

GREEN MOUNTAIN POWER CLIMATE PLAN SEPTEMBER 24, 2020



Green Mountain Power

Final Climate Plan

September 24, 2020

Table of Contents

I.	Executive Summary	2
II.	Goals of Climate Plan	3
III.	Climate Plan Spending Areas and Project Selection Criteria	5
IV.	Regulatory Accounting During Regulation Plan Period	9
V.	Climate Plan Accounting Following Regulation Plan Period	12
VI.	Summary of Annual Climate Plan Filings/Reports	13

Appendices

Appendix A	Sample Clima	te Plan Project I	Report
------------	--------------	-------------------	--------

Appendix B COS Example during Regulation Plan

Appendix C Climate Plan Reporting Timeline

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 Climate 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

Case No. 20-0276-PET
Petition of GMP for approval of its Climate Plan
Final Climate Plan
September 24, 2020
Page 3 of 14

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. As a result, GMP's Climate Plan will not continue as a standalone document beyond the term of GMP's existing Regulation Plan, but serves as an important bridge to continue this critical resiliency work during the term of the Regulation Plan.

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.

Case No. 20-0276-PET
Petition of GMP for approval of its Climate Plan
Final Climate Plan
September 24, 2020
Page 4 of 14

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.

Investments pursued under this Climate Plan will be selected and prioritized based on specific criteria. As the first overarching criteria, each project proposed under the Climate Plan by any department will be required to increase the overall resiliency of GMP's systems, with a focus on improving outcomes for customers during outages, enhancing public and employee safety, improving GMP's communications and outreach efforts during emergency events, and helping ensure continuity of operations under catastrophic conditions for both GMP and the communities we serve. Investments under this Plan will be limited to projects that GMP would not have pursued but for the need to respond to more frequent and damaging storms, changing weather patterns, and changing environmental conditions driven by climate change.

In addition, 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.

Generation Projects pursued under the Climate Plan will be limited to projects that GMP would not have pursued but for the need to respond to more frequent and damaging storms, changing weather patterns, and changing environmental conditions driven by climate change. All generation projects must be necessary, appropriate, and in the best interests of customers.

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 and consideration of the ratio of capital dollars spent to customer hours out for each project. No single factor will be determinative of the specific prioritization of any individual project.

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.
- GMP will only pursue Remote Terminal Unit (RTU) upgrades under the Climate Plan where those projects meet these criteria *and* directly support identified T&D and Generation project work otherwise pursued under the Climate Plan.

Case No. 20-0276-PET
Petition of GMP for approval of its Climate Plan
Final Climate Plan
September 24, 2020
Page 8 of 14

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.

GMP will continue this assessment with stakeholders to develop specific criteria for the selection and prioritization of potential resiliency zones. During this Plan, GMP may only propose specific resiliency zone work consistent with the process outlined in this Plan, with an opportunity for DPS review and comment prior to initiating any spending, and subject to the specific regulatory accounting process outlined in the Plan prior to including any costs in rates.

Potential DER management software ("DERMs) investments will focus on DERMS 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.

GMP will continue evaluating and assessing options for potential DERMS platforms in FY21 and will not propose any investments in DERMS solutions in FY22 unless the Department reviews and approves the solution as consistent with the Climate Plan.

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.

Case No. 20-0276-PET
Petition of GMP for approval of its Climate Plan
Final Climate Plan
September 24, 2020
Page 10 of 14

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. <u>Climate Plan Capital Structure Impacts:</u>

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.

Green Mountain Power Appendix A Sample Climate Plan 'CP' Project Report

					Preliminary Budget		Completed Project			
Fiscal Year Project	Project Name / Description	Climate Plan 'CP' Department Designation 1]	Capital or O&M Project	Description of Criteria Fit	Anticipated In- Service Date (month / year)	Total Budget Amount (Capital Installation)	Oracle Project Number	Actual In-Service Date (month / year)	Actual Project Amount (Capital Installation) ^{2]}	Notes
FY 2021										
-										

1] CP Department Designation

T&D

Generation

IT/OT

Innovation

2] Exhibit 2 Documentation Requirements

Capital Projects over \$2,000,000 shall be considered 'Major Projects' and require a cost-benefit analysis (see exemptions in Exhibit 2 MOU) Capital Projects under \$2,000,000 shall be considered 'Non-Major Projects' and require a financial analysis

Appendix B COS example during Regulation Plan

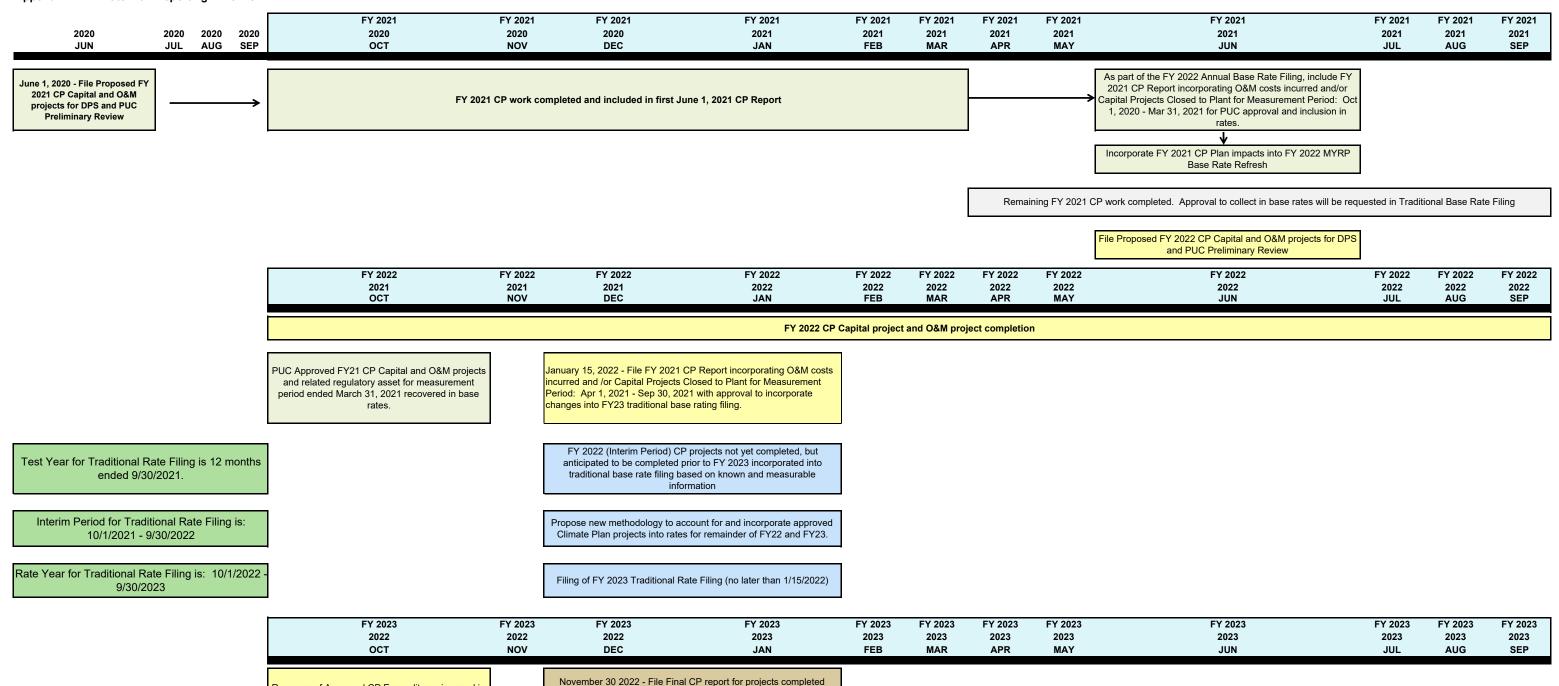
Schedule C

GREEN MOUNTAIN POWER CORPORATION			50			
COST OF SERVICE	FY 2021					
RATE YEAR: October 2020 - September 2021	INITIAL	MYRP	FY 2021	FY 2021	FY 2021	
	PUC Approved Filing	FY 2021 Adjustments	REFRESHED Pro- Forma	Climate Plan Incremental Change	REFRESHED including CP Impacts	
COST OF SERVICE - \$ in 000s	(1)	(2)	(3)	(4)	= (3) + (4)	
Operating Expenses:						
Purchased Power, Net	\$293,316		\$293,316	-	\$293,316	<< incremental impacts, if any
Production	26,240	-	26,240	-	26,240	<< incremental impacts, if any
Other Power Supply	3,439	-	3,439		3,439	
Purchased Power and Production	322,995	-	322,995		322,995	-
Transmission	114,112	-	114,112		114,112	
Transmission - Other	6,070	-	6,070		6,070	
Distribution	47,996	-	47,996	-	47,996	
Customer Accounting	11,029	-	11,029	-	11,029	
Customer Service and Information	2,807	-	2,807	-	2,807	
Sales	0	-	0	-	0	
Administrative and General	59,453	-	59,453	-	59,453	
Non Base O&M Costs - AMI	96	-	96	-	96	
Non Base O&M Costs - KCW	841	-	841	-	841	
Non Base O&M Costs - VMPD	0	-	0		0	
Non Base O&M Costs - Climate Plan						<< incremental CP O&M expense
Acct 929	(281)		(281))	(281)	•
Business Development	790	_	790		790	
Depreciation & Amortization	70,787	_	70,787			<< incremental depreciation and reg asset
Taxes - Federal and State	20,262	-	20,262			<< incremental income tax expense
- Municipal	31,694		31,694			<< incremental property tax expense
- Other, excluding Revenue Taxes	2,524	_	2,524		2,524	Theremental property tax expense
Accretion Expense	294	_	294		294	
Capital Costs	395	-	395		395	_
Total Operating Expenses	691,863	-	691,863	_	691,863	_
Return on Utility Rate Base	113,181	-	113,181		113,181	<< incremental return on capital
Total Cost of Service Before Credits	805,045	-	805,045		805,045	
Less:						
Equity in Earnings of Affiliates	75,346	-	75,346		75,346	
Other Operating Revenues	20,635	-	20,635		20,635	
Business Development	1,138	-	1,138	_	1,138	_
Total Credits	97,119		97,119		97,119	
Cost of Service to Ultimate Consumers	707,926	-	707,926		707,926	
Gross Revenue & Fuel Gross Receipts Taxes	6,933		6,933		ŕ	<< incremental GRT impacts
·	•	-	•	_		- Incremental GRT impacts
Total Cost of Service to Ultimate Consumers	714,859	-	714,859		714,859	
Fixed Merger savings	(38,457)	-	(38,457))	(38,457)	
Total Cost of Service to Ultimate Consumers	676,402		676,402		676,402	
Rate Smoothing Adjustor	2,504	-	2,504		2,504	
Smoothed Total Cost of Service to Ultimate Consumers Revenue from Ultimate Consumers after Smoothing Adjustment	678,906 661,903		678,906 661,903		678,906 661,903	
	•					
Revenue Deficiency from Ultimate Consumers Smoothed Revenue Adjustment for Eligible Customers	17,003 2.72%		17,003 2.72%		17,003 2.72%	
,						
Line Items to be Refreshed for FY 2021 MYRP						

Appendix B COS example during Regulation Plan GREEN MOUNTAIN POWER CORPORATION RATE BASE INVESTMENT

RATE BASE INVESTMENT RATE YEAR: October 2020 - September 2021	FY 2021 INITIAL PUC Approved (1)	MYRP FY 2021 Adjustments (2)	FY 2021 REFRESHED Pro- Forma (3)	FY 2021 Climate Plan Incremental Change (4)	FY 2021 REFRESHED including CP Impacts = (3) + (4)
Production	\$634,113	-	\$634,113		\$634,113
Transmission	212,759	-	212,759		212,759
Distribution General	947,409 231,702	-	947,409 231,702		947,409 231,702
Utility Plant in Service	2,025,983	-	2,025,983	<u>-</u>	2,025,983
Community Energy & Efficiency Development Fund	9,463	-	9,463	-	9,463
Subtotal	2,035,446	-	2,035,446	-	2,035,446
Construction Work in Progress	8,151	-	8,151	-	8,151
Investment in Affiliates					
Generation Vermont Yankee	939 48	-	939 48	-	939 48
Generation Maine Yankee Generation Connecticut Yankee	38	-	38	- -	38
Generation Yankee Atomic	55	-	55	-	55
Green Lantern Transmission NE Hydro Trans	882 232	-	882 232		882 232
Transmission NE Hydro Trans Electric	1,478	-	1,478	-	1,478
Transmission VELCO - Common	10,101	-	10,101	-	10,101
JV Microgrid JV Solar	41,627 49,541	-	41,627 49,541	-	41,627 49,541
Transmission TRANSCO LLC	630,603	-	630,603	-	630,603
SUBTOTAL	2,779,141	-	2,779,141	-	2,779,141
Special Deposits	1.060		1.060	•	1.060
Special Deposits Unamortized Debt Discount and Expense	1,069 4,742	-	1,069 4,742		1,069 4,742
18641-Synergy True-Up	1,060	-	1,060	-	1,060
18646-Def Dr Tree Trim/Pol	-	-	-	-	-
18225-GORGE REPOWERMENT 18227-PSA UNDER-COLLECTED	- 179	-	- 179	-	- 179
18230-REGULATORY ASSET-ASSET RETIREMENT OBLIGATION	170	-	170	-	170
18235-REG ASSET - VMPD VALUE SHARING POOL	-	-	-	-	-
18236-REG ASSET - DEPRECIATION STUDY	30	-	30	-	30
18238-REG ASSET - DEERFIELD WIND COSTS 18250-REG ASSET - RETIRED METER COST	-	-	-	-	-
182xx-REG ASSET - JV MICROGRID ASSET (Liability)	(983)	-	(983)		(983
18611~JV SOLAR ABANDONED SITES	-	-	-		-
18612-DEF ASSET-LOW INCOME DISC PAYMENTS	-	-	-	-	-
18613-DEF ASSET-EFFICIENCY FUND PAYMENTS 18605-DEF ASSET-NO RATE CHANGE	190	-	190	-	190
18652-VTEL SMARTGRID PAYT	1,330	-	1,330	- -	1,330
18619-DEFERRED DAM EXPENSES	172	-	172	-	172
18620-DEFERRED DAM DEPR EXP	202	-	202	-	202
18226-ST. ALBANS DIGESTER DEV COSTS Tax FAS 109	903 3,104	-	903 3,104	-	903 3,104
18xxx REG ASSET: VEG MGMT DEFERRAL	600	-	600	- -	600
Climate Plan 'CP'	-	-	-	-	
Subtotal	12,767	-	12,767	·	12,767
Working Capital Allowance:				Page 2 of 2	
Material and Supplies Inventory including Fuel Millstone III Nuclear Fuel Inventory (Net)	24,339 2,211	-	24,339 2,211	-	24,339 2,211
Prepayments	7,665	-	7,665	-	7,665
Lead -Lag Working Capital Allowance	9,601	-	9,601	•	9,601
Subtotal Working Capital	43,816	-	43,816	0	43,816
DEDUCT: ACCUMULATED DEPRECIATION/AMORT.	785,558	_	785,558		785,558
Customer Advances for Construction	92	-	92	-	92
DEFERRED CREDITS	414 000	-	411 000		414 000
Accumulated Deferred Income Taxes and Tax Reform Reg Liability Accumulated Deferred Investment Tax Credits	411,988 988		411,988 988	-	411,988 988
25352-Unclaimed Prprty-Cust Refunds	1	-	1	-	1
25358~Reg Liab-Earnings Sharing	2	-	2	-	2
25392-Contingency Reserves 25393-Health Insurance Reserve	3,095 1,000	-	3,095 1,000	-	3,095 1,000
25387 Reg Liab-Plant Removal	-	-	-	- -	-
25361-Reg Liab-Neil Vy	76	-	76	-	76
25337~Def Credit-Gain On Disposition	9	-	9	-	9
25378-Ciac Reg Liability	-	-	-	-	-
25382 Reg Liab Cvps/Cis Net Meter Cre 23000-Asset Retirement Liability	- 5,954	-	- 5,954	- -	- 5,954
23480-Nothern Water Res- Accounts Payable	62	-	62	-	62
24206-Misc Cur Workers Comp Major	1,782	-	1,782	-	1,782
25356 Reg Liab-Power Adjustor	-	-	-	•	-
25379 Reg Liab Synergies 25380 Reg Liab Cow Power Marketing	(0)	•	(0)		- (0
25402 Reg Liab Production Tax Credit	-	-	-	-	-
25403 Reg Liab Gmp Vt Solar Devel Fee	-	-	-	-	-
25404 Reg Liab Gmp Vt Solar Partnersh	-	-	-	-	-
25407 REG Liab Transco Utopus Gain Deferral Deferred Comp	128 3,652	-	128 3,652	- -	128 3,652
SERP	3,338	-	3,338		3,338
Accrued Pension Expense	(9,402)	-	(9,402)	-	(9,402)
Acc. Post-Ret. Medical Expense FAS 106 Acc. Other Post-Employment Ben. Exp. FAS 112	(2,983) 577		(2,983) 577	•	(2,983)
SUBTOTAL	1,205,915	-	1,205,915	<u> </u>	1,205,915
TOTAL RATEBASE INVESTMENT	1,629,809	-	1,629,809		
	,- ,		.,0=,,00,		

Appendix C - Climate Plan Reporting Timeline



during Regulation Plan period, showing status of approved projects

under CP Plan or traditional rate case.

Recovery of Approved FY 2022 and 2023 CP Related Expenditures to be collected in FY23 base rates

Recovery of Approved CP Expenditures incurred in

FY 2021 collected in base rates.