit associated with returning excess Accumulated Deferred Income taxes as a result of the recent federal tax legislation. The net result is a decrease of 0.5 percent for rates starting January 1, 2019.

Q6. What is the Department's recommendation regarding the Company's requested rate increase?

A6. GMP filed a cost-of-service ("COS") that reflects a $25.112 million revenue deficiency. The Department's overall conclusion is that there is a deficiency of $xx million. Therefore, the Company's request of 5.45 percent is reduced to xx percent. The table below summarizes the Department's proposed adjustments: TOTAL ABOUT -1% +/-

Summary of the Department's Adjustments to GMP COS Cost of Service

	$1,000
Revenue Deficiency per GMP COS	$25,112
PSD Adjustments to COS	
Purchased Power, net	($0)
Depreciation & Amortization	(0)
Taxes - Federal, State & Gross Receipts	(0)
Net Gain from Assets Sold	(0)
Return on Utility Rate Base	($0)
Merger Savings	($0)
Total PSD Proposed Deficiency	$0

Q7. Please briefly summarize the reasons for the Department's proposed adjustments to GMPs Cost of Service?

A7. The Department is proposing to remove the Tesla Powerwalls, Heat Pump Water Heaters and $XX million of T&D individual and blanket projects and "hold to sell" RECs from Rate Base totaling $XXX million. Additionally, the Department is recommending that $XXX be removed from Purchased Power Costs. Finally, the Department is proposing to eliminate ratepayer funding of the short-term incentive plan.

Q8. Does the Department have any other recommendations for the PUC?

A8. Yes. The Department's support for the Storage/Solar projects is contingent on GMP providing ratepayers financial assurance that the projects will deliver the asserted economic benefits and that GMP indemnify the ratepayers for any financial consequences should the proposed ratemaking or accounting be disallowed by the IRS. The Department also recommends that the Commission require GMP to: consider all reasonable alternatives to proposed capital projects and solicit Requests for Proposals when multiple vendors are available; maintain adequate contemporaneous information on the capital project planning and project approval processes; improve its methods for prioritizing reliability projects; and follow a more rigorous process for procuring energy and capacity resources including soliciting RFPs.

Background and Overview

Q9. Can you please describe the Department's investigation into the proposed change in rates?

A9. Yes. After the petition was filed, the Department organized a team composed of internal resources and experts from GDS Associates, Inc. and J. Kennedy and Associates. The team conducted a thorough review of the petition and supporting documentation, with a focus on capital spending, power supply, cost of capital, and regulatory accounting. The Department issued two rounds of discovery to the Company, engaged in a series of meetings and conference calls with key GMP staff to exchange information, and reviewed relevant Commission precedent.

Q10. How is the Department's testimony organized?

A10. The Department is submitting testimony from XX witnesses. In my testimony I provide a high-level summary of the entire case including: the Department's recommendations; a discussion of capital spending; and summaries of the recommendations of the other witnesses. Ed McNamara, the Department's Planning Director provides a summary of the power supply portion of the case. including: the GMP process for procuring energy and capacity; recommendations regarding the JV Microgrid and the Tesla Powerwall projects; the use of forecasted sales in determining rates and; the amount of Renewable Energy Credits in rate base. Carol Flint, the Director of the Department's Consumer Affairs and Public Information ("CAPI") Division, provides an assessment of GMP's customer service. The remaining witnesses are outside consultants that provide more detailed testimony in the areas covered by Mr. McNamara and myself.

Q11. Please provide some background on the regulatory landscape that is relevant context for this case.

A11. I will describe the regulatory landscape as it pertains to the capital spending, O&M and cost of capital portions of the rate case. In his testimony, Mr. McNamara provides a summary of the regulatory landscape relevant to the power supply portion of the case. GMP rates are set the way that most regulated utilities in the United States are, via a proceeding to determine the appropriate cost-of-service, which in broad terms include O&M expenses, purchased power costs and return on rate base.

A substantial portion of GMP's O&M revenue requirement has been pre-determined under a formula outlined in a Memorandum of Understanding ("MOU") adopted by the Commission in 2012 in Docket 7770, which concerned the merger of GMP and CVPS.

The Docket 7770 MOU defines this formula as "Base O&M costs," but it is generally referred to as the "O&M Platform." The revenue requirement for this portion of GMP's rates will be determined under this MOU through 2022.

GMP has been operating under a temporary alternative regulation plan that took effect in January of 2018. The temporary plan proposal includes mechanisms for purchased power storms and exogenous events cost recovery, allows GMP flexibility to pilot innovative products and services and is in effect for 2 years, through the end of 2019. Since a large portion of Purchased Power costs are long-term contracts that have been reviewed several times, and because O&M costs are largely pre-determined under the platform, the Department review of the current case will largely focus on the impacts of capital spending and investments in subsidiaries.

GMP filed a traditional rate case (Docket 17-3112-INV) in 2017 for rates in effect in 2018. During that case, the information available from the Company was not sufficient to allow the Department to assess the reasonableness of the proposed level of capital spending. In particular, the Company was unable to produce complete financial analyses and other documentation for approximately 69.7 percent of the capital projects reviewed by the Department. Having such information available for review is essential for the Department to fulfill its verification role in the rate case review process. As part of a settlement in that case the company agreed to maintain contemporaneous documentation of it's capital spending decisions and to a set of standards describing the required analysis of capital projects. The settlement also established a limit on the amount of capital allowed in rate base and provided GMP with 5.37% increase in authorized revenues which resulted in a 5.02% rate increase.

In June the company filed a proposal for a multi-year alternative regulation plan (Docket 18-1633-PET) that would operate through 2022. The plan would be bounded by the current rate case and a traditional rate case to be filed for the 2023 rate year. At a high level, the plan consists of a capital spending cap, earnings sharing, the O&M platform, and a purchased power adjustor. There are numerous issues to work out and the ultimate composition of the plan remains uncertain and subject to PUC approval. However, some of the Departments recommendations in this case are predicated on the existence of a multi-year rate plan.

Finally, the rates that will go into effect in January 2019 will also incorporate the costs related to the Storm Event (Filing number) and the purchase power costs. Assuming that the PUC approves the case as filed, overall rates after all adjustments will increase by XX%. Need to discuss with GMP what is on the table for 1/1/2019

Q12. Can you provide any perspective on the main cost drivers contributing to the need for the rate increase proposed in this case?

A12. First, I would like to provide some perspective on complexities involved when trying to distill the primary reasons for changes from a large list of numbers into a few key drivers.

The summary cost of service calculation is composed of over 25 cost items. Each of those items represents the summation of a large subset of cost items and so on. When the overall percentage change for a long list of numbers is relatively small, in a mathematical sense, there are numerous ways to combine the numbers to a handful of primary drivers. The same list of numbers is therefore subject to a wide range of interpretations of the primary drivers of the overall change. That is true for the GMP numbers in this case.

The Department has chosen to apply the following logic when summarizing the primary drivers. We have categorized cost of service by function, ie Power Costs, Transmission Costs, O&M, and made adjustments that account for the regulatory mechanisms used to recover the costs. Breaking the costs using this logic results in these major categories.

Summary of GMP Adjustments to Cost of Service - As Filed
In $1,000s

	Test Period	Rate Period	Dollar Change
Purchased Power and Production	$217,808	$239,191	$21,384
Net Transmission	$19,408	$32,196	$12,788
O&M Platform, Other O&M and Savings	$66,517	$79,066	$12,550
Capital Related Costs	$0	$0	$0
Depreciation & Amortization & Other	$43,646	$25,616	($18,029)
Taxes - Federal, State & Municipal	$51,322	$39,093	($12,229)
Return on Utility Rate Base	$70,121	$82,618	$12,497
Less Affiliate & Other Operating Revenue	($37,640)	($16,201)	$21,439
Gross Revenue & Fuel Gross Receipts Taxes	$4,565	$4,588	$23
Cost to Ultimate Consumers	$435,746	$486,168	$50,422

Most of the categories are straight forward and align well with the COS summary filed by GMP. Transmission O&M is shown net of the Equity in Earnings from Affiliates from VELCO to reflect the actual cost of transmission to the rate payer. I have provided a more detailed description of the Cost of Service line items included in each category in Exhibit DPS-BEW-3.

Q13. Does the analysis of the changes between the test period and proposed rate period reveal the main drivers of GMP rate increases?

A13. Not in this this case. The Department recommends that the PUC take a longer perspective when trying to determine the main drivers for the increase in GMP rates. In this case, both the test period and the rate period numbers represent only nine month periods and contain large one-time items that distort the picture. For example, in the test period the Affiliates & Other Operating Revenue line contains a large one-time benefit of ($XXXX million) related to a Solar JV project. In the rate period Depreciation & Amortization & Other line item there are large one-time benefits associated with the Storage/Solar JV projects, totaling ($XXX million), which reduce that line item significantly. The rate period also contains a one-time benefit of $8.x million from the VELCO sale of Utopus. Finally, there is a significant difference in the federal tax rate for the test period and the rate period. All these complications make a straight comparison almost meaningless. Never-the-less, to comply with the request from the PUC, an analysis of rate drivers that attempts to adjust for these one-time items can be found in Exhibit DPS-BEW-3.

Q14. What does the Department's analysis of the longer rate trends show are the main drivers of GMP rate increases?

A14. We performed an analysis of the rate trends for the period 2013 through 2018 grouping the costs in the same manner as used above. The results are presented in the table below:

Camparison of Changes to GMP Cost of Service - 2013 Recorded to 2018 Settlement.
In $1,000s

	2013 Test Year Actual	2018 Settlement	Dollar Change	Percent Change*
Purchased Power and Production	$322,603	$289,154	($33,449)	-10.37%
Net Transmission	$31,676	$28,878	($2,798)	-8.83%
O&M Platform, Other O&M and Savings	$117,541	$104,571	($12,970)	-11.03%
Capital Related Costs				
Depreciation & Amortization & Other	$45,611	$53,270	$7,659	16.79%
Taxes - Federal, State & Municipal	$46,809	$67,487	$20,678	44.18%
Return on Utility Rate Base	$66,673	$98,535	$31,862	47.79%
Less Affiliate & Other Operating Revenue	($33,282)	($21,583)	$11,699	-35.15%
Gross Revenue & Fuel Gross Receipts Taxes	$6,094	$6,266	$172	2.82%
Cost to Ultimate Consumers	$603,724	$626,580	$22,854	3.79%

The results are clear and easy to interpret. Over the period, Purchased Power Costs, over which GMP has some limited control, have declined by $33.4 million. GMP has made progress in reducing O&M costs which have declined by almost $13 million. Net Transmission costs have remained relatively stable with a $2.8 million decline. However, these cost reductions, which total $49.2 million, have been more than offset by a $60.2 million increase in capital and investment related costs, over which GMP has significant control. Were it not for that increase in capital spending, GMP rates may well have been over 9% lower by 2018. Given these trends the Department believes its recent focus on the level of GMP capital spending is well founded.

Proposed Capital Spending & Investments

Q15. Why is the level of capital spending and investments in subsidiaries so important in the GMP rate case?

A15. GMP has experienced significant growth in capital investment, especially during the years following its merger with CVPS. Capital spending and, in GMP's case, investment in subsidiaries are the primary components of rate base. GMP rate base grew by 22.7 % from 2014 to 2017 and GMP projects that its rate base will grow from $1.165 billion in 2014 to $1.564 billion in 2019, which represents a 34.1% increase in less than 5 years. The table below shows GMP's actual rate base from 2014 to 2017 and the projected rate base for 2019.

GMP TOTAL RATEBASE INVESTMENT - 2014 to 2019 ($1,000)

2014[1]	2015[2]	2016[3]	2017[4]	2019[4]
$1,165,784	$1,209,349	$1,264,195	$1,430,213	$1,563,786

[1]8389 2014.11.14 GMP ESAM Filing.pdf, pg 8, Green Mountain Power - 2014 Earnings Sharing Adjustor, filed with the PUC on November 14, 2014. 13 month average as of September 2014.

[2]GMP FY2015 ESAM.pdf, pg 4, Green Mountain Power - 2015 Earnings Sharing Adjustor, filed with the PUC on November 20, 2015. 13 month average as of September 2015.

[3]GMP FY 2016 ESAM Filing, pg 4, Green Mountain Power - 2016 Earnings Sharing Adjustor, filed with the PUC on November 29, 2016. 13 month average as of September 2016.

[4]Case No. 18-0974-TF Schedules 10 month average as of September.

In the Company's most recent presentation to Standard & Poor's from November of 2017, which is attached as Exhibit PSD-BEW-2, the Company forecasted capital spending and investments in subsidiaries of $534 million from 2018 through 2021. In that same presentation, GMP forecasted retail revenues to grow by 20.46% from 2017 to 2021. Finally, the GMP Long-Term Executive Compensation Plan (Attachment GMP.DPS1.Q20.c.pdf) sets explicit targets for growth in "Investments Driving Customer Value" defined in the plan documents as "total utility plant, net" plus "investment in associated companies," both of which are primary components of rate base. The targets grow from $1.73 billion for the period ending in 2017 to $2.086 billion for the period ending in 2020. That amounts to 20.6% growth in three years.

GMP is clearly planning to continue to significantly grow rate base. We know from the analysis provided earlier in my testimony that growth in rate base is the single most important driver of GMP rate increases. Therein lies the need for the Department to pay particular attention to the level of capital spending.

Q16. How much capital spending and investment in subsidiaries has GMP proposed in this case?

A16. The Company has requested recovery for capital additions and investment in subsidiaries of $xx for 2018 and $xx for 2019. The proposed capital spending and investments in subsidiaries will increase the base rate revenue requirement (excluding the impact of the lower tax rates and one-time credits) by approximately $14 million from the test year period.

Q17. What is the Department's assessment regarding the level of capital investment and capital projects of the Company?

A17. There does not seem to be a clear operational reason for the level of rate base growth considering that customer growth is very low, load is stagnant, and sales are declining. Testimony from our expert witnesses, discussed in detail later, confirm this. In fact, in this case, GMP has proposed some investments, such as the Storage/Solar JV projects, that have no clearly established operational need. Instead the company has sought to justify the expenditures on primarily economic grounds.

Q18. Has the quality of GMP documentation and evaluation of capital spending in this proceeding improved over what was provided in the last case?

A18. In some area yes and in others no. GMP has adopted the agreed upon template for capital projects and provided more detail on blanket projects over $250,00. Kevin Mara of GDS Associates conducted a review of GMP's capital spending proposals and identified the following weaknesses: cost estimate errors; failure to use an industry standard method to value and prioritize reliability projects; insufficient data to justify capital spending proposals; unnecessary capital projects and over use of blanket projects. Additionally, GMP did not evaluate, or solicit requests for proposals for, viable alternatives to the Storage/Solar JV or Tesla Powerwall projects which is specifically required in the MOU.

Mr. Mara's findings are consistent with the findings of the Department expert witnesses in the GMP prior rate case – Docket 17-3112-INV. Witnesses from SAGE Consulting and Larkin & Associates in GMP's insufficient documentation, overuse of blanket projects and little evident that GMP considered viable alternatives.

With respect to GMP's general obligations for creating and retaining documentation, the Commission has held, on more than one occasion that "utilities have an obligation to document their decisions that affect ratepayers, so that those decisions can later be reviewed by regulatory authorities."[1] Due to the weaknesses with the content of the documentation provided by GMP through discovery, and a pattern of not fully evaluating alternative investments, the Department cannot be sure that GMP has proposed an appropriate level of capital spending.

Q19. Do you support the proposed adjustment to Transmission, Distribution and General Plant rate base discussed in the testimony of Kevin Mara of GDS Associates?

A19. Yes. I am recommending that the PUC adopt the adjustments to T&D capital spending included in the testimony of Kevin J. Mara, of GDS Associates INC., which total $XXXXX million. Mr. Mara's testimony includes a detailed by project discussion of the rationale for excluding this amount.

[1] See *Tariff filing of Citizens Communications Company*, Docket No 6596, Order of 7/15/02, at 22-23 (citing Docket No. 5132, Order of 5/15/87 at 97)).

Q20. Please explain the Departments recommendation that $25.7 million of blanket projects excluded from rate base.

A20. In his testimony Mr. Mara recommends that $42.5 million of the $49.4 million of proposed blanket capital projects be excluded from rate base. The are several reasons for this recommendation including; the projects do not meet the known and measurable standard; and including the projects in rates eliminates the incentive for GMP to be efficient in design and construction. Mr. Mara also raised issues with the methods of estimating each of the different categories of blanket projects. The Department has raised concerns with GMP's use of blanket projects in prior cases and is also alarmed by the large increase in the use of blanket projects over the past few years. However, the Department is reluctant to recommend completely removing the blanket projects from rates. There are several reasons for this. First, while the Department knows of no circumstance were the PUC has specifically addressed the appropriateness of blanket projects, they are long standing practice. Secondly, the Department is factoring in the likelihood that this case may become the basis for a multi-year rate plan. In that event, it would not be appropriate to exclude essentially all blanket capitals costs until the next traditional rate case.

Given that the Department remains very concerned that the blanket capital project categories are being overused, we asked Mr Mara to provide us with an analysis of the appropriate amount to include in rates for each of the blanket project categories. The

Department has reviewed his analysis and recommends the PUC adopt the resulting adjustments totaling $25.7 million.

Q21. Please summarize the rationale for excluding $xxx million Renewable Energy Credits from rate base.

A21. Certain renewable energy credits are created, with some regulatory lag, simply from the operation of GMP generation assets or through purchased power contracts. In most cases GMP has imputed a value for these credits and they only held until they are sold. Terry Myers of GDS Associates, Inc. …… raises a concern regarding how GMP … NEED TO SEE ED AND TERRY'S TESTIMONY The Department is therefore recommending that $XXX of these credits be removed from rate base.

Q22. Please explain the Departments recommendation that the Heat Pump Water Heater products be excluded from rate base.

A22. First it is useful to provide some background. The Department supports the Company's efforts to find innovative solutions to serve its customers' needs, however anytime a monopoly public utility offers commercially available competitive products and services, an issue arises about the utility's impact on the competitive market. For instance, in this case, GMP has included the costs associated with the heat pump water heater in rate base. The Department has developed a list of conditions that should be met before it will support including generally available consumer products in rate base. These requirements are: that the Company must have the ability to control the usage of those products for the benefit of all ratepayers; benefits of the program must exceed the costs to non-participating ratepayers; any bad debt expense should be borne by the program or shareholders; and that GMP must open it's billing system to companies offering similar competing products. The Department and GMP have discussed these conditions throughout the pilot review process, and it was addressed in the resolution of Docket 8794, in which GMP sought to tariff its heat pump and heat pump water heater pilots.

The ability for GMP to exercise control of these products for the benefit of all ratepayers was generally not implemented for Heat Pump Water heater products offered in 2016 and part of 2017. The Company has stated that beginning in 2018, such control will be a standard component of innovative products and services included in rate base. It has become apparent since that controls for these products are not generally available. Additionally, it is not clear that the heat pump water heater's operating characteristics will allow them to be efficiently controlled to create benefits for non-participating customers. Until GMP has implemented the ability to control these devices for the benefit of all ratepayers, the Department recommends excluding them from rate base to remedy the competitive advantage created by the regulated rate of return on the investment. The Department has recommended that the revenues and costs associated with these devices, including depreciation, flow through other operating revenue.

Q23. Please explain the Departments recommendation that the Tesla Powerwall products be excluded from rate base.

A23. There are several significant concerns. The first is that the overall size of the program is $15 million. This is a significant portion of GMP's proposed 2019 capital budget of $85 million and therefore does not fit the definition of a pilot program. The Department believes that such a sizable investment should be offered under a tariff so that the costs and benefits can be examined more closely than what is required for the innovative product program. Christopher Dawson of GDS Associates reviewed the avoided cost models used by GMP to justify both the Tesla Powerwall program and the Storage/Solar JV projects and has concluded that; the resulting energy prices are optimistic beyond five years; there is no basis for capacity prices increases included in the model; REC price assumptions are unproven and unrealistic; the assumed Transmission price increases are not sustainable. He also concluded that GMP failed to perform any sensitivity analysis around the market price projections. His conclusions raise doubts about the analysis showing that the program will provide economic benefits. The value of the projects is highly dependent on factors such as market price, the success in timing of peaks and other assumptions. NRED EDS TESTIMONY XXXX has raised concerns about whether the program is covering it's costs and whether there are benefits to non-participating customers. Furthermore, GMP did not explore alternatives to storage such as Demand Response. Finally, GMP did not provide any support indicating that it explored alternative vendors and did not solicit RFPs for this program. The Department is open to changing it's position should GMP be able to demonstrate the program meet's its requirements for including commercially available consumer products in rate base.

Short-term Incentive Plan

Q24. Has GMP included Short Term Incentive Pay (STIP) in the filing?

A24. Yes. GMP includes approximately 50% of the Short Term Incentive Plan costs in the Base O&M platform calculation adopted in _____ and modified in Docket 8190.

Q25. Do you have concerns about including GMP's STIP in rates?

A25. Yes. While certain goals that are included in the plan clearly provide benefits for rate payers, the actual operation of the plan over the last several years indicates the plan is weighted primarily toward benefitting shareholders and, that there is no clear way to assign a value to the benefits for ratepayers. Ratepayers should not be responsible for any of the costs. To clear, I do not take issue with the existence of the plan or the content of the goals. The GMP Short Term Incentive Plan is consistent with plans offered by other regulated utilities.

Q26. Can you briefly explain how the Short-Term Incentive Plan works?

A26. Yes. During discovery GMP provided the Short-Term Incentive Plan documents for 2016, 2017 and 2018 in Attachment GMP.DPS1.Q18.a.pdf. The plan consists primarily of two sets of goals. The first set of goals, which per the plan documents account for 60% of the payout, are derived from GMP's Service Quality & Reliability Performance, Monitoring and & Reporting Plan. These goals are clearly established to benefit ratepayers and there is a clearly defined scoring matrix for these goals. The second set of goals, which account for 40% of the payout are individual goals that, according to GMP are "developed annually by identifying the key strategic, customer-focused goals for the fiscal year and allocating relative weight to each participant based on responsibility and accountability." (Discovery response GMP.DPS1.A18.) A close examination of the metrics for these goals reveals that they clearly provide benefit to the shareholders and, in some cases, to rate payers and shareholders. The plan establishes stretch targets for these goals but is not specific about how these goals are weighted against each other. Finally, the plan requires that, before any payout is made, the company must meet 90% of its ROE target and achieve or exceed 13 of the 16 Service Quality Metrics – the first set of goals. The following table from the plan documents summarized the operation of the plan.

Short-Term Incentive Compensation Measures

Performance Measure	Threshold	Target	Stretch
Actual ROE as percentage of allowed ROE	90%		
Achieve or exceed service quality/ reliability measures	Achieve or exceed 13 of 16 measures	Achieve all 16 measures	Achieve all 16 measures and exceed at least 13 of 16 measures
Individual Performance Goals – metrics determined individually	Individualized	Individualized	Individualized

Q27. Can you explain how the STIP plan is weighted primarily towards shareholders' benefit?

A27. There are several reasons: while the first set of goals are customer focused, they have not had impact on the payouts from the plan. The company has exceeded these goals in each of the last few years, they have not benchmarked their performance against other utilities and the targets have not been adjusted in several years. In short, these goals are not challenging enough. The fact that the Service Quality Metrics are almost certain to be met makes it unlikely that the Service Quality Metrics will impact the payout. For all practical purposes, if the earnings target is made, 60% of the incentive will be paid. It is clearly within management's prerogative to determine how challenging to make the Service Quality targets for their executives. Ratepayers should not cover the costs of this portion of the STIP plan unless the goals are likely to impact the payout.

The second set of goals, accounting for 40% of the payout, are grouped in the following categories: Customer Focus; Financial Strength; Regulatory proceedings; Innovation; and Deep and Positive Stakeholder Relationships. An examination of the 2018 metrics included in each of these categories (Attachment GMP.DPS1.Q18.b-e 2018.xls) reveals that: many of target metrics will increase GMP earnings; they include metrics that are subjective and difficult to quantify; some are image building, lobbying and charitable contributions and; there is no indication of how they are weighted relative to each other. Even for categories that one would expect to provide benefits for ratepayers seem to be weighted towards shareholders. Here are some examples. The Customer Focus goal includes several metrics that relate to advancing the JV Microgrid Projects. As indicated in later in my testimony, the benefits to shareholders are clear and the benefits to ratepayers are questionable. The Innovation goal includes metrics for installing new controllable devices, which again have clear benefits for shareholders (rate base earnings) but the benefits for ratepayers are not clearly established, as illustrated by the

Departments recommendation to exclude the Tesla Powerwalls from rates. The Deep and Positive Stakeholder Relationships goal has metrics that seem aimed at influencing public opinion, improving GMPs image or are charitable in nature. These types of expenditures would not normally be directly allowed in rates. Finally, the goals in this portion of the plan overlap with the goals in GMP's Long-term Incentive Plan. Those goals, which can be seen in Attachment GMP.DPS1.Q20.c.pdf, are primarily focused on growing earnings and rate base. Because of the lack of clarity as to the weight given the individual performance goals in this category, and that the preponderance of goals that clearly benefit shareholders, it is not possible to determine that these goals clearly benefit ratepayers.

Finally, under no circumstances will the plan pay out if the earnings (ROE) target is missed. That is true even if the company achieves it's stretch targets for the Service Quality Metrics or any other goal that could benefit ratepayers.

Q28. Have you recommended an adjustment to rates?

A28. Not at this time. Given that GMP includes approximately 50% of the Short Term Incentive Plan costs in the Base O&M platform calculation adopted in _____ and modified in Docket 8190. DAN TO EXPAND

Power Supply

Q29. Please summarize the Department's testimony regarding GMP's Power Supply expenses.

A29. Edward McNamara, Director of Energy Policy for the Vermont Department of Public Service. He discusses the applicable statutory and regulatory framework through which GMP is guided in making its power supply decisions. Mr. McNamara also provides an overview of GMP's power supply costs. He proposes downward adjustments to net power supply costs totaling $xxxxx.

Christopher C. Dawson of GDS Associates Inc. conducted a review GMP's power supply costs and the markets forecasts used in the economic analysis of the Storage/Solar JV projects and Tesla Power program. He concluded: GMP's hedging program is insufficiently documented and structured; the market price analysis used in Storage/Solar JV projects and Tesla Powerwall may not justify their investments; and that GMP has not sufficiently evaluated Demand Response as a resource. NEED EDS TESTIMONY

Capital Structure and Cost of Capital

Q30. Please summarize the Company's requested cost of capital and capital structure.

A30. GMP requests an authorized return on equity of 9.3 percent and a capital structure consisting of 49.85 percent equity and 50.15 percent debt. The weighted average cost of capital ("WACC") was estimated at 5.28 percent when factored for the nine month rate period.

Q31. What does the Department recommend for GMP's Cost of Capital?

A31. In his testimony, Richard A. Baudino of J. Kennedy and Associates, recommends a return on equity range of 9.1% based on analysis that shows reasonable range for the ROE of 8.7% to 9.35%. This recommendation is consistent with the 9.3% cost of equity that Department agreed to in the settlement with GMP in the last rate case however the PUC did not adopt that part of the settlement. Given that the 9.3% return still falls within the reasonable settlement, but the Department again recommends that the PUC adopt a 9.3% cost of equity. Mr Baudino concurs with the Departments recommendation. Mr Baudino agrees with GMP's requested capital structure and cost of Short-term debt. Finally, Mr. Baudino lowered the cost of GMP's future debt issues to 5.03% resulting in an overall recommended cost of capital for GMP of 6.97%. EXPRESS IN NINE MONTH TERMS?

The Department's Revised Cost of Service

Q32. Please summarize the Testimony of Jacob Thomas.

A32. In this case the Department did not procures the services of the consultant from Larkin & Associates who has handled GMP cases for many years and, consequently, we do have access to large amount of institutional knowledge about how GMP's models work. Mr. Thomas provides the Department's cost-of-service model incorporating the adjustments to cost of capital, capital spending and power supply adjustments based on information in the petition and from discovery. It is likely that GMP will identify more accurate ways to estimate these adjustments and the Department will continue to work with GMP to ensure our adjustments accurately reflect the recommendations.

Return of Accumulated Deferred Income Taxes Through a Bill Credit

Q33. What does this issue pertain to?

A33. The Tax reform that went into effect on January 1, 2018 lowered the corporate federal income tax rate from 35% to 21%. This has resulted in two major impacts to GMP's cost of service. The first is, on a going forward basis, GMP will need to collect less Federal Income Tax from ratepayers. The second relates Accumulated Deferred Income Taxes (ADIT) that were collected from rate-payers based on the old tax rate. The amount of ADIT in excess of the new rate will be returned to ratepayers in two ways. Some portion will be returned over multiples years based on the remaining life of certain assets. GMP is also proposing that other portion, $27.4 million, be returned to rate payers as a bill credit to be paid over the rate year.

Q34. Does the Department Support GMP's proposed treatment of the excess Accumulated Deferred Income Taxes?

A34. Yes. Terry Myers of GDS Associates, Inc. performed and extensive review of the analysis GMP performed in this area and found no issues. In fact, he indicated that the GMP analysis was one the most well prepared that he had seen. The Department supports the proposal and appreciates GMP' proactive efforts to return the excess accumulated deferred income taxes to ratepayers in a timely manner through one-time bill credits in the current and proposed rate periods.

Storage/Solar JV Projects

Q35. Is the Department comfortable with the process GMP used to evaluate the need for the Storage/Solar projects?

A35. No. The company has not asserted that there is a physical system need (safety, reliability, replace aging or damaged equipment, etc.) or regulatory policy requirement for this type of equipment. Although originally proposed as microgrids GMP did not propose installing the equipment needed to isolate the circuits. In fact, in response to a discovery request in the Milton Microgrid proceeding, Case No. 17-5003-PET, the company stated that: "GMP does intend to implement islanding capabilities with the Project, recognizing that the costs and benefits of those activities are separate from the base use cases (primarily peak load reductions and Frequency Regulation) presented in the CPG application. **GMP wishes to emphasize that the business case for the Project is based on the positive economics described by the cost benefits analysis.** (Emphasis added) At the time that the scope of providing islanding services have been fully analyzed, the costs and benefits of providing those services to customers will be separately identified and evaluated before proceeding." Furthermore, GMP did not provide any support indicating that other alternatives to battery storage were adequately considered and GMP did not solicit RFPs from competing suppliers. Therefore, least cost alternatives were not fully explored, and the location of these projects is not relevant in terms of necessity or benefit.

Q36. Does the Department believe that these projects will provide the asserted economic benefit to ratepayers?

A36. The primary justification offered by GMP for these projects is the economic benefit to rate payers; however that benefit is subject to execution and market price risk. As indicated earlier in my testimony, Mr. Davis of GDS Associates has raised doubts about the analysis showing that the project will provide economic benefits since the market price forecasts were generally optimistic. The value of the projects is highly dependent on factors such as market price, the success in timing of peaks and other assumptions. The NPV is also impacted by the non-traditional upfront ratemaking treatment of the developer fee and HLBV. In short, there is a significant risk that ratepayers will not receive the asserted economic benefits. The degree of uncertainty around the economic benefits is troubling since the only purpose of the project is to provide those benefits.

Q37. Does the Department have concerns with the way GMP is accounting for the year one HLBV and developer fee?

A37. Yes. Terry Myers of GDS Associates, Inc. raises a concern regarding how GMP is treating the Hypothetical Liquidated Book Value and the up-front developer fee when its Storage/Solar Joint-Venture ("JV") projects are put in service. GMP currently uses this fee to reduce amortization which benefits ratepayers in the first year but results in higher costs in subsequent years. This is intergenerational discrimination. The normal ratemaking approach is for these benefits to amortized over the life the projects. Mr Myers also indicates that IRS may determine that this upfront treatment violates its normalization rules. If that is the case, GMP could lose its ability to use accelerated depreciation. The Department's position is that this departure from the normal treatment requires specific approval from the PUC.

Q38. What risks do the tax equity investors face?

A38. Very little. The tax equity partner contributes cash to the Project upfront and in return, receives most of the tax depreciation, ITC benefits, and rights to a small amount of the cash flow from the Project for the first five years.

Q39. Do GMP investors face any risk that they will not earn their authorized return?

A39. Once the project is added to rate base, GMP will earn its authorized rate of return over the life of the project. Except for variations due to changes in GMPs authorized return on equity, or other highly unlikely exogenous events, there is almost no risk associated with those earnings. However, ratepayers bear a risk associated with the NPV due to the length of the payback time and the volatility associated with the market price risk.

Q40. Why does the Department recommend that GMP be required to provide financial assurance that the rate payers will receive the asserted benefits?

A40. In short it is about ensuring a balance of equities. The primary benefit for ratepayers being asserted by GMP is economic. GMP and the project investors will earn handsome returns with minimal risk. These returns are backstopped by rate payer money and the rate payers are being asked to bear a disproportionate amount of risk as compared to GMP and project investors. Again, this is not like investing in a substation, transformers or poles, where ratepayers will clearly receive operational benefits from the assets. This is a speculative investment where the benefits are risky and purely economic. The Department recommends that the PUC require GMP to provide ratepayers financial assurance for the asserted economic benefit to ratepayers of these projects and, that GMP investors indemnify ratepayers from any financial consequences that result from adverse IRS rulings relating to GMP's approach to the HLBV and developer fees.

Forecasted Sales and Customer Growth Costs

Q41. Does the Department have an issue with GMP using forecasted sales for the 2019 rate period?

A41. Not in this circumstance. Although PUC precedent is clear for traditional ratemaking, the regulatory mechanics of operating under a multiyear rate plan make that precedent impractical for several reasons. First, depending on the design of the multi-year plan, there is to be a need to create an annual sales forecast to flow through rate adjustments related to purchased power estimates. To avoid unnecessary volatility, prior period actual sales will need to be adjusted for known and measurable changes, such as significant known changes in loads, and will need to be weather normalized. Secondly, Ed

McNamara has done an extensive review of the forecasting methodology employed by GMP and has determined that it is an acceptable approach in this circumstance.

Q42. Does the Department support the inclusion of costs related to customer growth for the 2019 rate period?

A42. In this circumstance yes. Assuming a multi-year rate plan is adopted, it would impractical to apply the traditional rate making approach of excluding customer growth related costs. It would require that GMP to incur multiple years of regulatory lag related to the recovery of the growth related costs; or require an annual adjustment mechanism to true-up to the actual growth related costs incurred.

Q43. Please describe the appropriate ratemaking treatment for growth-related plant in Vermont.

A43. My understanding of the appropriate ratemaking treatment for growth-related plant comes from *Tariff filing of Green Mountain Power Corporation*, Docket No. 5428, Order of 1/4/91. In that case, GMP sought to include a number of capital additions in its rate base that the Department argued were being put into service to serve new customers, either in whole or in part. The Board set forth its rule of decision as follows:

> The Board has previously held that since revenues from new customers are not included in rate year income, expenses associated with serving those customers should also be excluded. We apply that principle in this case, but we do not extend it to exclude investments that are made to maintain adequate and efficient service for test year customers and are only incidentally available to serve new customers as well. We have allowed inclusion of certain improvements which will be able to accommodate some growth-related sales, where the record demonstrates that the

> improvements were not undertaken in order to accommodate growth, but were or are needed to maintain adequate and efficient service for test year customers, absent any load growth.

Id. at 21.

Q44. Is there any other circumstance where it is appropriate to consider growth-related plant in establishing utility rates?

A44. Yes. The rule is based on the need to match revenues and costs when setting rates, so that the numerator (costs) is spread fairly across the appropriate denominator (sales). In the case cited above, the Board achieved this by using test year sales and excluding growth-related plant. Theoretically, you can achieve a similar matching using rate year (projected) sales and including growth-related plant. This too, should achieve a matching between revenues and sales. Because using projected figures has, in the past, been considered less reliable than using known test-year figures, it makes sense as a general matter to use the known test-year figures and exclude growth-related plant. In this case the Department is satisfied that the method for forecasting sales is acceptable.

Q45. Is there precedent for including growth related costs when establishing rates?

A45. Yes. In Vermont Gas's last rate case (Docket No. 8710), the Board approved the placement of the Addison Project into rates, even though that project was a growth-related project, i.e., it was built to serve new customers rather than to maintain adequate and efficient service for test year customers.

Customer Service

Q46. Please summarize the Department's testimony regarding GMP's Customer Service?

A46. Ms. Flint, the Department's CAPI Director, presents an overview of GMP's recent customer service history including service reliability. as well as an opinion of the Company's provision of certain un-tariffed products and services. Ms. Flint does not recommend any adjustments to GMP's cost-of-service.

Q47. Does this conclude your testimony?

A47. Yes.