

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Petition of Green Mountain Power for approval of its)
Zero Outages Initiative as a Strategic Opportunity) Case No. 23-____-PET
pursuant to 30 V.S.A. § 218d and)
GMP’s Multi-Year Regulation Plan)

**PETITION FOR APPROVAL OF GREEN MOUNTAIN POWER’S ZERO OUTAGES
INITIATIVE AS A STRATEGIC OPPORTUNITY UNDER ITS MULTI-YEAR
REGULATION PLAN**

Green Mountain Power Corporation (“GMP”) petitions the Public Utility Commission (“Commission”) pursuant to 30 V.S.A. § 218d and Section IV(A)(6) (the “Strategic Opportunities Exception”) of GMP’s Current Multi-Year Regulation Plan (“MYRP” or the “Plan”) to approve GMP’s Zero Outages Initiative, which proposes targeted infrastructure investments to significantly increase local resilience in the face of the severe impacts of climate change driven storms and other disasters, so customers can experience no outages in their electricity service. In support of this Petition, GMP states as follows:

1. GMP is a Vermont corporation engaged in the generation, transmission, distribution, and sale of electricity directly to the public. Its principal office is located at 163 Acorn Lane, Colchester, Vermont 05446.
2. As an integrated electric utility, GMP is subject to the Commission’s regulatory authority over its electric rates and service. *See* 30 V.S.A. §§ 203, 209, 218, 218d, 219, 225, 226, and 227.
3. GMP is currently under a four-year MYRP, which was approved by the Commission under 30 V.S.A § 218d in Case No. 21-3707-PET.
4. As set forth in the supporting testimony and exhibits, GMP seeks approval to implement its Zero Outages Initiative to further protect customers from the impacts of damage due to climate change and other grid emergencies, enhance local resiliency, and equitably improve

customers' quality of life by eliminating outages throughout its territory. This plan builds on the effective regulatory framework GMP is under by expanding ongoing innovative initiatives and Transmission & Distribution (T&D) resiliency work. This is done through a combination of storm hardening lines, creating community microgrids in targeted areas, and deploying residential storage, using each solution where it is most effective for customers.

5. Recognizing the present and future severe impacts of a changing climate on customers and the state, GMP has worked to proactively harden the grid and implement new technologies to support customer and community resilience. In recent years GMP has significantly accelerated climate resiliency projects for customers. During GMP's 2018 regulation plan GMP filed a specific Climate Plan, which was approved in Case No. 20-0276-PET and permitted additional targeted capital investment for these purposes. The resiliency investment principles developed in the Climate Plan are now part of GMP's Integrated Resource Plan ("IRP") and incorporated in its current MYRP and capital planning process.

6. However, it is clear the pace of this work must dramatically increase. Storms are increasing in magnitude, frequency, severity of damage, resulting in significantly greater restoration costs than expected even when the Climate Plan was filed, and other physical and cyber threats to the regional grid also are increasing. This past winter saw four of the most damaging winter storms in GMP's history, typified by warmer temperatures bringing heavy wet snow that piled up and tore down trees in its service territory. In the March 2023 storms, Vermont received liquid precipitation equivalent to what the state experienced in Tropical Storm Irene in some areas of the state. And then, four months later in July, an even greater amount of rain fell on the state, bringing catastrophic flooding that decimated several communities and caused outages.

7. These types of storms will keep increasing in frequency and severity because of climate change. The current level of available resiliency investment cannot keep pace with the rate of change the state is now seeing. GMP needs to be able to execute more of these projects faster for customers and communities to minimize what will otherwise inevitably be future significant, recurring storm restoration time and costs.

8. Following last winter's storms, the Vermont General Assembly as part of Act 47 of 2023 (S.100) exempted from Act 250 review the rebuilding of electric distribution lines to improve reliability. *See* 10 V.S.A. § 6081(y). This exemption is currently in place until January 2026—and is an important, timely, and strategic opportunity for investment to strengthen the distribution system. GMP is expediting projects subject to this exemption, particularly in the areas most impacted by those storms. But more still must be done to increase resiliency before the next devastating storm is at Vermont's doorstep.

9. This work also comes at a time of unprecedented federal funding opportunities which GMP can pursue to increase program and infrastructure investment to benefit customers. For example, GMP has pending applications of up to \$68M for significant resiliency funding through the Grid Resilience and Innovation Partnerships program of the U.S. Department of Energy, which require a 50% match if awarded, and expects to pursue every opportunity that will benefit customers and the state as they are offered.

10. Especially with the disrupting effects of climate change increasing, the role of an electric distribution utility must evolve. As sectors around the state electrify to decarbonize -- from medical technology moving to the home, and everyone increasingly relying on remote connectivity for work, education, healthcare, and more — reliable and resilient electric service becomes even more important to customers' lives every day, and especially during emergencies.

11. That is why additional strategic investment is needed now, delivered to customers faster than the current framework allows. Each resiliency investment, which typically includes long-lived capital assets, provides present savings in avoided storm costs and avoided economic impacts due to connectivity interruptions, as well as greater safety and other tangible and intangible benefits to customers and their communities that come from staying powered up even during extreme weather events, as further detailed in the testimony supporting this Petition.

12. The Zero Outages Initiative seeks to maintain GMP's identified capital priorities under the MYRP, while completing additional resiliency and zero outages work over and above the existing MYRP capital levels. The first phase of this comprehensive initiative, described in this filing, will rapidly accelerate all these efforts in the next few years, especially in rural areas of southern and central Vermont where severe climate change driven storms are hitting hardest. As part of this work, GMP will also build the roadmap and systems to ramp up this work throughout GMP's territory so that customers will not experience any outages by 2030. GMP's Zero Outages Initiative provides several overlapping benefits and is driven by a focus on equity. Achieving zero outages will support rural Vermont customers who should have the same reliability and resiliency as other parts of the state.

13. To achieve these goals, GMP seeks a Strategic Opportunity Exception in this Petition for certain categories of projects, described below, and only to the extent that the actual annual investment in completed Zero Outages projects exceeds the overall capital spending thresholds that apply for the remainder of the Plan.

14. The primary components of the Zero Outages Initiative are described in detail in the attached supporting materials and build on proven resiliency solutions for customers by accelerating distribution line storm hardening (undergrounding, tree-wire or spacer cable,

protective devices), microgrids, and energy storage. GMP will analyze this work by zones within each circuit across GMP's service area, which will allow for rapid prioritization of solutions by zone. The four zones range from protected three-phase lines near substations out to rural "last mile" lines. These zones are designed around the resiliency solutions typically most effective for each.

- Storm hardening including undergrounding where possible will be the usual solution in Zones 1-3, and also used where beneficial in Zone 4. This distribution line work will draw upon a range of hardening techniques appropriate to each zone and will be a critical priority in order to give effect to the Act 250 exemption provided by Act 47 of 2023.
- In rural Zone 4, there are fewer customers on each mile of distribution line. For many of these areas, where single phase rural lines are more difficult to storm harden or underground on a customer-by-customer basis, storage-based solutions will be evaluated as a preferred solution to help customers ride through any storm events while restoration occurs.

15. Microgrids remain key to GMP's Zero Outages Initiative and will continue to be prioritized and deployed according to the ranking criteria developed under the Climate Plan wherever they provide the best community-level resilience solution. GMP will continue to implement microgrids as planned under the MYRP, or through grant opportunities, and seek separate approvals as appropriate depending on the project type.

16. Customer storage systems have proven their ability to provide reliability benefits while generating savings for all customers. For example, in the storms last winter, customers with battery systems remained powered up for more than 77,000 hours in approximately 2,300

separate events, with many customers riding out the entire outage event affecting their community. As a result, GMP's Energy Storage System ("ESS") tariff, which leases batteries to participating customers, has long had a lengthy application waitlist. Recognizing the value of these systems for customers, the PUC recently lifted the annual cap on ESS systems and is working with customers to accelerate installations.

17. This tremendous reliability resource should be available to all customers whose reliability experience would benefit, not just those who can lease or pay for a system through the "bring your own device" tariff. Until now, except for a limited pilot in Grafton and a small critical care customer grant, battery systems have been offered through lease or in a "bring-your-own-device" program to interested customers. Recognizing the value these assets provide to keep rural customers powered up when large, damaging storms hit, the Zero Outages Initiative proposes to provide utility-owned batteries directly to customers in Zone 4 where optimal to do so. Within this zone, where batteries are often a better solution than attempting to storm harden every element or underground the "last mile" single-phase lines. For customers, storage provided by GMP to certain customers will be an efficient solution to keep those powered up when outages threaten and will also provide all the other flexibility benefits to both the individual customers and to the grid as a whole. Looking forward, between utility-provided storage solutions and customer-provided storage opportunities such as vehicle-to-home and vehicle-to-grid, GMP envisions a future where all customers have access to this flexible, critical resiliency resource.

18. For the Zero Outages Initiative, across all circuits and zones, projects of all types will be prioritized using existing climate resilience investment principles from GMP's Climate Plan and IRP to focus on reliability-challenged areas first, while accounting for the ability to execute impactful projects quickly.

19. The Zero Outages Initiative sets forth the regulatory accounting process for incorporating these investments in rates, which builds on the treatment approved in the Climate Plan and Broadband petitions. As with GMP's previously approved Climate Plan and its Broadband Make-Ready Tariff, which was approved as a strategic exception to GMP's previous regulation plan, GMP will not seek recovery of capital investments until specific projects are completed and providing benefits to customers. This will not only ensure just and reasonable rates for customers but also account for the federal funding through grants that GMP and the state pursues that will complement this work and require matching funds while also potentially lowering the overall direct investment.

20. To support the Zero Outages Initiative, GMP seeks a Strategic Opportunity Exception under the MYRP. Section IV(A)(6) of the MYRP provides that:

Notwithstanding the other provisions of this Plan, GMP may petition the PUC for approval at any time during the Plan for incremental plant in service additions, expenses and revenue to be included in rates when either unexpected circumstances or new strategic opportunities arise that provide material benefit to customers.

Strategic opportunities here may include, but are not limited to, categories of investments that provide new opportunities to increase the resiliency of the distribution system.

MYRP at 11. The exception requires that GMP demonstrates that such expenditures are "in customers' best interests and will result in just and reasonable rates in the long run." *Id.*

21. The prefiled testimony and exhibits accompanying this Petition demonstrate that the investments sought under the Zero Outages Initiative meet these requirements. These proposed accelerated investments were not yet contemplated or foreseen during the MYRP proceeding, when GMP's existing capital spending limits were set, but instead are dynamic responses to increasingly severe weather, the increasing impacts to customers, and the tremendous storm-related expenses that have occurred in the past year. The Act 47 distribution line exemption

from Act 250, which provides a mandate and opportunity to do this work now in response to these recent storms, also was not foreseen during the MYRP proceeding.

22. To meet these increasing and critical customer needs to scale up and expand GMP's climate resilience and reliability work for customers, GMP is seeking authorization for up to \$250M in additional T&D storm hardening investments and an additional \$30M for innovative customer and community storage programs over the last two years of the MYRP (FY25 and FY26).

23. These investments will be long-lived capital assets that will save on operations including storm response and vegetation management while providing many tangible benefits to the grid and for customers as described in the supporting testimony and exhibits.

24. For the reasons stated above, GMP respectfully requests the Commission approve its proposal to apply a Strategic Opportunity Exception to investments for this Zero Outages Initiative under the MYRP and to account for these costs as proposed in the material accompanying this Petition.

WHEREFORE, GMP respectfully requests that the Commission:

- (a) Approve GMP's strategic capital exception under Section IV(A)(6) of GMP's MYRP, authorizing up to \$250M in additional T&D investments and \$30M in additional storage solutions to improve resiliency and reliability for customers over the final two years of the MYRP.
- (b) Schedule promptly a prehearing conference on the Petition and issue an order establishing procedural requirements, including scheduling public hearings, if needed,

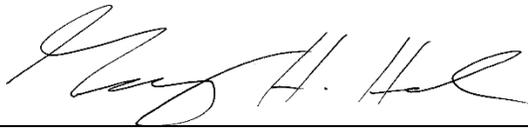
and technical hearings, as the Commission deems appropriate, for its review of the

Petition;

- (c) Make findings of fact and conclusions of law with respect to the matters set forth in this Petition; Issue an order in a timeframe that will allow GMP to implement this work and complete distribution line projects eligible for the Act 250 review exemption provided in 10 V.S.A. § 6081(y), expiring January 1, 2026; and
- (d) Take any other actions the Commission deems necessary or advisable in connection with this Petition.

Dated at Burlington, Vermont this 9th day of October, 2023.

GREEN MOUNTAIN POWER CORPORATION

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