STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 18-1633-PET

Petition of Green Mountain Power Corporation for approval of a multi-year regulation plan pursuant to 30 V.S.A § 209, 218, and 218d	

DEPARTMENT OF PUBLIC SERVICE'S RESPONSES TO THE GREEN MOUNTAIN POWER CORPORATION'S FIRST SET OF INTERROGATORIES, REQUESTS TO PRODUCE, AND REQUESTS FOR ADMISSION

The Department of Public Service (the "Department") hereby provides the following responses to the First Set of Interrogatories, Requests to Produce, and Requests for Admission served on the Department by the Green Mountain Power Corporation ("GMP"). The Department is serving two copies of these responses on GMP.

GENERAL OBJECTIONS

1. The Department objects to any instructions contained in GMP's discovery requests to the extent such instructions purport to place on the Department greater requirements or reserve greater rights to GMP than are permitted by the Vermont Rules of Civil Procedure as made applicable to Commission proceedings through Commission Rule 2.214(A).

2. The Department objects to any request for information or production of document(s) that is (or are) subject to the attorney-client privilege, constitute work product, are protected under state or federal law or are proprietary, competitively sensitive or confidential, constitute draft and/or non-final documents and/or constitute communications containing or concerning any of the above.

3. The Department objects to the discovery requests to the extent that they: (a) are overbroad or unduly burdensome; (b) are cumulative; (c) call for the production of documents not in the possession, custody, or control of the Department; (d) call for the review, compilation, or production of publicly available documents that could be obtained by the requesting party in a less burdensome manner, including on a public website; (e) call for the review, compilation and/or production of documents already in GMP's possession, custody, or control; (f) are vague and/or ambiguous; (g) seek information not reasonably calculated to lead to the discovery of admissible evidence; or (h) call for the review, compilation, or production of a voluminous number of documents at great expense to the Department.

4. Each of these General Objections shall be incorporated by reference into the below-referenced objections and responses as if expressly restated therein. The Department does not hereby waive any objections, and it reserves the right to later raise any additional, available objections.

RESPONSES TO INDIVIDUAL DISCOVERY REQUESTS

Requests for All Witnesses

Q.GMP.1-1. For each witness for whom DPS has submitted prefiled testimony:

a. Please identify and produce all documents prepared by and/or relied upon by each witness, or any persons working for or under the direction of each witness, in connection with their testimony, including, but not limited to, the raw data, and other results of any research, calculations, or work conducted by the person and any documents, calculations, data, research, or other information generated by any other person which the witness consulted. For any document provided by GMP to DPS please just identify the document.

PSD Response: Objection. The Department objects to this request on the basis that it is overly broad and unduly burdensome. Without waiving these objections, the Department responds as follows:

Please see Attachments A.PSD.1-1 and A.PSD.1-2. Additional documents relied upon by Department witnesses are produced in response to individual discovery requests below. The Department also relied upon all documents produced by GMP in this proceeding, including prefiled testimony, exhibits, and discovery responses.

b. Please identify and produce copies of any studies, reports, articles, presentations, regulations plans, orders, decisions, and any other background information relied on by Department witnesses, or those working under the direction of each witness, when evaluating GMP's proposed Multi-Year Regulation Plan ("MYRP" or the "Plan") or when researching and developing the Department's proposed changes to the Plan.

PSD Response: Please refer to the Department's responses to individual requests below, which include production of copies of decisions and other documents that Department witnesses relied upon in preparing testimony. The Department also relied upon a review of all materials that were filed in the Commission's generic investigation into alternative regulation in Case 17-3142, including the materials provided by the Regulatory Assistance Project and Mark Lowry.

c. Please identify and produce in their original format all electronic files that were utilized or generated to prepare any exhibit or any analyses, images, impressions, conclusions, or statements presented in either their prefiled testimony or any associated exhibits.

PSD Response: Please refer to the response to Q.GMP.1-1(a) above.

Persons Responsible: J. Riley Allen, Edward McNamara, and Maria Fischer

Title: Deputy Commissioner, Director of Planning and Energy Resources, and Utilities Economic Analyst, Department of Public Service, respectively Department of Public Service
Date: January 11, 2019

Questions Regarding Allen Testimony

Q.GMP.1-2. On page 9, line 3 of his Direct Testimony, Mr. Allen states that the Power Supply Adjuster ("PSA") in the new, modified form proposed in the Plan is not likely to serve as a strong incentive to manage power costs.

a. Which specific power or transmission costs does the Department believe should be managed more effectively? Please explain the basis for the Department's view.

PSD Response: Over time, all transmission costs can be managed through the management of loads that drive almost all costs of bulk transmission that are passed along through RNS and LNS charges. Over time, all costs of sub-transmission that are owned and managed directly by GMP can be managed by through the management of loads, the right sizing of conduit, and the sizing of transformers. Over time, all power costs can be managed. Power costs related to contracts can be managed through the replacement of and renegotiation of contracts, and the associated terms of each contact. Once the contract is in place, GMP can manage the costs of those power contracts through the choices that it makes in optimizing the power it receives under the contract. Power costs associated with owned facilities can be managed through the exercise of prudent management of operations and appropriate use of discretion in capitalizing where the substitution of capital is cost effective. Power costs of facilities that are partially owned can be managed through the purchase and sale, more or less, based on the performance, and by influence on the owners of these facilities to do the same through its influence as a partial owner. Over the term of this plan, GMP has incremental impacts in these same areas. Please also see Mr. McNamara and Ms. Fischer's responses to discovery requests Q.GMP.1-46 and 47 below.

b. What types of specific actions, transactions, or tools does the Department believe can be utilized by GMP to reduce power costs more effectively within the term of a Plan quarter or year?

PSD Response: See response to Q.GMP.1-2(a) above. GMP is in the best position to identify the specific actions, transactions and tools. Again, and extending these comments to actions within a specific quarter or years, these costs can also be managed through the choices that the company exercises to invest in new facilities such as solar, storage, wind, the choice of contracts that it engages in, the operation and management of its hydro stations, and the choices that the company makes to purchase day-ahead, or real time in the regional markets, or to hedge market conditions through a variety of contracts with HQ, or the its many regional partners. I expect that these actions take place on a daily, weekly, monthly, quarterly, and annual basis. Please also refer to the discovery responses and prefiled direct testimony of Mr. McNamara and Ms. Fischer on behalf of the Department.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-3. Regarding Mr. Allen's statement on page 13, lines 14-16 that "I have never before seen such an annual forecast update feature in any of the alternative regulation or multi-year plans that I have previously reviewed."

a. Please admit that the alternative regulation plans that GMP and Central Vermont Public Service Corporation ("CVPS") followed from 2006 to 2017 involved annual forecasts of the cost of service. If denied, please state the basis for the denial.

PSD Response: Admitted in part. I admit that features of the alternative regulation plans includes forecasts of loads, revenues, and power costs. Otherwise, traditional ratemaking principles apply.

b. Please admit that the alternative regulation base rate filings by GMP involved third-party revenue forecasts that were updated annually. If denied, please state the basis for the denial.

PSD Response: Admitted, in relation to loads, revenues, and power costs. Not admitted otherwise. The standards that apply to non-power costs are and have been traditional rate principles and known and measurable adjustments to a test years.

c. Please identify and provide the alternative regulation and multi-year plans that Mr. Allen reviewed to support this statement.

PSD Response: Mr. Allen participated in alternative regulation plans in Vermont historically, including Docket 7175/7176. Mr. Allen has also participating in the review of or provided testimony in Vermont on multi-year rate plans in natural gas and telecommunications in Vermont. Mr. Allen has also reviewed all of the Larkin reports, or at least portions of those reports, that address the GMP Alternative Regulation Plans over time.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-4. Regarding page 14, lines 18-20 of Mr. Allen's Direct Testimony, please identify the online services and portals the Department was unable to access.

PSD Response: The Bloomberg services that serve as the basis for the adjustments for the ROE was an example that Mr. Allen encountered.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-5. With respect to Mr. Allen's statement on page 14, lines 20-21 that "[t]here is still some uncertainty regarding how GMP will implement some of the annual line-item updates," please identify the specific annual line-items that are uncertain in Mr. Allen's opinion.

PSD Response: GMP provided additional detail in its discovery responses as it relates to property taxes and other taxes. The Department still requires detail on other line items, including non-base O&M costs, equity in affiliates, and other operating expenses. The Department expects to seek additional information from GMP through future discovery on these line items to attempt to seek better clarity.

To be clear, the Department is, in any event, troubled by the notion of routine efforts to forecast rather than adjust on the basis of traditional ratemaking principles. Due to the nature of the power costs and their recovery, Mr. Allen does not extend those same concerns to power costs and transmission expenses that are embedded in the PSA.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-6. On Page 16, lines 13–16 of his Direct Testimony, Mr. Allen recommends that there should be a reasonable provision for year-to-year changes in costs reflecting formulaic adjustments to the base rate based on a reasonable measure of inflation less productivity. Does the Department envision that the measures of inflation and productivity would account for factors (e.g., increases in property taxes above the rate of general inflation, if applicable) that tend to put upward pressure on GMP's costs? If so, please explain how the formula proposed by the Department would take these factors into account.

PSD Response: As Mr. Allen's testimony reflects, the productivity offset should be based on a top down and also potentially a bottom up analysis. In a top down analysis, there are potentially many line item expenses that will greatly exceed or fall short of inflation minus productivity. The negatives tend to counterbalance the positives. As a manager of its costs, a company like GMP can also exercise its abilities to influence costs and the timing of investments to achieve results that benefit both ratepayers and shareholders.

But the Department made its proposal for a productivity adjustment based on both a top down and potentially a bottom up analysis. The application of a "Y" factor to the formula to account for some known cost drivers may obviate the need for a bottom-up analysis. The Department will modify that proposal based on a credible explanation and defense of the bottom up analysis. To date, the Department has not seen such a credible defense and the updated forecasts demonstrate the volatility of the forecasts and highlight the associated uncertainties around the line item forecasts. I believe that both top-down and bottom up analysis are needed.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-7. Please refer to the following statement starting on page 16, line 22 and continuing through page 17, line 3 of Mr. Allen's testimony: "However, ratepayers deserve an additional dividend beyond the savings resulting from the O&M Platform to reflect the expected productivity that should result from additional flexibility, potential efficiency of regulation, and certainty of cost-recovery that this plan provides." With respect to this statement:

a. **Is the Department aware of any other regulation plans that have been implemented in similar or analogous circumstances to those proposed here in which additional productivity savings have been required on top of already guaranteed merger savings? If so, please identify and produce any such plans.**

PSD Response: No. The merger savings were the product of Docket 7770 and relate to the savings that were attributed to the savings that could result and be shared. As I discussed in my testimony, Docket 7770 is a distinct case with obligations and requirements independent of any alternative regulation plan. What the Department seeks is a dividend that is associated with benefits that will be achieved through GMP's participation in the plan that is the subject this pending investigation. I believe the merger savings assurances provide a good starting point for what should be sought on behalf of ratepayers in this plan.

b. **Please admit that synergy savings under the Commission's Order in Docket 7770 are computed based upon the difference between the O&M Platform and actual spending and that GMP is already required to return 50% of any such savings to customers in FY20 and 100% of such savings in FY21–FY22. If denied, please state the basis for the denial and provide all supporting documents and information.**

PSD Response: Admitted. As my testimony reflects, I admit that the synergy savings are the result of a schedule that establishes a minimum guaranteed level of savings, that the schedule reflects an increasing share of savings over time, and the level of assurances decline in the final years that the ratepayer share increases in the last several years of the plan. The shares are 50% in FY 20, and 100% in FY 21 and FY 22. My testimony indicates the same. The Department seeks sharing of the savings and assurances that are separate from those that are already embedded in the O&M platform that resulted from the merger with Central Vermont Public Service Corporation.

c. **Assuming GMP is able to realize some level of additional O&M savings due to the efficiencies associated with this multi-year regulation plan, does the Department agree that those additional savings will flow back to customers based on the current O&M platform savings requirements established in the Docket 7770 Order. If not, please explain why the Department believes GMP is not already required to return these savings to customers?**

PSD Response: Agreed. Base O&M platform savings are due to Vermont ratepayers as a result of Docket 7770. The Department acknowledges that GMP is obligated to deliver these additional savings back to customers based on the O&M platform savings requirement. Again, what is sought is an increment of savings expectations and assurance on top of those associated with the merger.

d. Beyond GMP's performance in delivering customer savings through its performance against the O&M platform, what other areas of additional cost savings does the Department believe GMP can realize for its customers during the Plan period? Please be as specific as possible and explain how these savings are distinct from the savings GMP is already required to return to customers under the merger savings platform required under the Commission Order in Docket 7770.

PSD Response: To be clear, the O&M platform and associated commitment to customer savings is the result of the merger proceeding. The Department is seeking additional assurances that may drive further O&M savings relevant to the categories listed in the O&M platform or in areas beyond the categories of costs and accounts associated with the O&M platform. As an example, the multi-year rate plan helped to foster efficiencies in operations that relate to regulatory oversight. Less staff time and effort related to support for rate cases may result in staff savings, a reduction in the cost of legal services, and an ability of the Company to focus attention on other savings or service opportunities. The Department is not attempting to identify or instruct GMP on the areas of savings opportunities. That is management's prerogative. The Department is attempting to foster the conditions and the incentives for GMP to manage its operations in a manner that is consistent with further improvements to its operations and performance relative to the commitments and assurances that were part of the merger. GMP has a long history of demonstrating savings in the past relative to inflation. Additional savings beyond the merger savings are expected both as a matter of time and prudent management practice, and as a result of the plan. Section 218d features this expectation. Absent such an expectation there is reason to question why the state or GMP should embark on such a plan.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-8. Regarding Mr. Allen's statement on page 19, lines 5–6 that "[f]inal adjustments for the depreciation study should be incorporated in the plan in the second and third year of the plan," please explain exactly how the Department is proposing these adjustments would be incorporated into the Plan.

PSD Response: Mr. Allen is not a depreciation expert. The company has made it clear that this study will impact depreciation levels in the second and third year of the plan. The Department believes that the adjustments to depreciation levels should be additive to the bottom up analysis that informs the establishment of the productivity offset.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-9. On page 20 of Mr. Allen's Direct Testimony he discusses continuing to embed the O&M Platform savings into base rates. With respect to this issue:

a. **Please explain how the O&M Platform would be embedded into base rates under the Department's proposal? Would this be based on GMP's forecasted merger savings at the outset of the Plan? Would that number be adjusted for reforecasting (not formula adjustment) during the Plan?**

PSD Response: The O&M Platform contains costs and expected savings levels that can be built into the plan in a way that informs the productivity offset that is established and applied. The levels of adjustments should be sufficiently well vetted by the time of the onset of the plan that they can be built into the expected levels of depreciation at the plan's onset.

b. **Is the Department proposing to eliminate the annual merger savings report and/or the merger savings adjustment/true-up? Please explain why or why not.**

PSD Response: The principle that the Department advances is one of building on the assurances that have already been secured for ratepayers as a result of Docket 7770. As such, the Department sees no reason to diminish the reports and activities that are relevant to those assurances. The Department does not propose to eliminate the annual merger savings report. The principle should extend to other elements of the commitments associated with the merger. How such reports are framed may, however, may need to change to reflect these broadened productivity or efficiencies that result from both the merger and the multi-year rate plan.

c. **Is it the Department's position that merger savings associated with the O&M Platform that are embedded into base rates would be subject to the proposed inflation and productivity formula on an annual basis?**

PSD Response: The O&M platform is an embedded component of the base rates under the Department's proposal. The O&M platform would be an embedded component of the cost of service. Expectations for savings relative to that platform would be reflected in the productivity offset that is a part of the Department's proposal for the multi-year rate plan.

d. **If merger savings are subject to this formula adjustment, please describe how GMP should calculate the total O&M savings related to the merger on an annual basis and at the end of the 10-year merger savings period.**

PSD Response: GMP has made assurances relative to the O&M platform that must be met. This sets a floor on savings relative to the O&M platform. It seems unlikely that GMP will be able to readily distinguish savings attributable to the merger from savings relative to the multi-year rate plan. That Department is not seeking such as distinction. As a practical matter, I believe that the merger platform savings represent both savings from the merger and savings that would naturally and historically have existed for GMP over time as the multi-factor productivity analysis for GMP and for most utilities in the sector have yielded. These historical patterns represent the floor of expectations that we believe should apply over the course of the plan.

e. **If merger savings are embedded into base rates but are not subject to the inflation minus productivity formula, please explain how the Department's formula would be applied on an annual basis to exclude merger savings.**

PSD Response: The Department's proposal does not attempt to exclude the merger savings. Rather the Department's proposal is to embed the savings in the broader formulaic adjustment to base rates. The merger savings merely inform that productivity adjustments that should be wired into the plan for the year-to-year inflation minus productivity adjustments. In effect, the merger savings are a hard-wired component of the base rate formula under the multi-year rate plan.

f. **Please explain how the Department's proposal for incorporating merger savings would work under the following scenarios:**

   i. **Actual merger savings achieved in FY20 are $5M greater than the forecasted merger savings amount included in base rates. Would 50% of these additional savings be returned to customers, and if so, how? Would GMP receive 50% of total merger savings actually achieved for FY20, and if so, how?**

PSD Response: Yes. This is a complication that I believe exists for the first year of the plan. Some accommodation would need to be made. I would like to see a work-around crafted at the front end of the plan. In perhaps the most straightforward accommodation, the "savings", actually the difference between the O&M platform and the actual expenses that materialize in the O&M platform, would simply be split 50/50. The 50% share to GMP would likely need to ride outside of the base rate adjustments and the ESAM. In effect, 50% of the additional savings would simply be recognized as an expense for purposes of the base O&M adjustors. In this instance, a $2.5 million regulatory asset would be created and treated as an expense that would flow through as a separate item in 1 or more future years.

   ii. **Actual merger savings achieved in FY20 are $5M less than the forecasted merger savings amount included in base rates. Would 50% of these reduced savings be collected from customers, and if so, how? Would GMP receive 50% of total merger savings actually achieved in FY20, and if so, how?**

PSD Response: Assuming that there was a bona-fide conflict between the formulation of the merger and the base-rate adjustments, then the prior formulation would supersede unless the parties to the agreement in Docket 7770 agree otherwise. It potentially acts as a constraint on the application of adjustment to the overarching base rate. Some of the expected ratepayer benefits that are expected can surface through the productivity offset, they can be built into the base rate, or they can be recaptured as a an offset to the regulatory asset account just mentioned.

iii. **Actual merger savings achieved in FY21 or FY22 are $5M greater than the forecasted merger savings amount included in base rates. Would 100% of these additional savings be returned to customers, and if so, how?**

PSD Response: See prior response.

iv. **Actual merger savings achieved in FY21 or FY22 are $5M less than the forecasted merger savings amount included in base rates. Would 100% of these reduced savings be collected from customers, and if so, how?**

PSD Response: See prior response.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-10. Regarding page 26, lines 5-11 of Mr. Allen's testimony, please identify the individual cost of service line items which would be incorporated into/subject to the attrition-relief mechanism ("ARM"), utilizing to the extent possible reference to the specific line items included on Exh. GMP-ER-1 Schedule 1 (from the 2019 Rate Case, Case No.18-0974-TF).

PSD Response: The ARM would apply to the base rate elements (i.e., not the rate base) and only exclude items that were part of a power supply adjuster. All of the cost of service line items except for those that were part of the power supply adjuster would be incorporated into and subject to the ARM.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-11. Please also explain how the non-plant in service rate base items would be calculated under the Plan and identify the individual non-plant in service rate base items that would be subject to the Department's formula, utilizing to the extent possible reference to the specific line items included on Exh. GMP-ER-1 Schedule 2 (from the 2019 Rate Case, Case No.18-0974-TF).

PSD Response: Non-plant in service rate base items under the plan would occur under the plan as they would be reported in financial statements. Any exceptions would need to be clearly spelled out at the front end of the plan. This approach provides a summary view of the allowed revenue requirement and does not take a line-item approach to the adjustments to the cost of service. Other than the fact that this multi-year rate plan would ride on top of a framework for sharing savings under the merger, there is little relevance for the individual line items.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-12. In the event the PUC approves GMP's proposal to provide customers one-time benefits from the three JV Solar/Storage projects and the Utopus return within the 2019 rate period, how would the Department Plan (Exh. PSD-JRA-1) adjust for those items in rate period FY2020 after their return.

PSD Response: As indicated earlier, the proposal is for the ARM mechanism to be calibrated to provide an opportunity for GMP to earn a reasonable return over the three years of the plan. The ARM approach does not take an individual line item or project approach to the adjustments. That said, the Department is intent on making this plan work for the company and for ratepayers. The Department intends to develop a reasonable expectation of the cost of service over the three years informed by all know rate pressures at the onset of the plan. This analysis will provide the bottom-up analysis that will inform the refinement of the ARM. The projects mentioned will inform that analysis relative to the adjustment in year one. The key is to focus not on a single year but the three year period while attempting to ensure that GMP is still able to recover all necessary revenues to adequately cover its cost of service in line with its allowed ROE.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-13. On page 26, lines 9–11 of his Direct Testimony, and again on page 28, lines 8–15, Mr. Allen discusses the influence of productivity, and states that the electric utility sector has historically performed (and is expected to perform) at a rate that is better than inflation.

a. What cost categories is Mr. Allen referring to in this context?

PSD Response: I was referring specifically to the overall cost of service as reflected in the retail price relative to the inflation index, but the same phenomenon seems likely when viewed more narrowly. I am also referring to the base (non-power costs) portion of the cost of service as might be reflected in certain studies of multi-factor productivity such as that included in Exhibit 2 to my testimony.

b. What metrics (e.g., cost per customer per year, cost per kWh, average electricity rates?) is Mr. Allen referring to in this context? Please provide the basis for the Department's understanding that the metric(s) have historically performed at a rate that is better than inflation.

PSD Response: I am referring to cost per kWh, but the same likely holds for other metrics of costs for electricity.

c. Please state the period of "recent history" as that term is used on page 28, lines 14–15 of Mr. Allen's Direct Testimony.

PSD Response: Recent history here refers to the period from 2010 to 2017. But I acknowledge that the specific period can matter. Over the longer term, the pattern seems to hold. The inflation index as measured by the CPI-U overall versus electricity is considerably higher (measures relative to the 1982-1983 base) is considerably higher indicating that this is an enduring phenomenon, even while shorter term movements in the costs of energy can have an impact on the relationship between inflation and trends in electricity prices.

d. In Mr. Allen's opinion, have declines in fossil fuel prices to electric generators or declines in wholesale power market prices contributed to the observed decline in electric sector costs that Mr. Allen cites here? Please explain why or why not.

PSD Response: Declines in the price of fossil fuels have likely contributed, especially in the declines in natural gas prices that now provide almost half the generation in the New England region. This phenomenon has likely taken hold since about 2010. Although there was a temporary upswing in natural gas prices in 2013 and 2014, the region has experienced relative declines since. The upswing in 2014 created some rate increases, especially in retail choice states like in most of the neighboring states. In the 2000s, the opposite likely held. Natural gas prices were rising and power costs reached a relative peak in about 2008. That might explain the retail price trends that occurred during that period.

Longer term, I think that the phenomenon is due to a wide range of factors. Generation accounts for the majority of costs. Until the 1980s, the declines in costs seems to be in part driven on the generation side by increasing scale or size of the generators. In the 1990s and 2000s, it seemed to be in part due again to changes in generation technology, moving more toward natural gas and away from oil and other fuels. Relative declines in costs are likely due also to factors beyond generation. The industry is capital intensive and the costs of capital have declined steadily over the last 28 years. The industry has seen consolidations which generates efficiencies. IT and automation have likely helped. Looking forward, I would expect a new set of factors to play a more significant role, including new clean, flexible loads, automation, advances in technology around distributed generation and storage, and perhaps new business models and partnerships for the utilities. Some of this is already beginning to unfold with the introduction of new enabling technologies like storage.

e. **Is it the Department's position that the cost of electricity has increased at a rate lower than inflation in Vermont over this period of recent history? Please identify and produce any data, information, or analysis supporting the Department's position.**

PSD Response: A comparison of price levels in the United States and Vermont from 2010 through 2017 available on EIA.org seems to reinforce this position. From 2010 through 2017, EIA data browser indicated that average prices in Vermont have increased about 10%. Over the same pricing in the US increased less than 7%. CPI-U increased about 12.5%. The GDP deflator showed price levels rising by roughly the same amount (12.5%). Reference for these amounts can be found online at the Bureau of Labor Statistics ("BLS"), the Bureau of Economic Analysis, and the Energy Information Administration's data browser.

But the work that is associated with the LBNL study cited is really focused on the non-power cost portion of rates. Yes, as the factors suggest, base rates have changed at levels less than the rate of inflation as a result of improvements in overall system productivity.

f. **Please provide the basis, including any supporting multi-factor productivity studies or references to such studies, and any data that support the view that the cost of electric service is increasing at a rate lower than inflation.**

PSD Response: The data used in the top down analysis was based on the LBNL study attached to my testimony. Other resources that demonstrate the phenomenon include those cited above. BLS shows that the overall CPI-U price levels (probably the most widely recognized measure of inflation) are about almost 19% higher than that for electricity expenditures, even while electricity sales have increased significantly on a per capita basis over that period.

g. **Please provide the basis, including any supporting multi-factor productivity studies or references to such studies, and any data that support the view that**

the electric utility industry is expected to performed at a rate better than inflation.

PSD Response: As the responses above all seem to show, this has the potential to be a phenomenon. The LBNL study provides a more rigorous and clinical approach to support this phenomenon over the last several decades. Many factors seem to be combining to give cause for believing that this phenomenon with continue, and perhaps even improve. Most of these factors center on new technologies and ways to use electricity, including declining costs of distributed generation, storage, rate design, load management and related controls, and the computer and communications technologies that contribute. At the bulk transmission level, investment levels seem to finally be moderating. The technologies that led to improvements in generation seem likely to continue. There are countervailing influences as well, such as aging infrastructure.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-14. Regarding page 28, lines 8-11 of Mr. Allen's Direct Testimony, please provide a list by utility/jurisdiction and date of the productivity offsets included in multi-year or incentive rate plans that were reviewed by the Department in preparing their testimony. Please provide docket numbers or copies of plans to the extent these are in the Department's possession.

PSD Response: The research that I conducted was performed online. The research that was done was largely done by first reviewing the summary reports and materials like that referenced and attached to my testimony. Much of this research was done over a year ago in the context of my review of plans and research for the Commission's general investigation into alternative regulation and the materials that were produced at that time. I have not retained those online materials and I do not possess additional resources.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-15. On page 29, lines 14–16 of his Direct Testimony, Mr. Allen states that "[r]elative to base rate levels of roughly $260 million, this saving implies a year-to-year productivity offset of roughly 0.2 to 0.25 percent during the term of the plan" under the merger savings Platform.

a. Please provide the calculations indicating this approximate range of implied productivity offset.

PSD Response: I simply took the level of improvements expected in the models provided by GMP and compared that with the assumed based rate level of roughly $260 million.

b. In this context, what does "base rate levels" mean?

PSD Response: As described earlier, the phrase base rate levels refers to every expense and cost category that is not part of the power cost adjuster.

c. How was the $260 million figure developed? Please identify the categories of cost that are included in this estimate of base rate levels.

PSD Response: This is largely illustrative but was based on an assumed overall cost of service of $680 million and then deleting the portion that was associated with the power cost adjuster of roughly $420 million.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-16. On page 30, lines 1-5 of his Direct Testimony, Mr. Allen states "Given the confluence of advancements in technology (which GMP was presumably not capable of having fully anticipated when the O&M Platform was approved by the Commission in Docket 7770) GMP should be expected to yield efficiency savings in excess of the amounts targeted through the end of the O&M Platform term." Please state:

a. **What specific technological advancements does the Department believe are available now that were not previously anticipated, and which GMP should be implementing, to achieve additional efficiency savings beyond those already guaranteed in the merger savings Platform established in Docket 7770.**

PSD Response: There are a variety of technologies that have come down in price and are reasonably accessible. But without getting into details, technology improvements continue to expand their capabilities to enable more with less. This likely applies to almost all features of the operations that rely on software and technology. Evidence of this is found in the various software systems that the company manages, including billing and systems monitoring. Integration of these different systems will likely bring about additional efficiencies if they have not already transpired.

Technology opportunities exist around storage. These opportunities were likely not apparent in 2012. GMP is implementing grid scale projects and household project through the Tesla Power Walls. The declines in the costs of solar generation were likely not understood fully in 2012. The opportunity to mix storage and solar PV seems like a forward-looking opportunity.

Smart metering opportunities were likely understood in 2012, but there are likely many more opportunities for system monitoring and control that were not fully recognized then.

End-use device monitoring, measurement, and control were probably little appreciated at the time that the merger was taking place. Today GMP is in the early stages of implementing controls on batteries and EVs. There is likely much more good work in this space. The challenge here is likely with the seamless integration of different systems for grid benefit. An area that I believe has opportunity is to rely on third-parties as agents of either the utility or the customer to augment that value. The back-end platforms that dispatch load management resources probably have room for improvement.

I view load management and the many enabling technologies that include automation through back-end systems as an area of significant remaining potential. Rate design, new business models, and utility load management and associated systems all play a role.

Some improvements are also possible in the software systems used to manage and inform power costs.

There is no doubt many systems that are associated with grid modernization efforts at GMP and are in full view in neighboring states that could be covered here, but that seems beyond the scope and my expertise in this area is admittedly limited.

b. Provide any documents, data, or other information that supports Mr. Allen's opinion that additional technological investments are available to GMP that would produce additional productivity savings beyond those already guaranteed in the merger savings Platform established in Docket 7770.

PSD Response: **Objection.** The Department objects to the request on the basis that it is vague, overly burdensome, and seeks the production of documents not in the possession of the Department to which GMP has equal access. Without waiving these objections, the Department responds as follows:

I have no specific documentation to offer without a narrowed request. The opportunities are vast, and the request is wide ranging and burdensome. The topics listed are all areas in which GMP staff have direct knowledge and likely relevant expertise.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-17. On page 30, lines 19–22 of his Direct Testimony, Mr. Allen states that "[t]he Department has reviewed appropriate reference materials and concluded that a top-down estimate of productivity improvement would be 0.86 percent, meaning that ratepayers should expect an improvement in productivity, all else being equal." With respect to this statement:

a. **Please identify and produce all of the "appropriate reference materials" referenced in this sentence that were reviewed by the Department and explain how those materials support the suggested 0.86% productivity factor.**

PSD Response: The Department reviewed a number of documents that could be considered reference materials and chose to place the most credibility on the GRID Modernization Laboratory Consortium, U.S. Department of Energy report titled *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities* dated July 2017. This choice was largely predicated on GMP being included in the study and reliance on Pacific Economics Group and the lead author of the report, Dr. Mark Newton Lowry, to assist it in the development of a new regulatory strategy in June 2017. I have followed the work of this particular expert over time and value his work.

All other documents responsive to this request have been included as attachments A.PSD.1-17.1 through 17.8.

b. **With respect to this recommendation, has the Department considered the large number of mergers in the utility industry from which multi-factor productivity studies are derived, and whether merger savings are embedded in these studies? If so, please explain how it was considered.**

PSD Response: In principle, the Department understands that mergers and related merger savings are one component embedded in multi-factor productivity studies.

c. **Please explain how the Department is distinguishing between merger-related O&M savings that GMP is already required to return to customers under the Commission Order in Docket 7770 and improved "productivity" described in this statement? How does the Department propose to track these different savings over the term of the Plan?**

PSD Response: Please see the prior responses given to Q.GMP.1-9 above.

Person Responsible: J. Riley Allen and Scott Wheeler
Title: Deputy Commissioner and Utilities Finance & Economics Analyst, respectively, Department of Public Service
Date: January 11, 2019

Q.GMP.1-18. On page 31, lines 5–8 of his Direct Testimony, Mr. Allen states, "[m]ore specifically, the proposed 0.86 percent multi-factor productivity (MFP) adjustment is derived from a report issued by the GRID Modernization Laboratory Consortium, U.S. Department of Energy titled *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities* [italics original] dated July 2017." With respect to this statement:

a. Is the Department aware of any regulator that has relied upon or adopted the results of this study for purposes of setting a productivity factor for a multi-year rate plan?

PSD Response: The Department is not aware of any specific instances where this report was relied upon for setting a productivity factor for a multi-year rate plan. However, the Department believes that the report is credible enough to be relied upon given that lead author Dr. Lowry is widely respected within the industry and has testified in many jurisdictions in the US and Canada.

b. Is the Department aware of the multi-factor productivity study results presented, and adopted by the Massachusetts Department of Public Utilities, for Eversource's recently approved multi-year rate plan? If so, please explain the Department's understanding of how the productivity factor was established there.

PSD Response: Yes, the Department is aware of Eversource's case in Massachusetts. It is thought to be the first time that any jurisdiction in North America has approved a negative productivity adjustment factor (i.e., the "X" factor). The Department believes that regulators in Massachusetts made this decision in this specific case to meet overarching goals based on a confluence of competing factors, with the X factor representing but one small component of the inputs. Perhaps this quote excerpt from the multi-year rate plan approval says it best:

"…we find that Eversource has demonstrated that a change is warranted in this case with respect to the Department's historical ratemaking approach (Exhs. DPU-19-2; DPU-19-9; DPU-19-10; DPU-19-19; DPU-24-18; DPU-24-23; DPU-44-2; DPU-47-1; AG-18-15, Att.; AG-28-6; Tr. 1, at 17-19; Tr. 4, at 789-792). The approach we adopt must address lost sales growth and allow Eversource to best meet its public service obligations in terms of providing safe, reliable, least-cost service to customers and ensure that the Commonwealth's clean energy goals are met. D.P.U. 94-158, at 57."

c. Is the Department aware of any North American utility with a productivity factor as high as 0.86% built into an adopted multi-year rate plan in the last three years? If so, please identify and produce such plans.

PSD Response: No, the Department is not aware of any North American utilities having adopted multi-year rate plans with productivity factors as high as 0.86% in the last three years.

d. Given the changes in the industry cited by the Department, how much confidence can be placed in productivity study results including time periods as far back as 1980? Please explain.

PSD Response: The Department acknowledges that the industry has changed significantly since 1980. Arguably for the better in the sense that advances in technology have made productivity gains even greater and more pertinent today. The Department, accordingly placed a higher weighting on GMP's MFP study results for the period from 2008 to 2014.

Person Responsible: J. Riley Allen and Scott Wheeler
Title: Deputy Commissioner and Utilities Finance & Economics Analyst, respectively, Department of Public Service
Date: January 11, 2019

Q.GMP.1-19. On page 31, lines 15–17 of his Direct Testimony, Mr. Allen notes that GMP has produced favorable results compared to other U.S. electric utilities over time and even more so under Ms. Powell's leadership in the near term.

a. Please explain what major categories of utility costs are included (and not included) in the MFP results and the derivation of the percentage improvements presented in the table on page 31.

PSD Response: It is the Department's understanding that all of the major categories of utility costs excluding power costs are included in the MFP results on page 31.

b. If GMP has produced favorable results historically (i.e., if GMP has been able to lower its costs over time relative to other electric distribution utilities), what is the basis for assuming that GMP will be able to continue its relative improvement over time? Explain whether the achievement of past savings (e.g., through improvements in systems, or more efficient use of infrastructure) tends to limit the potential for GMP to deliver additional savings in the future?

PSD Response: The Department believes that GMP is well positioned to continue delivering innovative, cost effective solutions to customers. This excerpt from Ms. Powell's pre-filed testimony perhaps sums it up best:

"As I look ahead, I know that GMP will continue to work to drive down costs for our customers through innovation, increased synergy savings, and tight cost control as we move in partnership with our customers toward the new energy future we all seek. As a customer-obsessed culture, that is the focus of everything we do. We know that leading this important transformation through innovation is critical to discovering and delivering ways to lower the cost of maintaining the bulk grid, while continuing to provide strong customer service. It is our culture of innovation, paired with a lean and effective operating approach, that gives us confidence during this challenging time of transition."

The Department shares Ms. Powell's vision for GMP and its customers, which gives us confidence that the current management team will deliver additional savings in the future.

Person Responsible: J. Riley Allen and Scott Wheeler
Title: Deputy Commissioner and Utilities Finance & Economics Analyst, respectively, Department of Public Service
Date: January 11, 2019

Q.GMP.1-20. The table at the top of page 32 of Mr. Allen's Direct Testimony includes an Estimated Department Weighting for each of three historical periods.

a. Please describe and produce any other formula or weighting considered by the Department when developing its proposed productivity factor. Please explain in detail why the proposed formula and weighting factor was selected over any other alternatives considered.

PSD Response: The Department considered weighting each of the three periods equally but, as I touched upon briefly in Q.GMP.1-18.d., the relevancy of the period from 2008 to 2014 cannot be ignored. Not only does it coincide with Ms. Powell's transition into the leadership role, it also arguably best captures the impact of accelerating technology on innovation.

b. Each of these three historical periods includes the years from 2008 to 2014. What overall weight therefore is the Department effectively assigning to the period 2008 to 2014 in its formula?

PSD Response: The Department acknowledges that that the inclusion of the period from 2008 to 2014 in all three historical periods risks over-emphasizing this time period and the weights the impact on the formula. Nevertheless, we remain enthused by the opportunities in front of GMP for further improvement.

c. With respect to the data from the period of 2008 to 2014, does the Department understand these productivity numbers already include synergy savings associated with the merger of GMP and CVPS post 2012? If so, what level of synergy savings are incorporated into these productivity factors? If the Department does not believe these savings are already included, please state the basis for that opinion.

PSD Response: Yes, the Department understands that the productivity numbers include synergy savings associated with the merger of GMP and CVPS from the time of the merger at the end of 2012 to 2014. While the Department cannot quantify the level of synergy savings incorporated into these productivity factors precisely, we have attempted to estimate the impact by lowering the full MFP calculation from 2008 to 2014 from 1.05% to our weighted average result of 0.86%.

d. Does the Department possess the annual MFP changes for GMP that underlie the averages for the three historical periods listed in the table? If so, please provide them.

PSD Response: No, the Department does not possess the underlying data.

e. Please provide a list of multi-year or incentive plans that were reviewed by the Department that use multi-factor productivity methods to calculate a

productivity adjustor and please identify the productivity adjustor percentage that was in each of those plans.

PSD Response: Please refer to the same materials provided for Q.GMP.1-17.a.

f. Please describe with specificity the process the Department is proposing to develop the appropriate productivity factor for each year of the plan.

PSD Response: The Department's initial thought is that the prescribed MFP of 0.86% will remain unchanged throughout the term of the multi-year plan. Having said that, the Department is open to exploring possible mechanisms for adjusting the productivity factor periodically if it is deemed appropriate. Alternatively, the Department is open to the addition of a certain "Y" factor that might serve as an additional adjustment factor to account for additional categories of costs, such as changes in depreciation, that are largely known and external to the performance of the company over the coming years.

Person Responsible: J. Riley Allen and Scott Wheeler
Title: Deputy Commissioner and Utilities Finance & Economics Analyst, respectively, Department of Public Service
Date: January 11, 2019

Q.GMP.1-21. With respect to the Department's recommended indexing method described on page 34 of Mr. Allen's testimony:

a. Is the Department aware that other regulators (e.g., the CAPUC and the OEB) have adopted indexing mechanisms utilizing fee-based data providers (e.g., Bloomberg, Moody's)?

PSD Response: No. Mr. Allen was not aware.

b. Would the Department's concerns be alleviated by a commitment from GMP to provide stakeholders with annual updates to the data from these providers in support of the indexing mechanism?

PSD Response: The Department is seeking transparency and value. If there is a compelling basis for use of these indexes along with transparent access to the data by any member of the public online, then the Department could be supportive. The Vermont experience to date suggests that the 10-Year Treasury Bonds have proven to be an effective component of the formula.

c. Is the Department aware that the Wall Street Journal publishes daily bond benchmarks, such as the U.S. Corporate Long-term bond index (Bloomberg Barclays Indices) or U.S. Corporate Debt 10+ year maturities (ICE Data Services) that could be used for purposes of a ROE indexing mechanism?

PSD Response: If these indexes that are published by the Wall Street Journal are available online without a fee to any member of the public, and there is a well-articulated or comparative advantage on 50% of 10 Year Treasury Bond yields, then we would like to consider it. The advantage needs to be demonstrated and concerns for transparency addressed.

d. Has the Department conducted any analysis in support of its proposed 50% relationship between allowed ROEs and Treasury yields? If so, please identify and produce all such analyses.

PSD Response: Yes. EEI provides access to a nice comparison. The report is available at the following location:

http://www.eei.org/resourcesandmedia/industrydataanalysis/industryfinancialanalysis/QtrlyFinancialUpdates/Documents/QFU_Rate_Case/2018_Q2_Rate_Review.pdf

Utility ROE yields tend to move much more slowly than movement in the Bond yields, which is why reliance on a fraction of the movement seems to work well. In 1990, the average ROE award was about 12.62. By the second quarter of 2018, the ROE award was about 9.51. The difference between the two was about 3.1 percent. From 1990 to 2018, (on corresponding quarters), the Treasure bills moved from 8.42 to 2.92, after reaching a low of 1.56 in the 3rd quarter of 2016. The simple difference is about 5.5%. On that basis it would seem that simply relying on 50% of the movement in 10 year treasury bills. If one took into account the lagging effect of rate cases, the fit seems even more appropriate. 10-Year Treasury Bonds were 2.24 in the 3rd quarter of 2017 (8.42-2.24 = 6.18 x 50% is 3.1 percent).

e. **With respect to the time period proposed for establishing the percent change in the 10-year Treasury, clarify whether DPS is proposing a comparison to December 2019 yields (as indicated in Section IV.5 of Exh. PSD-JRA-1), or a year-over-year comparison based on August monthly averages (as indicated on page 34 of Mr. Allen's testimony).**

PSD Response: I believe that the point of comparison should be the end of the year prior to the new rates taking hold and at the time of the PUC decision in the rate case, so December of 2019. The difference reflects an evolution in our thinking as we prepared the testimony.

f. **With respect to calculating the percent change in the 10-year Treasury, is the Department proposing that this calculation be based on annual year-over-year changes based on full month averages (for a particular month) (as suggested on pages 34-35 of Mr. Allen's testimony) or using the average daily yields for the first 20 days of the selected month (as stated on page 44 of Mr. Allen's testimony)?**

PSD Response: The Department acknowledges that Mr. Allen's testimony includes an inconsistency. The important element here is that the reference point be known and consistently applied at the onset of the plan and pursuant to a Commission order. I propose use of the average daily yields for the first 20 days of the selected month. There was an evolution in my thinking on this topic that did not find its way to all the points that it is referenced. The 20 day average yield is what I recall was used in earlier plans, like that approved in Docket 7176.

g. **Is there a specific reason the Department is proposing a March-to-March comparison for purposes of establishing the percent change in inflation using the gross domestic product deflator (as indicated in Section IV.5 of Exh. PSD-JRA-1), but an August to August period for determining the change in the 10-year Treasury? Given that both factors will be used in the same formula, should they be based on the same time period? Please explain.**

PSD Response: The important element here is for this information to be available in time to allow for all of the adjustments. When I looked at the releases of the GDP deflator, it looks like there was a lag that had to be accounted for. My expectation is that, over time, there is likely little difference between one year-to-year adjustment and another, provided that there is consistency and that there is adequate time to apply the adjustment. The Treasury bond yields do not seem to suffer the same challenges in reporting.

h. **Has the DPS considered the volatility that would be created by utilizing a 20-day period (regardless of month)? Please explain all reasons why a 20-day**

period is DPS's preferred methodology, regardless of which month is selected for purposes of this comparison.

PSD Response: My recollection was that an average like this was used in the past by Vermont utilities, including GMP in its first plan approved in 2006, to take effect in 2007. The point of using 20 days is to help reduce the volatility associated with using just a single day or week. I do not believe that the Department is inflexible on the 20-day path, if there is a sensible alternative that is less volatile.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-22. With respect to the proposed Earning Sharing Adjustment Mechanism ("ESAM") described on pages 35-36 of Mr. Allen's testimony:

a. Please identify and provide any workpapers developed to support or analyze the ESAM boundaries proposed by Mr. Allen.

PSD Response: The boundaries that are proposed are similar to those that have existed in the past. The major difference is the asymmetries proposed. The basis for the proposal was simply a reflection on the asymmetric environment in which the utility system operates. Managers have information and can control the performance of the system that it operates in. Consumers do not enjoy this advantage. There are inherent asymmetries. There is no reason that I can think of to ignore this.

b. Is the Department aware of any other North American multi-year rate plan constructed with similar earnings sharing parameters? If so, please identify and produce such plans.

PSD Response: No. But I have not sought to find ones with similar sharing parameters.

c. Please explain how the ESAM would operate in rate year 2020 in the event merger savings exceeded the estimate included in base rates under the DPS proposal in an amount that would, once included in the ESAM calculation, exceed the deadband proposed by the Department.

PSD Response: If the boundaries on the ESAM violated the agreements reached under the merger agreement, then the merger agreement should override in 2020, unless of course, the parties to the agreement agreed otherwise at the onset of the plan.

d. Please explain how the ESAM would operate in rate years 2021 and 2022 in the event merger savings exceeded the estimate included in base rates under the DPS proposal in an amount that would, once included in the ESAM calculation, exceed the deadband proposed by the Department.

PSD Response: Same answer as above (Q.GMP.1-22(c)).

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-23. Please confirm that under the DPS proposal, retail sales would be forecast annually. If so, please explain how this forecast will be used to set the revenue requirements for each year of the Plan. If not, please explain how overall retail sales will be determined for the life of the Plan.

PSD Response: The sales levels that are used to set the targeted revenues for each year could be established at the onset of the plan or annually. So long as revenues are set to be recovered through the decoupling mechanism, it seems sensible to forecast the retail sales and rely on that for determining the rates.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-24. Regarding the Department's 29 suggested performance indicators on pages 40–41 of Mr. Allen's testimony:

a. **What criteria has the Department utilized in developing these recommended standards?**

PSD Response: Answer: The criteria differed for the performance indicators. Some of the performance indicators were there to help gauge the performance of the plan itself and whether it was performing as intended. As an example, the indicators relevant to capital spending will indicate whether the intent of the Company and the Department to set sensible guardrails around capital spending are successful. Capital spending is within the control of management. It can also be an indicator of management performance.

The majority of the standards were intended to reinforce the goals of the plan that were articulated my Ms. Powell, or are criteria in statute for the plan. The Department hopes that the standards help to give clear focus to the objectives of the plan and provide an objective reference for management and regulators to look back and agree that either the Company was unsuccessful, it was successful, or the indicators represented a poor reference point during the plan and a poor candidate for use in the future.

Power costs – As indicated earlier, the Department recognizes that while the Company may enjoy limited control over power costs over a short time horizon, it does have considerable control over power costs over time. Given the experience of the last 12 years with these plans, it seems sensible to recognize that these plans tend to run together and that the metrics can gauge performance not only in the cycle of a single plan, but over multiple plans.

Exogenous adjustments – Here too, the structure of the plan recognizes that these are largely outside the control of GMP to manage over a relatively short planning cycle. Yet there are features of the environment that GMP can manage and control, such as vegetative management. GMP can also improve its planning and forecasting around significant weather events. GMP can coordinate with sister systems for shared support. GMP does all these things well and we expect and should encourage the company to keep an eye on both a timely recovery, and on the rate impacts of these exogenous events over time. This seems especially important as unusual storm events seem to be becoming more common. Understanding the root cause of outages caused by weather may lead to innovation and improvements over time.

Load management – There seem to be many potential value streams from load management for both participating ratepayers and non-participants. The dimensions of value seem likely to grow with increasing levels of distributed generation. The Department would hope that sensible metrics of progress in this space can be identified and refined with time and experience.

Environment – Here again, the environmental profile of electricity is an important reference point for the plan and is clearly within the control of GMP. The state has established carbon and renewable objectives. These performance metrics are an important reference point for gauging the performance of GMP under the plan.

Distributed generation – The goals for the plan clearly include enabling the development of distributed generation and the ability of the company to receive and interconnect distributed generation is within the control of the company. It would be valuable to view the performance of the company relative to its performance around its continued progress around distributed generation.

Electric Vehicles and Tier III – The state and the company have objectives around adoption of electric vehicles. There are many ways that GMP can help to move the market, including innovation around rate design and incentives. GMP can potentially employ innovations around planning to encourage better location of EVs and Public Charging. GMP can combine load management with rate design to help move the market for controlled charging as it does with the level 2 chargers that its provides to customers, in exchange for some measure of load control.

Interconnection – It will be helpful to understand that increasing changing pressures on GMP and whether it is able to successfully navigate these challenges without major new categories of investment. Innovations around load management, rate design, incentives for storage, and better use of flexible loads may be useful. Alternatives to current compensation frameworks associated with net metering and standard offer may also help.

Storage and microgrid islanding – Gauging progress in an area that seems likely to grow in importance seems sensible.

Locational constraints and relief – This will likely to be a growing challenge and represents an area of the performance of GMP and the plan that should be closely monitored along with suggested remedies.

Third-party aggregators – Aggregators can play a role where the utility has difficulty reaching new customers with flexible loads to the collective benefit of all.

b. Does the Department believe that a metric should be reasonably within the Company's control in order to serve as an effective incentive?

PSD Response: Yes. In certain instances, however, the indicator may also be focused on just gauging the success of the plan itself.

c. Is the Department aware of any multi-year rate plan with a comparable number of metrics? If so, please identify and produce such plans.

PSD Response: No. I am aware of papers that discuss many, but not aware of any that have implemented such a long list. The purpose here is to help establish a shorter list over time that might provide performance incentives. It seems sensible for us to start with a longer list at this stage and winnow down with experience as we refine and focus on what proves to be best. If some of these are burdensome to measure, that should weigh into the discussion. But most of these seems like metrics that would already be monitored or could be readily added and shared.

d. Does the Department believe that exceeding service quality goals is an element of achieving higher customer satisfaction? Does the Department believe that having and maintaining high levels of customer satisfaction can help reduce operational costs for all customers? If not, why not?

PSD Response: Customer satisfaction and service quality are important dimensions of service. I expect that having and maintaining high levels of customer satisfaction reflects value that the customers provide to the system and each individual customer. I am not sure that I agree that high levels customer satisfaction can help reduce operations costs. I can imagine circumstances in which the opposite might be true. If for example, the company spent funds on promoting its image at the expense of system improvements, that could be costly. If the company achieved very high levels of service quality at extraordinary levels of investment of expense, that could be counterproductive.

e. Does the Department agree that GMP's current service quality measures are an asymmetrical performance incentive mechanism? If not, please explain why not.

PSD Response: I think I agree. The penalties are modest, but seem to only apply when there are failures.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-25. On page 45, lines 17-19, Mr. Allen states that "[t]he base O&M Platform and the savings sharing continue to exist and are reflected as an embedded component of a new modified plan. GMP's proposed plan will likely generate a new, separate stream of productivity gains and savings." What specific new, separate non-merger related savings does the Department believe should result from the Plan?

PSD Response: The merger savings in my mind conjure up a list of synergies and savings through combining two systems into one with associated reduction in personnel costs and the integration of software systems, and the downsizing of redundant management. These are distinct from but can overlap with a separate stream of productivity gains and savings from the plan. These savings are perhaps theoretical in character but reflect the drive to do things differently and take advantage of some of the emerging technologies for cost savings. Innovations that come to mind for me would likely include those around load management and rate design, but also the systems that support load management, and the integration of different software systems so that better information can be shared for greater system visibility and management control and prerogative. Please also refer to my response to Q.GMP.1-7 above.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-26. Has the DPS considered whether its proposed changes to the Multi-Year Regulation Plan would impact GMP's ability to remain on Accounting Standards Codification 980, Regulated Operations? If so, please explain any conclusions the Department has drawn regarding the impact of the Department's proposed changes on GMP's eligibility for rate-regulated accounting standards under the Generally Accepted Accounting Practices ("GAAP").

PSD Response: Yes, the Department believes that the proposed changes will not impact GMP's ability to remain under Accounting Standards Codification 980, Regulated Operations or eligibility for rate-regulated accounting under GAAP.

Person Responsible: J. Riley Allen and Scott Wheeler
Title: Deputy Commissioner and Utilities Finance & Economics Analyst, respectively, Department of Public Service
Date: January 11, 2019

Questions Related to PSD-JRA-1 (Proposed Plan)

Q.GMP.1-27. Did the Department, either directly through staff or through third party consultants, calculate, analyze, or estimate the rate path (in either any individual year or over each of the three years) that would result from the Department's proposed Plan (Exhibit PSD-JRA-1), based upon the detailed cost of service forecasts provided by GMP to the Department in discovery in this matter? If no, why not? If yes, please provide all documents, information, calculations, analysis, or estimates prepared by or for the Department on this subject.

PSD Response: The Department embarked upon such an effort but had to abandon for lack of time and available staff and expert resources. The Department plans to estimate a rate path that is informed by, but not limited to forecasts provided by GMP.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-28. Under Section II.2 of the Department's proposed Plan (Exhibit PSD-JRA-1), please explain how the following assumed projections of the Non-base O&M (non-platform O&M costs) costs would serve to inform the development of the attrition relief mechanism ("ARM"):

a. Assume that the Annualized 2019 non-base O&M costs are $1.2M and are projected to increase by $240K or 4% in 2020. The inflation component of the ARM is 2.4%. How would the ARM be developed/adjusted to account for this forecasted change?

PSD Response: The adjustment to the non-base O&M costs of $1.2 M (by $240 K) is a small amount in relation to the overall base rate that we estimate at about $260 million. The assumption going in is that there are many individual cost elements that will be pushing more or less toward the same direction. If inflation minus productivity yields 2.4% and the Department is persuaded that underlying elements of costs rise above 2.4%, then either the productivity adjustment will need to be adjusted or we may need to find flexibility elsewhere in the plan. The Department intends to be flexible and realistic in the application of the ARM mechanism. This will depend, in part, on a thorough review of the line-by-line forecasts in the bottom up analysis of the base rate elements of the plan.

This is also a three-year plan. The fact that this plan occurs over three years should allow additional room for flexibility. Part of what the Department hopes to achieve through the plan is a smoothing of the rate adjustments over the three years.

b. Assume the annualized 2019 non-base O&M costs are $1.2M and are projected to decrease by $240K or 4% in 2020. The inflation component of the ARM is 2.4%. How would the ARM be developed/adjusted to account for this forecasted change?

PSD Response: See response to request Q.GMP.1-28(a) above.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-29. Under Section II.3 of the Department's proposed Plan (Exhibit PSD-JRA-1), please explain how the following assumed projections of debt costs would serve to inform the development of the ARM:

a. **Assume that the annualized 2019 interest expense is $37M and is projected to increase by $2.5M for new debt issued for 2020 plant additions and the projected change in the credit facility interest rate in 2020. The inflation component of the ARM is 2.4%. How would the ARM be developed/adjusted to account for this forecasted change?**

PSD Response: The $2.5M, if verified as a reasonable expectation, would be recognized in the year over year change that would be necessary to offset the otherwise assumed productivity adjustment.

b. **Assume that the Annualized 2019 interest expense is $37M and is projected to remain unchanged in 2020. The inflation component of the ARM is 2.4%. How would the ARM be developed/adjusted to account for this forecasted change?**

PSD Response: The additional interest, or in this case the lack of additional interest expense, would be added to the other expense additions or potentially grow the productivity adjustment in this instance.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-30. With respect to Section II.5 of the Department's proposed Plan (Exhibit PSD-JRA-1), what happens if actual FY2020 earnings from equity in affiliates is:

a. **$3M more than the amount reflected in forecasted base rates set at the beginning of the Plan period?**

PSD Response: The $3M would be added to other revenues and costs and filtered through the ESAM to yield the allowed return.

b. **$2M less than the amount reflected in in forecasted base rates set at the beginning of the Plan period?**

PSD Response: The $2M less would be added (or in this case subtracted) from the other revenues and costs and filtered through the ESAM.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-31. Under Section II.6 of the Department's proposed Plan (Exhibit PSD-JRA-1), please confirm the approach used to establish and calibrate the ARM at the onset of the plan to the forecast of Other Costs & Revenues, Depreciation and Property Taxes is identical to the approach used with Non-base O&M (Section II.2). If different, please explain how it is different.

PSD Response: The intent generally is to perform a solid review of the underlying costs, cost drivers, and reasonable estimates to future costs based on appropriate standards. Calibration of the ARM can occur in any number of ways, but a ground up analysis of reasonable projections of future costs is what was contemplated.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-32. Under Section III.1 of the Department's proposed Plan (Exhibit PSD-JRA-1), please identify the source of the inflation factor for the first year from December 2018 to May 2019. Please also clarify whether the Department is proposing a December 2018 to May 2019 period, or a December 2018 to August 2019 period (as indicated on page 34 of Mr. Allen's Direct Testimony) for this first-year calculation.

PSD Response: That makes sense. The formula would have to be based on the same inflation factor, the GDP deflator for the most recent quarter in December 2018, likely the September value against the value that is 3 quarters later, likely the June 2019 value.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-33. Under Section IV of the Department's proposed Plan (Exhibit PSD-JRA-1), how does the Department propose to develop the forecast of the FY20 base rate revenue requirement, and does the Department agree that the forecast used to set the first-year rates under the Plan should take into account known changes in cost of service items that will occur at the end of the 2019 rate period and during FY2020?

PSD Response: Yes. If there are known costs, they need to be accounted for during FY2020

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-34. Under Section IV.1 of the Department's proposed Plan (Exhibit PSD-JRA-1), how does the Department propose addressing changes in plant-in-service amounts that occur between January 1, 2019 and the start of the MYRP in FY20 for purposes of setting the starting point for the capital expenditure caps set in this section? Does the Department propose that this should be based on actual plant-in-service amounts as of a date-certain?

PSD Response: My expectation is that we would take the final verifiable amount at the start of the plan for FY20.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-35. Under Section IV.2 of the Department's proposed Plan (Exhibit PSD-JRA-1), will the Platform Costs established at the onset of the plan be equal to the annualized Platform O&M Costs included in Commission approved 2019 base rate filing? If not please demonstrate by way of example how the Platform Costs will be calculated at the onset of the plan?

PSD Response: At the onset of the plan the Platform O&M costs will be included in the cost of service. Savings relative to that platform will be used to offset the platform.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-36. Under Section IV.2 of the Department's proposed Plan (Exhibit PSD-JRA-1), please demonstrate, by way of example, the calculation under the Plan of the Platform Costs that will be included in base rates for 2020, 2021, and 2022. Please clearly identify the key assumptions used in performing the calculations and timing of when various components of the calculation would be performed under the Plan.

PSD Response: The Department has not completed the requested calculation as of this date. To the extent the Department is able to complete more detailed modeling that includes the requested calculation, it will supplement this response.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-37. Regarding the formula described in Section IV.5 of the Department's proposed Plan (Exhibit PSD-JRA-1), please:

a. **Define the specific components of GMP's cost of service that would be included in the BRi (base rate revenue requirement) component of the formula by reference to specific line items in Exh. GMP-ER-1 Schedule 1 (From the 2019 Rate Case, Case No. 18-0974-TF). If the manner in which this number is developed will be different for the first year of the Plan (FY20) from the second and third years of the Plan, please explain any differences.**

PSD Response: The Specific components of GMPs cost of service included in the base rate revenue requirement includes every element of the cost of service that is not in the PSA.

b. **Please confirm that the term BRi, as defined by the DPS, means all of GMP's non-PSA costs.**

PSD Response: Confirmed.

c. **Does the term BRi-1, as defined by DPS, include the revenue requirement associated with recovery of return on equity in the prior year? Please explain why or why not.**

PSD Response: Yes. It is part of the cost of service that includes all costs, including the cost of debt and equity in the prior year. The intent here is to keep the plan and its moving parts as simple and straightforward as possible. The plan could also remove the rate base adjustment for changes in Treasury Bonds for further simplification.

d. **Please confirm whether and how the base rate revenue requirement (BRi) plus PSA costs would be compared against forecasted revenue to determine the overall revenue requirement and change in rates for each year during the term of the plan.**

PSD Response: The PSA is virtually isolated from the BRi until the revenues and costs from each come together to determine the level of earnings sharing under the ESAM. Once the new base rate revenue levels are set, the revenue requirement would be set either based on the initial load forecasts at the onset of the plan or the annual updated forecast of loads.

e. **Please describe what specific line items are included in the term RBi by reference, where possible, to specific line items in Exh. GMP-ER-1 Schedule 2 (from the 2019 Rate Case, Case No. 18-0974-TF). Does the Department propose that the beginning rate base (RBi) for each fiscal year will be forecast at the beginning of the Plan and that number will be used for this calculation? Please explain why or why not.**

PSD Response: The Department would expect that total rate base investment would be included in RBi, but is open to discussions and clarifications. The rate base and the calculations of the rate base would be used for calibration of the productivity offset. It should be forecasted over the three years based on the capital spending.

f. With respect to the term RBi, please explain why only the rate base at the beginning of year is included in the BRi calculation.

PSD Response: Please refer to response to Q.GMP.1-37(g) below.

g. Is there a reason why the thirteen-month average for rate base was not used for the Formula? Please explain.

PSD Response: The thirteen-month average would have been the better choice and we will modify in our rebuttal if it still makes sense to keep this rate base element as part of the formula.

h. How is the impact of the change in rate base that will occur during each fiscal rate period incorporated into the Department's calculation?

PSD Response: This would be incorporated as part of the ground up work that would be used to establish the productivity adjustment.

i. Please explain why the equity percentage of the capital structure is not incorporated into the Department's proposed formula.

PSD Response: The equity costs are already embedded in the formula for the base rate. The equity component could also be isolated from the other base rate elements and then added to set the revenue requirement. Part of the objective was to reduce the number of moving parts. Part of the objective was also to consolidate the parts into a larger whole that could be appropriately indexed.

Person Responsible: J. Riley Allen
Title: Deputy Commission, Department of Public Service
Date: January 11, 2019

Q.GMP.1-38. Under Section IV.5 of the Department's proposed Plan (Exhibit PSD-JRA-1), please use GMP's 2019 rebuttal cost of service and calculate BRi for 2020 and forecasted BRi for 2021 and 2022. Please clearly identify the key assumptions used in performing the calculations and timing of when various components of the calculation would be performed under the Plan.

PSD Response: The Department has not completed the requested calculation as of this date. To the extent the Department is able to complete more detailed modeling that includes the requested calculation, it will supplement this response.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Q.GMP.1-39. How will new regulatory assets or liabilities that occur during the term of the Plan be handled under the Department's proposal?

PSD Response: New regulatory assets should be covered by one of the categories established for power costs, earnings, or exogenous factor deferrals and recovered in a manner that his consistent that the framework that exists within the plan. If there is another category, then that should be identified and addressed within the plan.

Person Responsible: J. Riley Allen
Title: Deputy Commissioner, Department of Public Service
Date: January 11, 2019

Questions Regarding Fischer & McNamara Testimony

Q.GMP.1-40. On page 8, lines 10–12 of Ms. Fischer and Mr. McNamara's Joint Direct Testimony states that a reduction in the number of items included in the PSA will further increase transparency. Please explain how removing the recommended items from the PSA will increase transparency.

PSD Response: By reducing the number of items included in the PSA, the number of categories that need to be audited and followed are reduced. Broad categories that include costs incurred for a significant number of power supply expenses can be burdensome for the Department to satisfactorily audit, and almost impossible for the general public to follow. Therefore, reducing the number of items to be tracked simplifies the PSA and makes it more accessible to the general public.

By way of example, in 2015, the Department Finance and Economics Division, along with Larkin Associates, examined GMP's 2015 first and second quarter power adjustors. A copy of this report is included as Attachment A.PSD.1-40. The findings of that in-depth audit yielded several instances where non-power supply costs (i.e. legal fees, sound monitoring, community outreach, office cleaning) were included in the PSA. GMP agreed to reclassify each of these items such that they were no longer included in the PSA, but there is a concern that, going forward, other costs can be mis-categorized and inappropriately included in the PSA. To the extent that there are less items in the PSA, the review is more efficient, less daunting to a member of the public that is interested in reviewing the PSA, and it would be more likely to identify costs that are improperly categorized.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-41. On page 9, lines 20–21, Ms. Fischer and Mr. McNamara's Joint Direct Testimony states that, "[a]llowing all costs to be passed through, regardless of the [small] size, creates a burdensome regulatory review process." Please explain how the inclusion of items that are small or not volatile creates a burdensome regulatory review process. Does the Department have discretion as to what frequency and depth of review of the various power cost items – that is, to focus primarily on those items that are largest and most volatile (and to devote more limited focus to items that tend to be small and not volatile)?

PSD Response: It is important to note that there is no entitlement in statute or precedent for the ability to utilize a PSA for timely review and recovery of utility costs. The PSA is intended, in part, to represent a more efficient regulatory process; however, there still needs to be meaningful review of GMP's costs. In order to have a timely and efficient review process, it is important that the costs included in the review are manageable with respect to the time period allowed for review. Accordingly, the inclusion of costs in the PSA represents a balance of competing interests – primarily the desire for timely review of certain costs and the meaningful ability to ensure that GMP's customers are only paying those costs that are reasonable. There is no way to provide a quantifiable justification of what costs should be included in the PSA, this is both art and science. The Department's proposal is designed to ensure that the review process is meaningful and manageable.

The inclusion of items that are small or not volatile does not in itself create a burdensome regulatory review process. The inclusion of too many categories covering broad expenses creates a burdensome review process, which is the reason the Department has proposed that several categories be excluded.

As described in response to Q.GMP.1-40 above, review of certain categories proposed for exclusion from the PSA can require a significant amount of time. For example, O&M has been known to include a wide range of costs, not all of which should be considered power supply expenses. While the Department does have discretion as to the frequency and depth of review, it has been our practice to spot audit different categories in the PSA so that they all receive an equal level of attention. The definition of a spot audit is to randomly select items to be audited. By picking and choosing which items to audit, and always turning a blind eye to certain categories because they contain smaller costs, would not be fulfilling our duty as regulators. Experience has shown that some smaller items, that are most time intensive to verify, also often have errors, or include costs that should not be included. To the extent that the Department focuses on higher cost items without meaningful review of the smaller costs, there is the potential for a systemic shift toward less rigor in the categorization of the smaller costs.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-42. Please refer to page 10, lines 1–4 of Ms. Fischer and Mr. McNamara's Joint Direct Testimony. In the Department's view, what level of risk with respect to power cost variances should be considered "undue" and what level of variations in the utility's bottom line should be considered "significant"?

PSD Response: The Department did not calculate a specific power cost variance that would be considered undue or what level of variations in the utility's bottom line should be considered significant. However, looking at previous alternative regulation plans, a methodology similar to that used in the Earnings Sharing Adjustor Mechanism (ESAM), where if actual earnings reflect an ROE that is 101 or more basis points below or above the Board-approved ROE, then the entire revenue impact or benefit flows to customers in the Earnings Sharing Adjustor, could be used for this purpose. Alternatively, the determination of the Exogenous Change Adjustment, where GMP absorbed $1,235,000 annually, that threshold could feasibly be used to define significant variances. The Department's preference would be to use the ESAM approach.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-43. With respect to the Department's proposal to exclude costs it believes are immaterial or time intensive to review, as expressed on page 10, lines 16–22 of Ms. Fischer and Mr. McNamara's Joint Direct Testimony, is the Department aware of any other power supply adjustors, or similar pass-through mechanisms in other jurisdictions that exclude allegedly immaterial power supply costs? If so, please identify and produce such plans or orders.

PSD Response: The Department has not researched PSAs in other states with respect to excluding costs in this manner. Depending on the individual state, staffing levels can vary significantly as well as the extent to which the staff involved in reviewing the PSA are also working on other issues the timing of which is outside of staff's control.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-44. Please confirm that the analysis in Exh. PSD-MRF/EM-2 reflects 2017 only. If not, then please provide the years that this analysis encompasses. If so, then please provide the rationale for analyzing only one year.

PSD Response: On July 15, 2018, GMP provided the Department, in an email from Doug Smith to Riley Allen and Brian Winn, a spreadsheet containing a review of GMP PSA variances since FY 2015. In that spreadsheet, "illustrative benchmark magnitude" costs were provided that reflected FY2017 costs. With this spreadsheet compiled by GMP summarizing 3 years of historical adjusters and using average FY2017 as the illustrative benchmark, the Department continued to use FY2017 as the illustrative benchmark.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-45. Are the Department's proposed exclusions listed on Exh. PSD-MRF/EM-2 intended as examples of the types of categories that would be excluded or are they instead the proposed exclusions? Is the Department aware of any changes in these listed categories that would require adjustment to the proposed exclusions? Please explain. If this is not a proposed list, please explain how the final list will be established and whether that will be reset on an annual basis?

PSD Response: Exh. PSD-MRF/EM-2 lists the proposed exclusions, based on the current categories. The Department is not aware of any changes to these categories; however, the Department does understand that ISO New England rules, etc. can change, and the PSA categories may also need to be adjusted accordingly.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-46. With respect to the Joint-owned O&M expenses identified on Exh. PSD-MRF/EM-2, does the Department agree that GMP is a minority owner in these jointly owned generation assets, and generally has only limited voting control over operating decisions? If not, please explain why not.

PSD Response: Yes, the Department acknowledges that GMP is a minority owner in joint owned generators.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-47. With respect to the Joint-owned O&M expenses identified on Exh. PSD-MRF/EM-2, please explain why the annual O&M expenses of these assets are not "largely outside the utility's control" given GMP's minority ownership. Did the Department take this limited minority ownership into account when determining the extent to which this category of expenses meet the DPS criteria for inclusion/exclusion in the PSA? Please explain how this factor was taken into account.

PSD Response: Yes, the Department did consider GMP's minority ownership and limited control, however, when considering categories to include or exclude from the PSA, all criterion need not be met. Joint O&M is generally a small share of total costs and generally not subject to significant volatility. Furthermore, as noted in the Larkin Report referenced in response to Q.GMP.1-40 above, in other jurisdictions, O&M expenses are not typically passed through a recovery mechanism such as the power adjustor. Having O&M included in the adjuster can result in more expenses inappropriately categorized as O&M so that they receive pass-through treatment.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-48. Is the Department aware of any North American jurisdiction outside of Vermont that has a power supply adjustor mechanism, which excludes certain categories of power supply costs similar to the manner proposed by the Department, rather than a straight pass through of power supply costs? If so, please identify and produce copies of such plans or orders.

PSD Response: The Department is not aware of any other jurisdictions that exclude certain categories in the manner proposed, however, what is included in GMP's power adjuster is much broader than most other jurisdictions. The Larkin report referenced in response to Q.GMP.1.40 above, which the Department has recently reviewed, noted that "[t]he GMP power costs include FERC Accounts 500-556 and 560-574. Power clauses and/or mechanisms typically provide for recovery of costs in Account 501 (Fuel); Account 518 (Nuclear Fuel Expense; Account 547 (Fuel) and Account 555 (Purchased Power). In some cases, fuel handling charges may also be included. The various other operational and maintenance accounts, allowed (for) GMP, are not automatically passed through a recovery mechanism in other jurisdictions."

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-49. On page 12, lines 11–14 Ms. Fischer and Mr. McNamara's Joint Direct Testimony recommends a three-year forecast of certain items (to be removed from the PSA), which would then be updated on an annual basis and included in the annual base rate adjustment.

a. **Please explain further what would be the goal of this annual update process and how it would work?**

PSD Response: The goal of the annual update process would be to reflect costs that are more in line with current forecasted costs rather than stale forecasts (i.e. in the final year of the MYRP, the original forecast would be more than three years old).

b. **For example, the Department recommends that Stony Brook demand charges be removed from the PSA. Is the Department saying that for each year of the MYRP, a current (updated) forecast of Stony Brook demand charges be incorporated into the base rate adjustment? If not, please explain how these types of adjustments would be handled.**

PSD Response: Depending on the annual update method ultimately adopted, the process for updates in the given example could vary. With GMP's original proposed annual update method, the process described could be appropriate. However, the Department, in Mr. Allen's prefiled testimony, has proposed a formulaic update process. If this approach is adopted, then, in this example, Stony Brook demand charges would be adjusted through the attrition-relief mechanism (ARM), as described in Mr. Allen's pre-filed testimony.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-50. On page 15, line 12 the Department's Joint Direct Testimony states that since 2013, GMP has recovered more than $30 million through the PSA.

a. Please provide the workpapers supporting this figure.

PSD Response: See GMP's response to the Department's first set of discovery questions in attachment GMP.DPS1.Q54 [annual summary tab].

b. For comparison, what were the benchmark power costs for the same period?

PSD Response: During that period, benchmark power costs totaled $1,831,861,789.

c. During this period how much power costs did GMP absorb through the Component B deadband, and through a 10 percent sharing of Component B power cost variances outside the deadband?

PSD Response: The amount absorbed by GMP was $6,917,559 and has been netted out of the $30 million figure.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-51. On page 15, lines 1–2 the Department's Joint Direct Testimony recommends an asymmetrical efficiency band of -$307,000 to $150,000.

a. Does the Department believe that GMP should bear the risk of fluctuating prudently-incurred power supply costs? If so, please explain why.

PSD Response: Yes, to some extent, GMP should bear the risk of some fluctuating power costs. For example, in recent testimony related to battery storage, GMP has touted the savings that will be achieved with the proper operation of these devices; the Department expects GMP to bear some risk associated with ineffective operation.

b. Is the Department recommending a PSA structure under which GMP—even assuming the most accurate practical forecasts of power costs—will tend to under collect its actual power costs? If so, please explain why this is appropriate. If not, please explain why this would not be the result of an asymmetrical efficiency band

PSD Response: With the most accurate power cost forecasts, GMP will collect the actual power costs. GMP has historically tended to underforecast power costs but been able to recover those costs (less a small deadband) after the fact.

c. Did the Department conduct analysis of what outcome would be with the new model and the Department's proposed deadbands, or any other proposals considered by the Department? If so, please identify and produce such analysis.

PSD Response: Yes. See Attachment A.PSD.1-51. The Department, using GMP's original workbook from discovery, added tabs for each year to analyze the proposed asymmetrical deadband impact.

d. Is the Department aware of any power supply adjustors or trackers, or any other multi-year plans, which contain an asymmetrical deadband similar to the Department's proposed approach? If so, please identify and produce such plans or order.

PSD Response: The Department is not aware of any similar asymmetrical deadbands.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

Q.GMP.1-52. In considering its recommendations with respect to the design of the efficiency band, has the Department considered the fact that the volume of GMP's actual load requirements within a given month/quarter vary to some degree on ambient temperatures (e.g., GMP customers tend to consume more electricity when winter temperatures turn out below normal, and tend to consume less when winter temperatures turn out above normal) and that this variance in load requirements tends to be positively correlated with the market prices (LMPs) that GMP must pay for that load (i.e., LMPs will tend to turn out higher if actual winter temperatures turn out below normal)?

a. **If so, please explain the Department's evaluation and findings.**

PSD Response: The Department did not do an analysis to test this relationship.

b. **Does the Department acknowledge that the correlation of load requirements and market prices tends to increase GMP's expected net energy costs for a given period, compared to a forecast developed using "base case" or "most likely" load requirements and market prices? If not, please explain why not.**

PSD Response: The Department acknowledges that the positive correlation between load requirements and market prices generally increases GMP's net energy costs compared to the "base case". However, the Department considers this relationship to support the need for an asymmetrical dead band, as GMP has some ability to mitigate adverse outcomes, while ratepayers have no control. For example, heading into the winter, GMP can review long-term weather forecasts and energy market conditions and decide whether to hedge the risk of exposure to higher prices.

Person Responsible: Edward McNamara and Maria Fischer
Title: Director of Planning and Energy Resources and Utilities Economic Analyst, Department of Public Service, respectively
Date: January 11, 2019

As to objections: Daniel C. Burke, Esq.

Dated at Montpelier, Vermont, this 11th day of January, 2019

Vermont Department of Public Service

By: */s/ Daniel C. Burke*

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