STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 23-3501-PET

Petition of Green Mountain Power for approval of its Zero Outages Initiative as a Strategic Opportunity pursuant to 30 V.S.A. § 218d and GMP's Multi-Year Regulation Plan	

<u>POST-HEARING BRIEF OF THE VERMONT DEPARTMENT OF PUBLIC SERVICE</u>

Table of Contents

I. INTRODUCTION

With its Zero Outages Initiative ("ZOI" or the "Proposal"), Green Mountain Power Corporation ("GMP" or "Company") seeks the Vermont Public Utility Commission's ("Commission") approval to spend $280 million over its average annual capital expenditure cap, currently set at $119 million per year for a total of $476 million over four years, in its Commission-approved Multi-Year Regulation Plan ("MYRP").[1] GMP pursues these ratepayer funds through the Strategic Opportunity Exemption ("SOE") clause of its MYRP, which contemplates incremental plant-in-service additions to be included in rates on a limited basis when either unexpected circumstances or new strategic opportunities arise, such as categories of investment opportunities not reasonably anticipated at the onset of the MYRP.[2]

GMP's ZOI proposal in this proceeding is just Phase I of a multiphase spending plan, and while GMP has not provided a full cost breakdown or proposed spending cap for the ZOI, GMP estimates the ZOI will cost ratepayers roughly $1.5 billion.[3] GMP seeks Phase I funds for the purpose of "undergrounding lines"; "spacer cable and tree wire for overhead lines"; and "energy storage for all."[4] In particular, Phase I of the ZOI work is broken out into four "zones." Zone 1 consists of main line distribution feeders that tie substations together and travel out to GMP's first devices on an electrical circuit. GMP proposes the use of spacer cable in Zone 1 to attempt to avoid outages in these sections of the grid.[5] Zone 2 consists of three-phase radial tap lines, and Zone 3 consists of single-phase distribution lines. In these zones, GMP proposes to convert overhead lines

---

[1] Case No. 23-3501-PET, Petition of Green Mountain Power for approval of its Zero Outages Initiative as a Strategic Opportunity pursuant to 30 V.S.A. § 218d and GMP's Multi-Year Regulation Plan, Michael Burke ("Burke") pf. at 12. GMP seeks to spend this $280 million in just two years—the two remaining years of the MYRP.
[2] Id.; See MYRP at Section IV(A)(6).
[3] Case No. 23-3501-PET, Burke pf. at 5; Exhibit DPS-AM-3.
[4] Case No. 23-3501-PET, Burke pf. at 4-5.
[5] Id. at 28.

to underground lines.[6] Finally, Zone 4 includes customers furthest from the substation. Instead of grid-hardening in these zones, GMP proposes to install home battery storage.[7] Overall, GMP has indicated that its end goal is to achieve "zero" outages in its service area by 2030.[8]

The Vermont Department of Public Service ("Department") generally supports the types of improvements GMP is proposing to increase reliability and resiliency for ratepayers. That said, as further explained in Section III(B) herein, the Department questions the reasonableness of GMP's Proposal as filed, especially in light of GMP's demonstrated lack of documented and reviewable planning and analysis to justify such a substantial capital spending request.[9] Specifically, the Department is concerned that GMP's ZOI Proposal as filed:

(1) fails to meet the criteria of the SOE and Commission precedent on resilience capital spending;

(2) is not supported by a cost-benefit analysis, or any analysis, demonstrating the reasonableness and feasibility of GMP's significant request;

(3) was formulated without stakeholder input, including a fully transparent ratepayer engagement plan;

(4) risks confusing customers by leading them to believe that "zero outages" is actually an attainable utility performance;

(5) unnecessarily rushes what should have been a comprehensive plan incorporated into GMP's Integrated Resource Plan ("IRP") and MYRP given the magnitude of the request; and

(6) overlooks other pertinent considerations.

[6] Id.
[7] Id. at 28-29.
[8] Id. at 4.
[9] See Infra Section III(B).

In place of recommending outright denial of GMP's ZOI petition, the Department has developed and proposed three alternative options for consideration as acceptable outcomes for this proceeding:

Option I requires GMP to properly plan, document, and pursue its ZOI through the appropriate Commission-directed channels—including its IRP and MYRP and with due consideration given to Vermont's Comprehensive Energy Plan ("CEP"), GMP's ratepayers, town and regional planning commissions, the Department, and any other stakeholders—as well as to develop an initiative roadmap supported by a comprehensive cost analysis demonstrating the justness and reasonableness of the ZOI cost for customers in a time of ever-increasing prices.[10] Option I also requires GMP to develop a transparent customer-facing master plan and, in consultation with relevant stakeholders, develop a suite of performance-based metrics by which investment progress would be tracked.[11] Option I prioritizes the needs and wants of Vermonters and honors the integrity of processes developed by the Commission for capital spending on resilience.

Option II would allow GMP to begin ZOI work immediately while taking the opportunity to conduct much-needed planning and analysis for the rest of the ZOI. Option II grants GMP $50 million in additional resilience capital spending while limiting the associated rate increase to approximately 0.75%.[12] As GMP is spending this $50 million, GMP would engage in meaningful ZOI deliberation to incorporate the initiative into the existing regulatory IRP and MYRP

[10] Case No. 23-3501-PET, Walter (TJ) Poor ("Poor") pf. at 11-12; See generally Anne Margolis ("Margolis") pf. at 10-17.
[11] See Case No. 23-3501-PET, Margolis pf. at 10-17.
[12] Case No. 23-3501-PET, Poor pf. at 12-13.

frameworks. During this time, GMP would also engage in meaningful customer outreach similar to the proposal under Option I above.[13]

Option III also would allow GMP to begin ZOI work immediately while taking the opportunity to conduct much-needed planning and analysis for the rest of the ZOI.[14] Option III builds on Option II by acknowledging and accepting GMP's representations that the EJG7 and 56G1 circuits are the furthest along in planning and development and that they would "demonstrate the effectiveness" and "outline any learnings and improvements for continued work" of the ZOI.[15] According to GMP, work to grid-harden these two circuits would cost approximately $80 million and, thus, the Department's Option III offers $80 million for completion of this work on these two circuits.[16] On balance, Option III is the Department's preferred option, as it affords GMP the opportunity to conduct specific resilience work for which the planning is more advanced than other projects while meaningfully developing its ZOI.[17] And, Option III also affords regulators and GMP the opportunity to learn from and improve the work conducted.

Because the proposed ZOI spending would fall outside of the MYRP's capital spending cap, GMP's proposed spending is voluntary. As such, the Department also respectfully recommends, if Options II or III are selected, the Commission adopt a set of interim metrics, targets, and, if necessary, disallowance mechanisms.[18] These metrics, targets, and potential disallowances would allow ratepayers, the Department, and the Commission to monitor ZOI

---

[13] See Case No. 23-3501-PET, Margolis pf. at 10-17.
[14] Case No. 23-3501-PET, Poor pf. sur. at 8-9; Margolis pf. sur. at 10-11.
[15] Case No. 23-3501-PET, Burke pf. reb. at 15.
[16] Case No. 23-3501-PET, Burke pf. reb. at 17; See Exhibit GMP-MB-12; Exhibit GMP-MB-13.
[17] See Case No. 23-3501-PET, Burke pf. 15-17 ("These two circuits are the right ones to prioritize for completion…").
[18] See Infra Sections IV(A), (B), (C), (D), and (E); See generally Case No. 23-3501-PET, Kevin Mara ("Mara") pf. & pf. sur.; Jacob Thomas ("Thomas") & Sean Foley ("Foley") pf. & pf. sur.

progress to ensure GMP's investments are working in the best interests of ratepayers as GMP continues to formulate its ZOI.

For the reasons set forth in this Brief, the Department respectfully recommends that the Commission issue an order adopting a modified version of GMP's ZOI that is amended by one of the three Options the Department has proposed as well as, if applicable, the Department's proposed interim metrics, targets, and potential disallowances. Adoption of any of the Department's Options would (1) support a more resilient GMP grid for the benefit of GMP customers; (2) protect GMP ratepayers from unrestricted capital spending; (3) define measurable objectives and parameters for the capital spending that is allowed; (4) allow for progress review before additional ZOI phases are proposed; (5) bring necessary stakeholders, such as GMP customers, town and regional planning commissions, the Department, and the Commission, to the planning table to discuss ZOI benefits, costs, and metrics; (6) respect the framework of and bring the ZOI into alignment with GMP's MYRP, GMP's IRP, and Vermont's CEP; and (7) follow Commission precedent on MYRPs, IRPs, and resilience-related capital spending to ensure the ZOI is cost-effective and results in just and reasonable rates.

II. LEGAL STANDARD

A. MYRP Strategic Opportunity Exemption

Section 218d of Title 30 authorizes the Department to review and the Commission to approve petitions for alternative regulation submitted by electric or natural gas companies. The approved alternative regulation should establish clear incentives for electric or natural gas companies to provide least-cost energy service to their customers; provide just and reasonable rates for customers; deliver safe and reliable service; and more.[19] GMP's MYRP, approved in Case No. 21-3707-PET, was established in accordance with 30 V.S.A. § 218d and found by the Commission to "strike[] a reasonable balance and ... allow GMP to maintain its system while moderating overall rate pressures."[20]

GMP's approved MYRP contains its SOE, which allows GMP to petition the Commission "for approval at any time during the [MYRP] for incremental plant in service additions, and revenue to be included in rates when either unexpected circumstances or new strategic opportunities arise that provide material benefit to customers."[21] As provided by the MYRP, strategic opportunities for which GMP petitions under the SOE must "*not [have been] reasonably anticipated at the onset of the [MYRP]*."[22] Based on this language, any strategic opportunities sought under a SOE should be novel in intent and form.[23] Furthermore, GMP bears the burden of fully demonstrating that proposed investments under the SOE are in customers' best interests and will result in just and reasonable rates.[24]

B. Commission Guidance for Capital Spending

GMP, in filing its ZOI capital spending plan, is also bound by Commission precedent on the matter. Specifically, when the Commission approved GMP's Climate Plan in Case No. 20-0276-PET, the Commission noted the following in its Final Order: "In testimony, the Department notes that resilience planning, climate-related or otherwise, is most effective when conducted in

[19] See 30 V.S.A. § 218d.
[20] Case No. 21-3707-PET, Petition of Green Mountain Power Corporation for approval of a new Multi-Year Regulation Plan pursuant to 30 V.S.A. Sections 209, 218, and 218d, Final Order of 8/31/22 at 13.
[21] MYRP at Section IV(A)(6).
[22] Id. (emphasis added).
[23] See id.; Case No. 21-3707-PET, Joshua Castonguay ("Castonguay") pf. at 21 (explaining the MYRP was designed to "limit[] the number of exceptions [and] add[] predictability by defining more clearly the circumstances that support an exception, and retaining flexibility to respond to *novel* opportunities").
[24] MYRP at Section IV(A)(6).

the context of broader utility planning efforts, including Integrated Resource Planning, future multi-year rate plans, and future rate cases. The Commission agrees with this view."[25] In light of this, the Commission expressly "direct[ed] GMP to include climate resiliency planning in its 2021 [IRP] *and any future multi-year regulation plan it proposes*" so that "overall investment may be evaluated holistically in the context of rate impacts and tradeoffs between different goals and outcomes."[26]

III. ARGUMENT

A. GMP's significant monetary ask of ratepayers falls shy of meeting the MYRP's SOE and contradicts Commission precedent and previous GMP testimony.

GMP's SOE contemplates incremental plant-in-service additions to be included in rates when either unexpected circumstances or new strategic opportunities arise. Examples of strategic opportunities may include categories of investment opportunities not reasonably anticipated at the onset of the MYRP.

During the last MYRP proceeding, parties worked collaboratively and successfully to ensure GMP's capital spending cap in its MYRP included an appropriate amount of capital spend to support GMP's continued climate resilience efforts while protecting customers from additional strenuous cost pressures during a time of rising inflation. Now, just one year after GMP's MYRP took effect, GMP pursues an additional $280 million in ratepayer funds, the first phase of a predicted $1.5 billion+ plan, so it may deploy aggressive resilience efforts in excess of those

[25] Case No. 20-0276-PET, Final Order Approving Green Mountain Power Corporation's Climate Plan of 9/24/20 at 15.
[26] Id. at 2, 16 (emphasis added).

contemplated by the Department and the Commission in Case No. 21-3707-PET and approved in the MYRP.[27]

Throughout this proceeding, GMP has argued that the ZOI falls squarely within the MYRP's SOE, an argument wholly at odds with the facts and circumstances of this and other, related proceedings.[28] The MYRP, itself, adds the clarifying caveat that new strategic investments should not have been "reasonably anticipated at the outset" of the MYRP.[29] However, both the resiliency work incorporated into the MYRP and the resiliency work contemplated under the ZOI are akin to the resiliency work undertaken via GMP's Climate Plan.[30] In fact, GMP describes the ZOI as "an extension and acceleration of [its] Climate Plan."[31] Thus, for GMP to be (1) actively spending MYRP-authorized, Commission-approved ratepayer funds for resiliency work, and (2) openly describing the ZOI as an extension of the Climate Plan while (3) simultaneously arguing that the resiliency measures in the ZOI were not reasonably anticipated at the outset of the MYRP is, at best, a contradiction and, at worst, a failure of the Company to adequately plan its intended uses for customer dollars before seeking permission to spend them.

Further, when GMP sought approval of its Climate Plan, it specifically assured the Department and the Commission that the Climate Plan was an interim planning framework not to be continued as a standalone document beyond the term of the MYRP.[32] Notably, GMP assured regulators that any future and similar resiliency work would be incorporated into GMP's existing

[27] GMP's MYRP went into effect in October of 2022. In October of 2023, GMP filed its ZOI petition with the Commission.
[28] Case No. 23-3501-PET, Burke pf. at 12, n.2.
[29] Case No. 23-3501-PET, Burke pf. reb. at 12 ("The ZOI is designed to be an extension and acceleration of GMP's Climate Plan.")
[30] Id.
[31] Id.
[32] Case No. 20-0276-PET, Brian Otley ("Otley") pf. reb. at 13; See Case No 20-0276-PET, Final Order Approving Green Mountain Power Corporation's Climate Plan of 9/24/20 at 8.

regulatory planning documents, such as its IRP and MYRP.[33] In response, the Commission "direct[ed] GMP to include climate resiliency planning in its 2021 [IRP] and any future multi-year regulation plans it proposes."[34] Now, in the instant proceeding, GMP pursues the exact opposite: a magnified Climate Plan extension developed in violation of the Commission's mandate, outside of the existing regulatory planning framework, and offered without a comprehensive planning roadmap or a supportive cost analysis. Likewise, GMP's request for SOE treatment of the ZOI is at odds with its own testimony in Case No. 21-3707-PET, wherein GMP characterized its MYRP as "limiting the number of exemptions, adding predictability by defining more clearly the circumstances that support an exemption and retaining flexibility to respond to *novel* opportunities."[35] Certainly, a Climate Plan extension is anything but novel, and a $1.5 billion+ venture with ratepayer dollars—or a request for a 60% increase in capital spending just one year after the MYRP effective date—cannot be classified as "predictable."[36]

When the Commission approved the Company's MYRP, it concluded that the approved MYRP struck "a reasonable balance and [would] allow GMP to maintain its system while moderating overall rate pressures."[37] If the Commission approves GMP's ZOI as proposed, a reasonable balance is no longer struck. This is not to say the Department does not support the potential opportunity to increase investment in measures that advance grid resiliency and reliability. The Department simply urges the Commission to require GMP to tackle this task through the robust and transparent planning processes within the existing frameworks specifically

---

[33] Case No. 20-0276-PET, Brian Otley ("Otley") pf. reb. at 13-14.
[34] Case No. 20-0276-PET, Final Order Approving Green Mountain Power Corporation's Climate Plan of 9/24/20 at 15.
[35] Case No. 21-2707-PET, Castonguay pf. at 21 (emphasis added).
[36] Case No. 23-3501-PET, Poor pf at 5, 6.
[37] Case No. 21-3707-PET, Final Order of 8/31/22 at 13.

created by GMP and approved by the Commission and by which the Company assured regulators it would abide. The SOE was simply not meant for additional $1.5 billion+ endeavors outside of GMP's already generous capital availability in its MYRP; and to allow the ZOI as proposed would strain the credibility of the MYRP process.[38]

B. GMP's sizable additional capital spending request was made without a thorough cost-benefit analysis and without having undergone a transparent planning process.

The core of the Department's position is simple: Absent a cost-benefit analysis supporting GMP's substantial monetary ask and its assertions that the ZOI is cost-effective for customers, both for Phase I and the ZOI in its entirety, the Department cannot support GMP's proposal as filed and must insist on modifying the proposal to better protect ratepayers. And while GMP is "only" requesting leave to spend $280 million at this time, the Commission cannot disregard GMP's stated intention to treat this $280 million as only Phase I of a multi-phase initiative with an unknown capital spending cap and barely a blueprint from which to work.[39] Thus, GMP's proposal as filed poses a risk to ratepayers that is simply too great to authorize without a full understanding of the costs and benefits.

---

[38] "A major strategic investment would be any significant capital opportunity that was not foreseeable at the time of the MYRP…[o]ne example of such a strategic investment might be the acquisition of a generating facility offered for sale." Case No. 18-1633-PET, Discovery Response A:PSD:GMP.1.78.a. The acquisition of a generating facility due to a sale is vastly different than GMP's proposed multi-phase, potentially $1.5 billion+ ZOI, both of which GMP claims to be categorized as major strategic investments that fall under a supposedly "limited" exception to GMP's MYRP. Case No 18-1633-PET, Otley PFT of 6/4/18 at 26; See Exhibit DPS-AM-3. Additionally, GMP's only Commission-approved SOE includes GMP's proposed Temporary Unserved Location Broadband Deployment Rider in Case No. 21-0546-PET. The rider itself was reviewed in Case No. 21-0544-TF. That program would cost a max of $15 million with a maximum rate impact of less than 0.15% in each year of the three-year period and be limited to locations unserved by Broadband so as to expand customer access to GMP's services. "The Department's support for GMP's proposed Tariff Rider…is contingent on the relatively modest maximum financial exposure, the limited term of the rider, and the narrow focus on unserved locations." Case No. 21-0544-TF, Tariff filing of Green Mountain Power Corporation for approval of a Temporary Unserved Location Broadband Deployment Rider pursuant to 30 V.S.A. §§ 225–227 to be effective on bills rendered on or after March 15, 2021, Department of Public Service's Comments on Tariff Filing and Recommendation of 3/1/21 at 4.

[39] See Case No. 23-3501-PET, Burke pf. at 5-6; Burke pf. at 26 ("[T]he Zero Outages Initiative is a *phased* acceleration of our Climate Plan work…") (emphasis added).

"A comprehensive cost-benefit analysis should be conducted and shared, demonstrating the economic impacts of the proposed investments. This analysis should consider the long-term benefits and costs to ratepayers and the utility."[40] During this proceeding, the Department has requested assurances from GMP in the form of a cost-benefit analysis detailing the nature of all work to be performed, associated benefits, all costs ratepayers would bear for this additional spending, and an analysis demonstrating GMP examined alternatives and determined the costs of this initiative would result in cost savings for customers.[41] As of the evidentiary hearing date in June of 2024, GMP still had not conducted such an analysis but, instead, doubled down on its request to spend more ratepayer dollars as soon as possible.[42]

Cost-benefit analyses are imperative for utility capital spending initiatives, especially those of the ZOI scale, because they are the basis for utilities to make—and regulators to review—prudently informed decisions by analyzing (a) initiative pros and cons; (b) initiative finance feasibility; (c) different options for achieving the same or similar goals; (d) how to allocate resources in the most efficient manner; and (e) the initiative's regulatory compliance. Cost-benefit analyses enable holistic evaluations of both tangible and intangible factors, accurate budgeting and forecasting, comparative analysis of alternatives, optimal resource allocation, and adherence to regulatory standards. By doing so, cost-benefit analyses support sustainable practices, stakeholder engagement, and the alignment of initiatives with a company's long-term goals.

GMP—a rate-regulated distribution utility with the ability to recover capital costs plus the opportunity to earn a fair rate of return on those investments—asserts it "know[s]" the ZOI will

[40] Case No. 23-3501-PET, Poor pf. at 8.
[41] Case No. 23-3501-PET, Poor pf. at 6-12; Poor pf. sur. at 10; Margolis pf. at 12-13; Margolis pf. sur. at 3-13.
[42] Tr. 6/11/24 at 30 (Burke).

work, but has provided no quantitative analysis to support that assertion or to otherwise demonstrate such resilience measures will work in the sense that they will be cost effective and beneficial for Vermonters.[43] It is important to understand proposed resilience projects' "impacts to ratepayers in terms of costs, benefits, cost- and benefit-sharing, and outcomes of least-cost, benefit analyses."[44] As described below in Section III(C) of this Brief, GMP does not define a supported clear or realistic target for results, including net benefits, as the proposed ZOI investment levels and associated projects will clearly not reach "zero" outages. GMP must be called on to fulfill its MYRP duty of proving that its proposed ZOI is in customers' best interests and will result in just and reasonable rates based on an evaluation of the net costs and benefits.

If GMP had attempted to collaborate with its customers and the Department ahead of filing its ZOI petition, stakeholders could have worked closely to develop a holistic initiative encompassing GMP's IRP, MYRP, Vermont's CEP, ratepayer wants and needs, local community goals, equity and environmental justice considerations, methods of tracking progress, and more. Instead, GMP largely chose to go it alone in crafting its ZOI filing. And while GMP has argued that it considered ratepayer interests through customer outreach, this customer outreach failed to both analyze and appropriately communicate to customers the comprehensive costs and benefits of the ZOI specifically, or gather customer input on how much resilience, at what cost, prioritized where, and reflect that back in a ZOI master plan.[45] Simply put, this past outreach lacked transparency, and any successful future outreach is uncertain at best, as GMP does not have a ZOI-focused customer engagement plan.[46] In sum, GMP seeks approval to spend ratepayer funds

[43] Id. at 25, 30.
[44] Case No. 20-0276-PET, Margolis pf. at 13.
[45] See generally Case No. 23-3501-PET, Margolis pf. at 12-13; Margolis pf. sur. at 13-14; Claire McIlvennie pf. sur. at 15-28.
[46] Tr. 6/11/24 at 151 (Smith).

without fully explaining the ZOI to customers and reviewing and incorporating ratepayer thoughts and feedback.

The Department respectfully urges this Commission to require more analyses and comprehensive, transparent planning from GMP before allowing the Company to voluntarily spend customer dollars, and earn a return on those dollars, without a ZOI work blueprint and without an overall budget or cap on investment.

C. GMP's goal of "zero outages" is unattainable based on GMP's proposal as filed and risks confusing consumers.

GMP has named its proposal for a \$280 million capital spend—which is intended to eventually grow to \$1.5 billion+—the "Zero Outages Initiative." Based on the petition, the record in this case, and the press coverage of the Initiative, GMP customers might reasonably assume that if this petition is approved, they will receive free batteries, they will soon never experience outages again, or that the ZOI will not affect the amount they pay for electricity.[47] None of these prospects are supported by the evidence in this case. It is therefore highly problematic that at this late stage in this proceeding, GMP still has not provided customers, regulators, or other stakeholders with a firm, verifiable definition of what "Zero Outages" is actually intended to mean. What has become clear, though, is that the proposal as filed is better described as the "Aiming for Zero Outages" Initiative, with caveats that will result in additional costs to ratepayers.

For instance, GMP is proposing to storm-harden three-phase lines with spacer cable and tree wire and to place single-phase lines underground. As noted by the Department, "[i]f we assume that this could eliminate outages on the main (primary) lines due to trees, weather, and

---

[47] See Case No. 23-3501-PET, Letter of Mari McClure to Commission of 10/9/23; Penn, I., Vermont Utility Plans to End Outages by Giving Customers Batteries, N.Y. Times (10/9/23).

accidents, GMP still has an average of approximately 3,600 outage events per year to these lines (affecting, on average, approximately 170,000 customers) due to other causes, such as power supplier issues, company-initiated shutoffs, equipment failure, etc."[48] The ZOI also does not include the secondary service drops to customers, which, using the outage events from Exhibit DPS-BJ-3, amounts to an additional 4,000 outages per year from service drops. So, even with the ZOI, GMP customers will still face outages and associated storm repair costs.[49]

However worthy a goal it may be to aim for "Zero Outages," in the absence of a solid, supportive evidentiary record, the characterization of this initiative in its present form as a path to "Zero Outages" risks confusion for consumers and is therefore not in the public's best interest. GMP is meeting its current Service Quality Reporting Plan ("SQRP") metrics for outages yet is arguing for the need to further invest in capital projects to reduce outage frequency and duration by an unspecified amount. The Company points to severe weather driven by climate change as the cause of increasing outages and making outage restoration costs unsustainable compared with the ZOI yet has not analyzed future storm frequency and severity to determine appropriate levels of investment and where those investments would be most beneficial in the short- and long-term.[50] If the ZOI in fact is more affordable and sustainable, the Company could and should have produced reviewable evidence in this proceeding of the corresponding risk assessment and cost-benefit analyses. In turn, such an evidentiary record would facilitate a review by the Commission and the Department to assess both the value of resilience and Vermont's suite of reliability metrics to

[48] Case No.23-3501-PET, Bill Jordan ("Jordan") pf. at 11-12.
[49] Id. at 12.
[50] Case No. 23-3501-PET, Burke pf. at 8, 18; See Tr. 6/11/24 at 49 (Burke) (Commissioner Allen: "I understand that Green Mountain Power kind of chose not to do kind of an overall cost/benefit analysis on the Phase 1 work of the zero outages initiative. Is that still correct?" The Witness: "We didn't do a long-term cost/benefit trying to predict the cost of future major storms…"). See also Tr. 6/11/24 at 27 (Burke) ("We have not done any future prediction of major storms.").

ensure they adequately measure the impacts of outages on customers and incent companies to efficiently improve service. For instance, it would be possible to measure the impact of major storms on reliability and resilience, and to gain clarity around accounting for mitigation measures such as battery storage, and how to reflect impacts to specific customers that are masked by averaging data over wide geographies. But the evidentiary record in this proceeding is devoid of such reviewable input—a fact that is especially critical given the magnitude of the ratepayer dollars GMP is seeking to invest outside of the MYRP.

D. A deferred start to facilitate a more grounded ZOI implementation will best serve the ratepayers and the public interest at large.

Cost-benefit analyses are standard business practices that only serve to strengthen a company's investment decisions and, ultimately, in GMP's case, customers would reap the rewards of these analyses in the form of realistic and transparent rate predictions, more efficient and effective investments, and, depending on the analysis results, a more resilient grid. Delaying the start of the ZOI by an additional few months would provide interested stakeholders with a necessary opportunity to meaningfully contribute to and track resilience in their communities. When explaining GMP's intent to implement ZOI without a full ZOI blueprint and cost analysis, GMP points to storms getting worse, though simultaneously acknowledging that it has not conducted an analysis of future weather events.[51] Such an "act now, plan later" approach to utility capital expenditures, if approved, would set a precedent for future capital expenditures that imperils ratepayer wallets by posing the risk of future unfettered capital spending.

---

[51] Tr. 6/11/24 at 27 (Burke) ("We have not done any future prediction of major storms. We do expect it to do nothing but climb."). If GMP's ZOI is predicated upon its expectation that the frequency of major storms will climb, then the Department expects GMP to provide some level of future major storm analysis to support this theory before it requests $280 million from its customers.

E. Other Considerations

It is important to frame GMP's proposed ZOI—a voluntary capital spending initiative—in the context of other recent GMP funding requests so as to bring into focus the cost burden that Vermonters are already bearing as GMP seeks more ratepayer dollars to fund the ZOI. **Table 1** below illustrates that GMP customers experienced a 9%+ cost increase to their electric bills over the last 18 months.[52] In addition, GMP recently filed for a 5.26% rate increase in Case No. 24-1709-TF.[53] Regarding that rate increase request, GMP customers have made very clear to the Department and the Commission that additional electric cost increases only exacerbate their "struggl[es] to afford regular costs of living."[54] GMP customers have also commented that constant rate increases are "truly frustrating" and "especially harsh for low income and fixed income citizens" as many "can barely afford electricity as it is."[55] GMP also recently filed a petition to spend additional ratepayer dollars for its Energy Storage System Tariff through its MYRP.[56] Of note, GMP's ask does not include a cap on investment.[57]

[52] Case No. 23-3501-PET, Poor pf. sur. at 6.
[53] See Case No. 24-1709-TF, Tariff filing of Green Mountain Power Corporation for approval of its FY25 Annual Base Rate effective with bills rendered on or after October 1, 2024, Cover Letter of 5/31/24.
[54] Case No. 24-1709-TF, Public Comment of Julia Chafets (6/27/24).
[55] Case No. 24-1709-TF, Public Comment of Jenni Belotserkovsky (6/26/24); Public Comment of Karen Hanron (6/27/24); Public Comment of Jensen Caldwell (6/26/24).
[56] See Case No. 24-1715-PET, Petition for Treatment of Green Mountain Power's Customer-Driven Energy Storage System Tariff as a "Tariffed New Initiative" Under Multi-Year Regulation Plan, Petition of 5/31/24.
[57] Case No. 24-1715-PET, Tr. 6/20/24 at 5.

Table 1: Recent GMP Rate Changes

Date	Increase/Decrease Amount	Reason
10/1/2022	Base Rate change of 2.34%	- Removed 1.34% Past Storm and Power Fixed Charge - Removed 0.19% Emerald Ash Borer Adjustor - Implemented Major Storm Restoration Fund Adjustor of 0.90% - Changed Current Energy/Major Storm Adjustor from -0.49% to 0.61%
3/5/2023	- Residential from $1.00 to $1.50 - Commercial from $1.67 to $3.00 - Industrial from $55.50 to $75.00	Electric Assistance Program revised via Case No. 22-5173-TF, to update eligibility threshold from 150% of the federal poverty level to 185% in accordance with a state statute passed by the legislature. At the same time, the per meter, per month fees were updated. Rate revenue impact estimated to be 0.3%.
4/1/2023	Current Energy/Major Storm Adjustor from 0.61% to 0.60%	Adjusted pursuant to MYRP.
7/1/2023	Current Energy/Major Storm Adjustor from 0.60% to 0.89%	Adjusted pursuant to MYRP.
10/1/2023	Base Rate change of 5.29%	- Current Energy/Major Storm Adjustor from 0.89% to 2.43% - Major Storm Restoration Fund Adjustor from 0.90% to 0.83%
4/1/2024	Major Storm Adjustment	Major Storm Adjustment line-item charge from 2.43% to 3.39%
Total Increase	9.42%	October 1, 2022 – April 1, 2024

Given the affordability burden of the many recent GMP-proposed spending increases that ratepayers are already bearing, the Commission should not approve the ZOI as filed without first insisting on a clear demonstration from GMP that this additional capital spending will result in net benefits for customers without eroding electric affordability.

IV. DEPARTMENT'S PROPOSALS

A. Option I

Again, the Commission made the following observation in its Case No. 20-0276-PET Final Order Approving GMP's Climate Plan:

> In testimony, the Department notes that resilience planning, climate-related or otherwise, is most effective when conducted in the context of broader utility planning efforts, including Integrated Resource Planning, future multi-year rate plans, and future rate cases. The Commission agrees with this view. As the Department notes, "the IRP process lends itself to the necessary transparent identification of the issues that must be addressed, and holistic consideration of those issues and their interrelationships."[58]

The Department's recommended Option I in this proceeding honors Commission precedent and the existing regulatory frameworks by which GMP must—and assured regulators it would—abide. For Option I, the Department recommends that GMP engage in a more meaningful and robust planning process before beginning its ZOI. In sum, the Department suggests GMP integrate its ZOI within its next IRP, which is due on December 10, 2024. This integration would include meaningful engagement with its customers, communities, and other stakeholders to decide how GMP will prioritize hardening, microgrid, and storage deployments under Phase I of the ZOI. Once this occurs, the Department recommends that the principles and methodologies developed during this engagement period be used to develop a ZOI Phase I master plan that identifies specific projects to be completed in Phase I along with cost estimates for each project. Within this IRP

---

[58] Case No. 20-0276-PET, Final Order Approving Green Mountain Power Corporation's Climate Plan of 9/24/20 at 15.

integration process, GMP should develop a suite of resilience and reliability performance-based metrics, which would not only allow the Commission, the Department, and GMP to understand how, where, and at what cost GMP will be making investments to achieve uninterrupted service but incent the Company to wisely spend this significant monetary request. This recommendation (1) closely follows the Department's Guidance for IRPs; (2) requires GMP to methodically and thoughtfully align the ZOI with its upcoming IRP; (3) ensures that GMP's capital spending pursuant to its MYRP strikes a reasonable balance and will allow GMP to maintain its system while moderating overall rate pressures on customers; (4) will allow time for GMP and stakeholders to develop meaningful performance-based metrics; and (5) will provide the legwork for when GMP eventually begins planning its next MYRP capital budget, the result of which should be more inclusive and reflective of GMP's planned capital expenditures, as required by Commission precedent.[59]

B. Option II

The Department's Option II, the initially proposed alternative to Option I, recommends GMP's preliminary Phase I investment be capped at $50 million, which equates to a .75% rate increase for customers. In addition to this cap, the Department recommends that the Commission approve and GMP adopt a set of interim resilience and reliability performance-based metrics as described in Section IV(D) herein and summarized in **Table 2** below. This tightened level of investment for Phase I will allow GMP to begin its preliminary ZOI work while it incorporates the ZOI into its IRP and MYRP, develops its permanent ZOI performance-based metrics, and finalizes its ZOI master plan, inclusive of cost-benefit analyses, as described in the Department's Option I.

[59] Case No. 23-3501-TF, Poor pf. at 11-12.

Importantly, capping Phase II at $50 million, or a less than one percent rate increase, is crucial as GMP customers continue to battle the financial pressures associated with increasing rates.[60]

C. Option III

The Department's Option III is its preferred Option as it strikes a reasonable balance between GMP's ZOI proposal and the Department's requests for further, necessary process. Option III allows for GMP's investment in two circuits on which GMP claims to be in initial stages of the hardening, undergrounding, and storage work that would be accomplished under the ZOI—the EJG7 and 56G1 circuits.[61] GMP articulated in testimony that these projects would "demonstrate the effectiveness of ZOI" and "outline any learnings and improvements for continued work."[62] The Company also stated it reviewed these projects using the Selection Criteria in the Climate Plan.[63] According to GMP, the "performance and initial cost/benefit information from these projects—based upon actual installations—will address the Department's desire for further analysis...."[64] The two projects would provide the Department, GMP, and the Commission with information to set and revise metrics as well as tie compensation to performance for future efforts. GMP estimates the cost of this work on the two circuits to be approximately $80 million.

Given the apparently advanced nature of these two circuits in their planning processes, the Department proposes its Option III, which would cap Phase I investment at $80 million, allowing for the EJG7 and 56G1 circuits to be fully completed. The Department suggests that this allowance be conditioned upon GMP filing notice with the Commission and the Department, with 45 days for the Department (or other entity) to request investigation. Such notice should include a full,

[60] Id. at 12-13.
[61] Case No. 23-3501-PET, Poor pf. sur. at 8-9.
[62] Case No. 23-3501-PET, Burke pf. reb. at 15.
[63] Id. at 15-16.
[64] Id. at 17.

transparent cost-benefit analysis for the two circuits. The notice mechanism is similar to other filings that GMP must make before spending ratepayer dollars (including innovative pilots) and would not constitute any sort of pre-approval of incorporation of these costs into rates, whether or not there is an investigation.[65]

Similar to Option II, Option III would allow for GMP to undertake more investments to harden, underground, and provide storage, refine project selection criteria, develop permanent performance-based metrics through focused engagement with customers and stakeholders, and finalize a master infrastructure plan.[66] These specific projects could allow for better testing of the establishment of new and innovative metrics and allow this first phase to advance more quickly. The remaining two years of the current MYRP allow for approximately $238 million in capital spending. Allowing a generous $80 million increase in the capital spending cap is approximately a 33% increase in allowable spending over the last two years of the MYRP. For the reasoning set forth herein, the Department also recommends that the Commission adopt the Department's proposed interim metrics summarized in **Table 2** below.[67]

D. Interim Performance Metrics

Given that GMP filed its proposed capital spending plan outside of Commission-approved and mandated regulatory planning frameworks, without a cost-benefit analysis, and without performance-based tracking metrics to (1) ensure regulators and other stakeholders can track progress; and (2) ratepayers are protected from unfettered, voluntary spending, the Department recommends, should the Commission approve the Department's Options II or III, the Commission

---

[65] Case No. 23-3501-PET, Poor pf. sur. at 8-9.
[66] Id.; Margolis pf. sur. at 13-14.
[67] See Infra Section IV(D).

also approve the following interim performance-based metrics for GMP to follow while the Company engages in necessary planning and customer and stakeholder engagement:[68]

Table 2: Department's Proposed Interim Metrics for Option II and Option III	
1	33% improvement in System Average Interruption Duration Index ("SAIDI")/System Average Interruption Frequency Index ("SAIFI") for rural feeders over 2023 SAIDI/SAIFI
2	Forced Outage Rate per Hundred miles of Zone 1 Spacer Cable ≤ 3.0
3	Storm costs, downward trend in rolling five-year average costs – less than $13 million by 2030.
4	Battery Failure to Start Index ≤ 1%
5	Report CEMI-8 for all residential customers

Based on the Department's analysis to identify rural circuits and estimate of the number of circuits that will initially be upgraded, and assuming the upgrades will occur to the least reliable circuits, a 33% reduction in SAIFI and 33% SAIDI goal should be set for an interim metric while GMP takes the time fully plan its ZOI. This is the Department's first interim metric, as seen in **Table 2**.[69]

The second recommended interim metric involves tracking the number of outages in Zone 1 for upgraded systems. GMP is very confident that its spacer cable proposal will eliminate most outages, so a metric demonstrating the result would be prudent for stakeholders to track. A similar metric used for transmission lines is Forced Outage Rate per Hundred Miles of Transmission per Year ("FOHMY"). This could easily be applied to the Zone 1 spacer cables. A Zone 1 failure should be a rare event and if one does occur, the circuit breaker in the substation will open. Thus, the number of outages can be tracked by the number of breaker operations with space cables in

[68] Case No. 23-2501-PET, Mara pf. sur. at 7.
[69] Case No. 23-3501-PET, Mara pf. at 30.

Zone 1. For transmission, a common goal is 2.0 FOHMY. For GMP, the Department recommends a FOHMY of 3.0.[70]

Third, GMP, without providing a cost analysis, discussed the storm repairs and how certain transmission and distribution upgrades will hopefully reduce storm repair costs. The Department calculated the five-year rolling total of storm restoration costs which are shown in a graph in Exhibit DPS-KJM-4. The rolling five-year average is between $8.6 million and $10.8 million. Thus, the Department recommends a third interim metric be set for the five-year rolling average to trend downward with an initial goal of less than $13 million with a longer-term goal of $8 million or less by 2030.[71]

Fourth, the Department recommends that GMP track the availability of batteries when grid power is lost. For standby generators, this is referred to as failure to start ("FTS"), and studies have shown that FTS ranges from 0.13% to 1.65%, but these standby generators are often used for safety purposes such as emergency lighting in hotels and schools. GMP stated that the data provided to the Department through discovery regarding batteries failing to start was flawed because the data included homes that did not experience grid outages and, therefore, the metering registered no battery discharge because there was no outage. This flawed data is exactly why a metric is needed to verify the data and results. Thus, the Department recommends that GMP track customers with a battery FTS index, which is the sum of customers with battery systems that failed to provide backup power during an outage divided by the total customers with batteries. Based on the data available, the metric or goal should be 1% or less.[72]

---

[70] Id.
[71] Id. at 30-31.
[72] Id at 23; Mara pf. sur. at 5.

Finally, in IEEE 1366, there is an index for capturing customers with multiple interruptions ("CEMIn"). CEMIn is a count of the number of customers with "n" or more interruptions. In 2023, 343 GMP customers with batteries experienced CEMI-8 (8 or more outages in a year) out of a population of 2030 customers, or 16.8%. As the fifth and final interim metric, the Department recommends that GMP report CEMI-8 for residential customers, both with and without battery systems.[73]

E. Performance-based Regulation and Risk-sharing Mechanisms

As mentioned above, GMP's ZOI proposal would see customers bearing 100% of the risk of GMP's additional voluntary spending. Hence, the Department recommends that a risk-sharing plan be adopted as a means to tie financial incentives to GMP for achieving the various interim performance metrics that have been recommended, and summarized in **Table 2**, for Option II and Option III. Specifically, the Department recommends that a dollar amount "disallowance" be tied to GMP's performance in each of the five interim metrics the Department has described. The prospect of disallowance is designed to share performance risk between ratepayers and shareholders should voluntary ZOI projects get approved. Such a plan would not replace the regulatory framework GMP has recommended; rather, it would be an additional element to the framework. If GMP underperforms relative to any given metric, a dollar amount of disallowed rate revenues must flow back to ratepayers.[74]

Again, ratepayers under GMP's proposal bear 100% of the performance risk. In other words, if GMP does not achieve zero outages, or even reduced outages, then there is no penalty for GMP, and the Company would still recoup its full rate of return on investment. In its

[73] Case No. 23-3501-PET, Mara pf. at 25-26.
[74] Case No. 23-3501-PET, Thomas & Foley pf. sur. at 11-12.

performance framework, the Department recommends a maximum 50/50 sharing of the performance risk of the Department's Option II, which limits GMP's investment to $50 million. The total amount of risk under this recommendation that would be tied to the performance metrics is $1,035,000. This figure is derived by taking the $11.6 million in net-income estimated by GMP to spend $280 million on ZOI projects, reducing it by a ratio of 50/280 and then multiplying by 50% to represent equal risk sharing, and then rounding to the nearest one thousand dollars. Given a maximum disallowance of $1,035,000 in aggregate and given there are five metrics that the Department is proposing, the maximum disallowance for any one metric under Option II is set at $207,000 for Option II.[75]

For Option III, given an $80 million investment versus the $50 million investment in Option II, the Department scaled up the maximum disallowance for each metric by a factor of 8-to-5 or 1.60. The resultant maximum disallowance per metric in Option III is therefore $331,000. This still represents a 50/50 sharing of risks between shareholders and ratepayers.[76]

F. SQRP Revisions

The Department recommends that GMP work with the Department to revise its SQRP and submit it to the Commission for consideration and approval within six months of the final order for this case. The Department specifically recommends that several SQRP edits be made. These updates include the requirement that GMP report its service compensation calculations annually on or before April 15th of each year. Service guarantees and service quality compensation values including the cap should also be modernized to address current monetary values, i.e. inflation. The SQRP should be updated at least once every three years during the ZOI investment period. Metrics

---

[75] Id. at 12-13, 16.
[76] Case No. 23-3501-PET, Thomas pf. sur. at 3-4.

must be established, and reported on, for energy burden, equity, and community resilience. These metrics will be exempt from service guarantees and will not be included in service quality compensation point calculations. Moreover, revised SAIFI and Customer Average Interruption Duration Index ("CAIDI") metrics should be established. Annual reporting of SAIFI and CAIDI metrics should no longer exclude major storms. And, service quality compensation points calculations would also no longer exclude major storms. In addition to the changes described for the SQRP, the Department also recommends annual reporting that describes how the Company has planned for and implemented equitable investments in rural and otherwise disadvantaged areas.[77]

G. Resilience Proceeding

The Department recommends that the Commission open a proceeding specifically focused on resilience, gathering all interested stakeholders—including all Vermont's utilities—to help develop a common framework for defining, valuing, measuring, and planning for resilience. Accepting "Zero" as a goal in this proceeding, without examining whether it is meaningful, sensible, or appropriate, carries risks from inflating customer expectations to setting an unattainable target that justifies (or forces, depending on the utility) unlimited future utility capital expenditures. Examples of other states examining appropriate levels of investment and planning and spending frameworks are available, and utility resilience planning tools, templates, and analytical frameworks are emerging daily. The Department has also applied for deep-dive technical assistance from the national labs to potentially support a resilience proceeding; decisions on applications will be made by late August/early September.[78]

---

[77] See generally the prefiled testimonies of Carol Flint, Bill Jordan, and Claire McIlvennie.
[78] Case No. 23-3501-PET, Margolis pf. at 5-6.

In addition to development of a resilience framework, the Department recommends that the proceeding encompass related revisions to Commission Rule 4.900, including defining "adequate" and "reliable" service—in particular as Vermonters become more dependent on electricity for heating and transportation at the same time climate change is driving changes in major storm frequency and intensity.[79] With common goals and a shared understanding of how to plan for and value solutions to meet those goals, requests for capital expenditures to execute those solutions will be able to be evaluated efficiently.

V. CONCLUSION

A resilient electric grid is important. But so are affordable electricity rates, sound and reviewable planning channels for capital expenditures, and transparent interactions with the customers and other stakeholders whose interests are materially affected by these matters. As proposed, GMP's ZOI does not strike a balance the Department can comfortably support. A better balance lies in affording ratepayers stronger protections in the face of the financial and sizable capital expenditures contemplated by the ZOI. Accordingly, the Department respectfully recommends that the Commission adopt one of the Department's three proposed Options. Any one of these three Options would better protect ratepayer interests and promote the general public good.

VERMONT DEPARTMENT OF PUBLIC SERVICE

By: <u>/s/ *Erin C. Brennan*</u>
Erin C. Brennan, Esq.
112 State Street
Montpelier, VT 05620
(802) 522-6301
erin.brennan@vermont.gov

cc: ePUC Service List

[79] Case No. 23-3501-PET, Jordan pf. sur. at 6.