Exhibit GMP-BO-1

GREEN MOUNTAIN POWER CLIMATE PLAN

JANUARY 30, 2020

GREEN MOUNTAIN POWER
Generating Possibilities Together

greenmountainpower.com

Green Mountain Power

Climate Plan

January 30, 2020

Table of Contents

Appendices

I. Executive Summary

GMP's Climate Plan ("Plan") provides a framework for GMP's continuing efforts to prepare for and proactively respond to the significant impacts climate change driven storms are having on GMP's systems and our customers. Climate change has already led to an increase in the frequency and severity of storms in GMP's service territory, and those impacts are only expected to intensify in the future, leading to increased costs and decreased reliability for customers, if not addressed. This Plan represents GMP's recommendation for a proactive effort to confront these challenges head on and move beyond business as usual. The Plan provides clear goals to create a more reliable and resilient energy system for customers that can better withstand and more quickly recover from severe storms, while also aiding in the transition to a more distributed grid that helps cut greenhouse gases in pursuit of Vermont's energy policy objectives.

The Plan is adopted pursuant to GMP's existing Multi-Year Regulation Plan ("Regulation Plan"), approved by the Public Utility Commission in Case No. 18-1633-PET. In that proceeding, GMP outlined the climate change challenges customers face and explained the need to move quickly to address these challenges. The Regulation Plan specifically authorizes GMP to seek approval of a Climate Plan during the term of the Regulation Plan to pursue climate resiliency projects that are necessary, appropriate, and in the best interest of customers.

The projects that will be selected annually as a part of the Climate Plan process are not part of the base capital spending during the Regulation Plan period. Rather this Plan work will complement and accelerate GMP's ongoing system and operational hardening in order to maintain and evolve GMP's energy and communication systems so that they can continue to provide GMP customers reliable, low-cost, and low-carbon service in this time of climate change.

GMP is taking a holistic approach to climate resiliency planning, and so the projects proposed under the Climate Plan will span across GMP's operations and systems. Many projects will include investments to address the risks climate change poses to the infrastructure that serve customers, including generation, transmission, and distribution systems. This comprehensive approach to resiliency planning will also include evaluating and upgrading critical information technology and operational technology systems to ensure reliable communications during severe weather events. Continued innovative work will also be a part of the Plan, such as improved DER management and resiliency zones with storage to ensure service to critical facilities and emergency services in communities around Vermont.

The focused approach to climate planning and resiliency outlined in the Plan will be incorporated into GMP's regular project planning process going forward, and ultimately incorporated into GMP's Integrated Resource Planning ("IRP") process, and future rate cases. During the outset of the Plan, while operating under GMP's existing Regulation Plan, the Climate Plan establishes a process for identifying and selecting these individual Climate Plan projects on an annual basis,

based on specific criteria approved by the Public Utility Commission ("PUC" or the "Commission") as part of this Plan. Under the Plan the Commission and the Department of Public Service will preview proposed Climate Plan projects for the coming fiscal year period as part of GMP's Annual Base Rate filing under the Regulation Plan, prior to GMP commencing work on the projects, to review GMP's use of the project selection criteria approved in the Plan. However, no costs associated with Climate Plan projects will be included in rates based on this initial pre-project review.

Instead, the Plan establishes a regulatory accounting treatment for Climate Plan projects that requires GMP to complete each of these projects prior to seeking Commission approval to include the project in rates. During the term of the Regulation Plan, GMP will identify the Climate Plan projects completed in the prior fiscal year period as part of each required Annual Base Rate filing (or follow-on traditional rate case in the last year of the Regulation Plan), and seek Commission approval for these projects over a defined recovery period. New operation and maintenance expenses associated with Climate Plan projects will be tracked separately from base O&M spending during the period of the Regulation Plan, to align with Docket 7770 and ensure return of all required synergy savings to customers.

While the general planning timeframe for the Plan is five years, GMP expects that this Plan, and the projects selected under the approved criteria will evolve over time, as will be required to address the evolving challenges presented by climate change. Therefore, while GMP seeks PUC authorization of a specific review and approval process for Climate Plan projects during the remaining years of the Regulation Plan, the Climate Plan does not prescribe a specific process for authorizing Climate Plan projects after the term of the Regulation Plan. The expectation is that the criteria used to select these projects will become integrated into GMP's regular planning processes moving forward, and the Commission will have the opportunity to consider how this integration may occur during GMP's next traditional rate case, which will be filed in January of 2022, together with any accompanying regulation plan proposal.

II. Goals of Climate Plan

GMP's Climate Plan has two interrelated goals, which are:

1. Hardening GMP grid and restoration response in the face of increasing frequency of severe storms driven by the climate crisis to better serve customers;

2. Better preparing GMP grid to serve as the backbone for Vermont's aggressive goals to cut greenhouse gas emissions and transition off fossil fuels.

These goals will help customers by targeting the interrelated needs of reliability and resiliency.

Reliability is about keeping the power on and describes GMP's ability to deliver that planned outcome. Resiliency, on the other hand, is about the ability to recover from certain types of disaster and failure, including remaining functional from the customer's perspective while recovering. Resiliency describes GMP's efforts and projects to achieve reliability.

Reliability is a more traditional, reactive framework for the electric system planning. The concept is binary – it asks "are the lights on or off?" If the lights are off, the concept of reliability compels making a repair to turn them back on. Given traditional least cost thinking and immediate repair needs, simply getting lights on as soon as possible does not always produce the best long-term solution for customers. But this approach has been the standard for utility thinking for years, and utility performance is typically measured against achieving certain expected reliability standards. Like all utilities in the state, GMP has specific existing customer service quality and reliably standards that it must meet, as set out in GMP's Service Quality and Reliability Plan ("SQRP"), which is incorporated into GMP's Regulation Plan. GMP continues to meet and exceed these SQRP standards, and the standards will remain in place, with GMP reporting performance under these criteria as part of its annual Regulation Plan report. But increasingly frequent and intense climate change driven storm events threaten to undermine the high quality, reliable service GMP has consistently provided its customers. Meeting these standards going forward, without a change to proactively harden our infrastructure and systems in the face of climate change, will lead to decreased reliability and greater storm recovery costs for customers.

The type of resiliency planning GMP proposes in this Plan provides a more proactive planning frame: what can we do to withstand and recover quickly from major storms or other catastrophes, or some combination of events we have never experienced? It is about preparing for, operating through, and recovering from significant, possibly prolonged events, and it is more urgent than ever given the increased frequency and ferocity of climate change driven storms.

As described below, the Plan provides a process for proactively identifying and pursing capital and operational projects, targeting improvements that will increase resiliency for customers, enhance public and employee safety, improve GMP's communications and outreach efforts during emergency events, and help ensure continuity of operations under catastrophic conditions for both GMP and the communities we serve.

At the same time, these resiliency measures also help the grid to serve as the backbone for the type of increased distributed generation and electrification that is so critical to broader reduction in carbon emissions across our energy systems. As Vermont continues to lead the nation in clean energy policy and as Vermonters continue to transition to electrification as their best method to reduce reliance on fossil fuels, retaining the high reliability level of our electric grid is paramount because customers will rely upon it even more so than they do today. The same projects and programs that promote a more resilient grid—such as advanced self-healing circuits and communications systems to supported automated failover systems to maintain grid operations during severe events—will also help GMP better integrate and manage distributed energy

resources ("DER") across GMP's service territory. And both of these outcomes - increased resiliency and improved DER management – provide important benefits for customers.

The process outlined in this Plan will help GMP achieve these goals for customers, and will support GMP's continuing efforts to address climate change driven impacts on the grid system, while at the same time advancing Vermont's important renewable energy and carbon reduction goals.

III. Climate Plan Spending Areas and Project Selection Criteria

As described above, the Climate Plan takes a comprehensive approach to evaluating GMP's operations and systems and will include a review of projects across departments to identify the best ways to create a more resilient grid that is better able to withstand and recover from severe weather events.

This will include work in generation, transmission and distribution, information technology & operational technology, and continued innovative efforts across the company.

GMP has developed specific criteria for each of the anticipated areas of Climate Plan projects to ensure the projects pursued under the Plan are necessary, appropriate, and in the best interests of customers. The types of projects to be pursued annually in each of the identified areas, and the criteria used to select specific projects are described below. For each project developed under the Plan, GMP will continue to follow the required capital documentation standards outlined in GMP's Memorandum of Understanding with the Department of Public Service and approved by the Commission in Case No. 17-3112-INV (Exhibit #2 to DPS/GMP MOU).

1. Generation Projects:

   Work on GMP generation resources will focus on identifying and addressing risks to assets that are particularly susceptible to climate change, focusing primarily on accelerating the pace of upgrades at GMP's high/significant hazard dam facilities based upon updated flood event modeling.

   Hydropower generation facility upgrades will be selected to improve GMP's management of high/significant hazard dams, high-water events, and catastrophic event emergency operating protocols. Criteria used for project selection include:

   - Age of assets/water control equipment; elevation of systems; and effects expected based upon hydraulic and hydrologic modeling will aid in project selection.

   - Priority is given to facilities that have not received electrical modernization to improve safety, reliability, and GMP's ability to both monitor and operate the facilities remotely.

2. Transmission & Distribution Projects:

Climate Plan projects in the T&D area will focus on accelerating the pace of system automation and hardening projects across GMP's substation and distribution assets, utilizing resilient techniques.

For substation relocation, GMP has used floodplain/modeling analysis, 100- or 500-year events to determine which facilities should be relocated (or, in some cases, potentially rebuilt at higher elevation at the same site.) These projects will be prioritized by addressing projects in 100-year flood plains, those with a history of flooding events coming first, with consideration given to the facilities and number of customers served by each substation.

With respect to resiliency work on distribution circuits, GMP will use several criteria to rank circuits, or sections of them, based on the magnitude of the impact the hardening investments will have for the customers and load served by each, using:

- twenty lowest-performing circuits/outage history during storm metrics;
- type, age, condition, and location of asset;
- the number of customers served by each circuit;
- outage hours and expected benefit from hardening; and
- the critical facilities served by the circuit.

Project prioritization will be based on a combination of a static assessment of these criteria paired with the local experience of our field resources.

3. Information Technology/Operational Technology:

GMP's work on IT/OT resources will focus on three primary areas: (1) projects that will improve the resiliency and durability of communications infrastructures that manage and provide telemetry for grid operations; (2) IT projects focused on increasing the uninterrupted functionality and durability of key application infrastructures and devices necessary to serve our customers, including our Outage Management System, Supervisory Control and Data Acquisition (SCADA), and Geographical Information System (GIS); and (3) projects that will enhance our communication and coordination efforts with municipalities, first responders, and customers during severe weather events. This will improve and enhance the ways GMP is able to deliver information into the hands of our stakeholders and customers, allowing them to have the critical information they need, when they need it, with greater detail.

In these areas, specific project selection will include:

- Assessment of which IT assets *must* be accessible in order for triage activities to take place to serve customers in the event of a total loss of one or more of GMP's existing data centers, control centers, network operation centers, field assets, or key services (for example, IVR services);

- Project selection for failover systems will be based upon the ability to provide enhanced levels of redundancy and resiliency to key operational systems that might either more easily succumb to extreme weather-related impacts in their current configuration, or upon the finding that the system's durability and availability would be critical to customer restorations during extreme events;

- Communications projects will be selected based upon ability to provide additional platform for stakeholder/emergency response information and resource sharing with GMP, and segmented/targeted customer communication.

4. Innovation

GMP's work in this area under the Climate Plan will continue existing innovation efforts to create a more distributed, local, customer-focused, cost-effective, reliable grid, with a particular focus on those innovative measures and programs that will help develop a more resilient system that can respond to and help customers ride through extreme weather events.

These efforts will include: continuing and expanding GMP's innovative pilots under GMP's Regulation Plan; developing next-generation distribution-level balancing applications to ensure reliability and capacity for increasing volumes of distributed energy resources on the distribution system; and developing microgrid/islanding capabilities that can be utilized in select resiliency zones throughout GMP territory to ensure continuity of critical facilities during severe events, based on anticipated experience implementing this type of system in the Panton, Vermont area in the next year.

Criteria used to identify and implement future resiliency zones will include working with local and state stakeholders to identify areas with critical facilities, key reliability deficits, and communications deficits (broadband/cell) that can be addressed as part of such zones to create areas that can support and sustain critical emergency response activities. This assessment will include:

- Whether the area has no current distribution feeder back-up capability—only radial distribution lines feeding the area.

- Whether or not the sub-transmission feeding the area is radial or looped.

- Whether the area has challenging reliability statistics—meaning the local incident count and duration of outages are higher than our averages.
- Whether the area is unserved or underserved with broadband in the community.
- Whether the area has poor or no cellular connectivity.

Potential DER management investments will focus on DER platform improvements designed to effectively automate dispatch, balancing, and management of a highly reliable grid with a significantly greater number of inputs and connected devices. This work will include evaluating platforms to help:

- Conduct circuit-level balancing of demand against local distributed generation and power fed from the serving substation, factoring in the capacity and control of local DERs;
- Build baselines for every circuit;
- Incorporate weather forecasts and historical demand patterns;
- Determine dispatch schedules to achieve different objectives, such as peak shifting, maximum DG absorption, resiliency preparation, etc.; and
- Issue dispatch instructions to various DER devices and control sub-platforms to realize the desired outcomes.

IV. Regulatory Accounting During Regulation Plan Period

During the term of GMP's existing Regulation Plan, Climate Plan projects will be developed, reviewed, and approved for inclusion in GMP's rates in the manner outlined below.

As noted above, GMP is not proposing to increase the locked level of non-Climate Plan capital spending authorized under the Regulation Plan or the associated depreciation and property tax expense, but will instead track and report Climate Plan related capital investments separately from authorized and fixed Regulation Plan capital.

Under the Plan, GMP will not seek to include any Climate Plan project in base rates in effect during the term of the Regulation Plan until the Project has been completed and recorded to plant in service.

1. Climate Plan Project Identification and Preliminary Approval:

   During the term of the Regulation Plan, GMP departments will identify Climate Plan projects that will advance the resiliency goals of the Plan for the subsequent fiscal year (e.g. GMP departments will develop FY 2021 Climate Plan projects in FY 2020), using the criteria developed specifically for each department identified in Section IV of the Plan, above. The Climate Plan projects may consist of both capital and O&M projects. GMP will file a Climate Plan Project Report listing the projects and associated budgets that each GMP department is proposing to pursue in the coming fiscal year, which will be provided as part of GMP's June 1st Annual Base Rate Filing. An example of this report is provided as **Appendix A.**

   The Department of Public Service ("DPS") and Commission will have an opportunity to review and comment on the proposed Climate Plan projects and budget.

   For any Climate Plan related investments and associated costs incurred in FY 2020 and FY 2021, GMP will not seek to recover through rates the cost of a proposed Climate Plan capital project until after the capital project is completed and recorded to plant in service or the cost of a Climate Plan O&M project until the cost has actually been expended.

2. Commencing and Completing Climate Plan Projects:

   (a) Following preliminary review, GMP will pursue the identified projects in the coming fiscal year, commencing and completing as many projects as possible. In the event a particular Climate Plan project could not be executed due to the permitting timetable or other limiting factors, GMP may substitute a Climate Plan project of a similar type which meets the Climate Plan criteria approved by the PUC.

   (b) Climate Plan capital projects will follow GMP's capitalization and AFUDC policies.

   (c) GMP will separately track the incremental Climate Plan O&M and capital project costs, including accumulated deferred income taxes and Climate Plan plant depreciation expense, property taxes, and incremental O&M costs.

3. Climate Plan Regulatory Assets:

   (a) For Climate Plan capital projects, GMP will record to a regulatory asset for future recovery from customers the depreciation, property taxes, interest and equity return, and other project costs between the time a Climate Plan capital project was completed and recorded to plant in service and when it is included in rate base in a rate filing.

(b) GMP will record to the regulatory asset incurred Climate Plan O&M project costs that have not been included in the cost of service of a base rate filing.

(c) GMP will accrue a return on this regulatory asset, excluding the deferred debt and equity components of the regulatory asset, but defer collection until the Commission specifically approves including the Climate Plan project in base rates.

(d) The regulatory asset will be included in a future Annual Base Rate filing, or the follow-on traditional rate case for FY23 rates at the end of the Regulation Plan proceeding, for Commission review and approval.

(e) GMP will propose an amortization period for recovery of the Climate Plan regulatory assets at the time it seeks Commission approval to include the regulatory assets in rates.

4. Cost Recovery:

(a) During the term of the Regulation Plan, GMP will file an Annual Climate Plan Project Report with GMP's June 1st Annual Base Rate Filing summarizing the Climate Plan capital and O&M projects completed in the prior fiscal year, but which have not yet undergone final Commission review and approval, together with a proposed recovery period for the regulatory asset associated with these projects.

(b) The Climate Plan capital & O&M projects that are ultimately approved by the Commission will be incorporated into the subsequent base rate change consistent with the recovery schedule approved by the Commission, and will go into effect October 1st of that year (i.e. Climate Plan capital and O&M projects submitted for Commission approval June 1, 2021 and ultimately approved by the Commission will be incorporated into the October 1, 2021 base rate change.)

(c) GMP will track both Climate Plan capital costs and increased O&M expenses in a manner that allows the impacts of those activities to be segregated from non-Climate Plan capital spending or O&M costs and separately reported in the Annual Base Rate Refresh Filing. **Appendix B** is an example of the Regulation Plan Annual Base Rate Refresh Filing lead schedules which shows how both capital and O&M-related Climate Plan costs will be presented in this filing.

5. Climate Plan Impact on Synergy Savings:

Direct O&M costs that are added because of Climate Plan projects will be excluded from any synergy savings calculation required under the Commission's order in Docket 7770.

These costs will be handled in a manner similar to the categories of "non-base O&M" costs that are already excluded from the Platform for purposes of the merger synergy savings calculations.

Any non-power O&M benefits that accrue because of capital spending undertaken as a part of the Plan will flow directly to customers through the existing annual synergy saving true-up.

6. Climate Plan Impact on Power Supply Expense:

Climate Plan projects are expected to have little if any impact on power supply expense, and any direct and indirect impacts on power costs that do occur will be captured as part of the annual refresh of power cost and any variance to the actual impacts captured in the Power Supply Adjustor.

7. Climate Plan Capital Structure Impacts:

The level of anticipated Climate Plan capital and incremental O&M costs is not anticipated to require changes to the approved, fixed debt costs or capital structure outlined in the Regulation Plan. In the event any change in the authorized structure is necessary, GMP will use the method in the Regulation Plan to seek Commission approval for any adjustments.

V. Climate Plan Accounting Following Regulation Plan Period

GMP's Regulation Plan concludes on September 30, 2022. GMP has committed to filing a traditional cost of service rate case prior to the termination of the Regulation Plan to cover rates for Fiscal Year 2023. GMP expects to file this traditional rate filing no later than January 15, 2022 for rates to take effect October 1, 2022.

When GMP files the traditional cost of service rate case in January 2022, the filing will include:

1. Climate Plan capital projects completed through September 30, 2021, but not yet approved by the Commission with a proposed collection period for the regulatory assets associated with these complete projects. Commission approved Climate Plan costs will be incorporated into FY23 rates.

2. Climate Plan projects anticipated to be completed within the FY22 "interim year" period, based on known and measurable documentation when available to be

incorporated into proposed FY23 rates, and a proposed collection period for regulatory assets that will be created by these anticipated projects.

3. A new proposed methodology to account for and incorporate approved Climate Plan projects into rates for remainder of FY22 and FY23.

During FY 2022, the final year of the Regulation Plan, GMP will continue to track the Climate Plan projects separately and will record to a regulatory asset for the depreciation, property taxes, interest and equity return, and other project costs between the time a Climate Plan capital project was completed and recorded to plant in service and when it is included in base rates in a rate filing. A final Climate Plan Project Report will be filed after the end of FY 2022.

VI. Summary of Annual Climate Plan Filings/Reports

The overall schedule for required Climate Plan filings is attached as **Appendix C**, and key deadlines are summarized below:

a. June 1, 2020 (as part of FY21 Annual Base Rate Filing):

   i. Proposed FY 2021 Climate Plan Capital and O&M Projects for DPS & PUC review (See example Climate Plan Project Report, **Appendix A**).

b. June 1, 2021 (as part of FY22 Annual Base Rate Filing):

   i. Climate Plan Project Report, including:

      a. Completed FY 2021 Climate Plan projects including plant in service and O&M costs incurred for the measurement period 10/1/20 to 3/31/21—for PUC approval and inclusion in rates.

      b. Status of ongoing FY 2021 Climate Plan projects (proposed but not yet completed or requested to be included in rates).

      c. Proposed FY 2022 Climate Plan capital and O&M budget, for DPS & PUC review and preliminary approval.

   ii. Annual Base Rate Cost of Service filing reflecting proposed recovery of FY21 Climate Plan projects (See **Appendix B** for example)

c. October 1, 2021

    i. Commission approved FY21 Climate Plan capital and O&M projects and related regulatory asset for measurement period 10/1/20 to 3/31/21 will be incorporated into FY22 base rates.

d. January 15, 2022

    i. File Traditional Rate Filing for base rates effective October 1, 2022 including:

        a. FY 2021 Climate Plan capital in service and O&M costs incurred for the measurement period 4/1/21 to 9/30/21 requesting approval to incorporate changes into the traditional base rate filing with specific proposed recovery period for the related regulatory assets.

        b. Interim period FY 2022 Climate Plan projects not yet completed, but anticipated to be completed prior to FY23 based on known and measurable information, when available, and proposed recovery period for related regulatory assets.

        c. A new proposed methodology to account for and incorporate approved Climate Plan projects into rates for remainder of FY22 and FY23.

e. November 30, 2022

    i. File final Climate Plan Project Report for projects completed during Regulation Plan period, showing status of approval of projects under Climate Plan or traditional rate case, and summarizing how this planning will be incorporated into GMP's IRP and other planning processes.