Green Mountain Power Schedule I - Climate Plan Project Report

For Information Only; No Impact on FY21 Base Rates

Summary of Anticipated FY21 Climate Projects by Department

(detail by department provided on sub-schedules)

Provided for Informational purposes only under pending Climate Plan in Case No. 20-0276-PET. Per proposed Climate Plan, projects would be presented in the Annual Base Rate filing in the year before completion but not be included in rates until after completion of construction and approval by Commission as part of following year Annual Base Rate Filing.

Final projects in any given year may vary, depending on limitations in construction or timing of permitting, approvals, etc., but will not exceed the total in the preliminary list. Note that this list was developed by GMP prior to review of DPS responsive testimony in the Climate Plan docket; review of DPS position may result in modification of project list for FY21.

	Total Projects		O&M Costs
Department 1]	(anticipated)	anticipated) Captial Investment (anticipated)	
T&D (Schedule I-1)	11	\$7,081,156.55	\$0
Generation (Schedule I-2)	2	\$7,755,438.00	\$0
IT/OT (Schedule I-3)	8	\$2,215,374.00	\$33,262.00
Innovation 2]	0	\$0	\$0
Total:	21	\$17,051,968.55	\$33,262

^{1]} CP Department Designation

T&D

Generation

IT/OT

Innovation

^{2]} With respect to innovation projects, GMP anticipates continuing to work with partners and stakeholders to develop criteria for identifying resiliency zones, as well as continuing work to evaluate and select a distributed energy resources software platform in the coming fiscal year but does not anticipate project-specific O&M costs or closing any capital projects

Green Mountain Power

Schedule I - Climate Plan Project Report - T&D Projects
For Information Only - No Impact on FY21 Base Rates

Project Name / Description	Climate Plan 'CP' Department Designatio 1]	n Capital or O&M Project	Description of Criteria Fit Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 5.3 - SAIFI: 6.8 - SADI: 35.9	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 Project is located within an FCC census
	1)		Description of Criteria Fit Prioritized project based on consideration of Climate Plan criteria			·-			
	T&D	Project	Prioritized project based on consideration of Climate Plan criteria	/ year)	(Capital Installation)	Number	(month /year)	Installation) ²	
.166684: CAP-L.VH4A P.1 to P.30 - Communities Served : Townshend, Jamaica	T&D			l .					Drainat is located within an ECC consus
		Capital	Total Cust Hrs Out: 6,628 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Country - Asset Type Wire: Bare).	Sept '21	\$733,297	166684			Floyer is located within an increase in the blockdesignated as underserved for broadband. GMP recommends adding dark fiber to the construction scope. Fiber costs not within the project budget amount.
.67068: CAP-L.VH4A P.30 to P.102 - Communities Served : Townshend, Jamaica	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 5.3 - SAIFI: 6.8 - SADI: 35.9 Total Cust Hrs Out: 6,628 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Country - Asset Type Wire: Bare).		\$1,565,032	167068			Project is located within an FCC census blockdesignated as underserved for broadband. GMP recommends adding dark fiber to the construction scope. Fiber costs not within the project budget amount.
.71071: CAP-L.3 P.147 to L.92 P.26 - Communities Served : Sharon, South Royalton	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 6.4 - SAIFI: 1.9 - SADI: 11.9 Total Cust Hrs Out: 15,317 - Assets Age > 40: Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Country - Asset Type Wire: Bare).	Sept '21	\$1,278,115	171071			Project is partially located within an FCC census blockdesignated as underserved for broadband. GMP recommends adding dark fiber to the construction scope. Fiber costs not within the project budget amount.
.71725: CAP-L.88 P.41X to L.881 P.19-1 - Communities Served : Sharon, Strafford	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 5.5 - SAIFI: 11.0 - SADI: 59.9 Total Cust Hrs Out: 30,469 - Assets Age > 40:Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Country - Asset Type Wire: Bare).	Sept '21	\$110,570	171725			
.71726: CAP-L.88 P.12 to L.881 P.41X - Communities Served : Sharon, Strafford	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI:5.5 - SAIFI: 11.0 - SADI: 59.9 Total Cust Hrs Out : 30,469 - Assets Age > 40:Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Country - Asset Type Wire: Bare).		\$138,272	171726			
.71727: CAP-L.51 P21 to P.49 - Communities Served : Londonderry, Winhall	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 23.8 - SAIFI: 2.2 - SADI: 52.2 Total Cust Hrs Out: 8,348 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare / Tree).	Sept '21	\$494,097	171727			
.71728: CAP-L.881 P.19-3 to L.8812 P.7-2 - Communities Served : Sharon, Strafford	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 22.1 - SAIFI: 2.0 - SADI: 44.7 Total Cust Hrs Out: 11,730 - Assets Age > 40:Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare).	Sept '21	\$192,505	171728			
.71730: CAP-L.VH4A P.125 to L.V66 P.70-2 - Communities Served : Townshend, Jamaica	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 2.8 - SAIFI: 14.9 - SADI: 42.3 Total Cust Hrs Out : 29,956 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare). C	Sept '21	\$522,969	171730			Project is located within an FCC census blockdesignated as underserved for broadband. GMP recommends adding dark fiber to the construction scope. Fiber costs not within the project budget amount.
.71731: CAP-L.47 P.26 to P.98 - Communities Served : Woodstock	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 11.8 - SAIFI: 3.5 - SADI: 41.9 Total Cust Hrs Out : 5,617 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare).		\$321,066	171731			
.71732: CAP-L.51 P.61 to P.86 - Communities Served : Londonderry, Winhall	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI: 15.6 - SAIFI: 6.8 - SADI: 35.9 Total Cust Hrs Out : 6,628 - Assets Age > 40 :Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare).		\$266,610	171732			Project is located within an FCC census blockdesignated as underserved for broadband. GMP recommends adding dark fiber to the construction scope. Fiber costs not within the project budget amount.
.71734: CAP-L.6 P.1 to Weston Village - Communities Served :Londonderry, Weston	T&D	Capital	Prioritized project based on consideration of Climate Plan criteria (Customer Demog: Rural - CAIDI:12.8 - SAIFI: 2.7 - SADI: 34.6 Total Cust Hrs Out: 26,090 - Assets Age > 40:Yes - Asste Condition- Plant: Poor - Asset Loaction: Road / X-Counttry - Asset Type Wire: Bare).	Sept '21	\$1,458,624	171734			
	71726: CAP-L.88 P.12 to L.881 P.41X - Communities Served : Sharon, Strafford 71727: CAP-L.51 P21 to P.49 - Communities Served : Londonderry, Winhall 71728: CAP-L.881 P.19-3 to L.8812 P.7-2 - Communities Served : Sharon, Strafford 71730: CAP-L.VH4A P.125 to L.V66 P.70-2 - Communities Served : Townshend, Jamaica 71731: CAP-L.47 P.26 to P.98 - Communities Served : Woodstock 71732: CAP-L.51 P.61 to P.86 - Communities Served : Londonderry, Winhall	71726: CAP-L.88 P.12 to L.881 P.41X - Communities Served : Sharon, Strafford T&D 71727: CAP-L.51 P.21 to P.49 - Communities Served : Londonderry, Winhall T&D 71728: CAP-L.881 P.19-3 to L.8812 P.7-2 - Communities Served : Sharon, Strafford T&D 71730: CAP-L.VH4A P.125 to L.V66 P.70-2 - Communities Served : Townshend, Jamaica T&D 71731: CAP-L.47 P.26 to P.98 - Communities Served : Woodstock T&D 71732: CAP-L.51 P.61 to P.86 - Communities Served : Londonderry, Winhall T&D	71726: CAP-L88 P.12 to L881 P.41X - Communities Served : Sharon, Strafford T&D Capital 71727: CAP-L51 P21 to P.49 - Communities Served : Londonderry, Winhall T&D Capital 71728: CAP-L881 P.19-3 to L8812 P.7-2 - Communities Served : Sharon, Strafford T&D Capital 71730: CAP-LVH4A P.125 to LV66 P.70-2 - Communities Served : Townshend, Jamaica T&D Capital 71731: CAP-L47 P.26 to P.98 - Communities Served : Woodstock T&D Capital 71732: CAP-L51 P.61 to P.86 - Communities Served : Londonderry, Winhall T&D Capital Capital	(Customer Demog, Rural - CAID: 5.5 - Salfi-11.0 - Salp: 5.9 a Total Cust His Dut. 13.08 - Assets Age - 30 New Seasons Total Cust His Dut. 13.08 - Assets Age - 30 New Seasons Trips: CAP-L88 P.13 to L881 P.19-1 - Communities Served : Sharon, Strafford T&D Capital Tpe Wrie Bare). Prioritized project based on consideration of Climate Plan criteria (Customer Demog, Rural - CAID: 5.5 - Salfi-11.0 - Salp: 5.9 a Total Cust His Dut. 13.08 - Assets Age - 30 New Seasons Total Cust His Dut. 13.08 - Assets Age - 30 New Seasons Total Customer Demog, Rural - CAID: 2.5 - Salfi-11.0 - Salp: 5.9 a Total Customer Demog, Rural - CAID: 2.5 - Salfi-12.0 - Salp: 5.9 a Total Customer Demog, Rural - CAID: 2.5 - Salfi-12.0 - Salp: 5.9 a Total Customer Demog, Rural - CAID: 2.5 - Salfi-12.2 - Salfi-12	Capital Cust Page 2 A0 Tes - Asset Served : Sparon, Strafford T&D Capital Cust Page 2 A0 Tes - Asset Condition. Plant. Poor - Asset Location: Road / X-Country - Asset 77725: CAP-L88 P 41X to L881 P 19-1 - Communities Served : Sharon, Strafford T&D Capital Pior Road (X-Country - Asset 77726: CAP-L88 P 12 to L881 P 19-1 - Communities Served : Sharon, Strafford T&D Capital Pior Road (X-Country - Asset 77726: CAP-L88 P 12 to L881 P 19-1 - Communities Served : Sharon, Strafford T&D Capital Pior Road (X-Country - Asset 77726: CAP-L88 P 12 to L881 P 19-3 to L881 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Pior Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 19-3 to L881 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 77726: CAP-L88 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 17726: CAP-L88 P 7-2 - Communities Served : Sharon, Strafford T&D Capital Road (X-Country - Asset 17726: CAP-L88 P 7-2 - Communities Served : Townshead, Jamako T&D Capital Road (X-Country - Asset 17726: CAP-L88 P 7-2 - Communities Served : Townshead, Jamako T&D Capital Road (X-Country - Asset 17726: CAP-L89 P 7-2 - Communities Served : Townshead, Jamako T&D Capital Road (X-Country - Asset 17726: CAP-L89 P 7-2 - Communities Served : Townshead, Jamako T&D Capital Road Road (X-Country - Asset 17726: CAP-L89 P 7-2 - Communities Served : Townshead, Jamako T&D Capital Road Road Road (X-Country - Asset 17	Custome Demog. Rural - CAD1-5.5 - SHE 1.10 - SAD1-9.8 Total Cust Frou 1/7.9 - Sacte Condition Plant Poor - Asset Location Road / X-Country - Asset Total Cust Frou 1/7.9 - Sacte Condition Plant Poor - Asset Location Road / X-Country - Asset Total Cust Frou 1/7.9 - Sacte Condition Plant Poor - Asset Location Road / X-Country - Asset Total Cust Frou 1/7.9 - Sacte Condition Plant Poor - Asset Location Road / X-Country - Asset Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sap - Sacte Total Customer Demog. Rural - CAD1-5.5 - Sacte 1.0 - SaD - Sacte Total Customer Demog. 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1] CP Department Designation

T&D Generation IT/OT

Innovation

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

Green Mountain Power Schedule I - Climate Plan Project Report - Generation Projects For Information Only - No Impact on FY21 Base Rates

	Preliminary Budget				Completed Project					
Climate Plan 'CP'	Anticipated In-	<u> </u>			_					
Department Designation Capital or O&M	Service Date (month	Total Budget Amount (Capital	Oracle Project Actu	ual In-Service Date A	ctual Project Amount (Capital					
Fiscal Year Project Project Name / Description 1] Project Description of Criteria Fit	/ year)	Installation)	Number	(month /year)	Installation) 2]	Notes				
Cin-l						Installation of automated Water Control Gate, Intake Structure, Access Bridge, Improve outlet				
2021 Goshen Intake GENERATION Capital Priority High Hazard Dam; need for work accelerated	Sep-21	5,760,809	167976			structure, and modernized dam monitoring & surveillance.				
2021 Middlesex Rock Anchors GENERATION Capital Priority High Hazard Dam; need for work accelerated	Jan-21	1,994,629	169950			Dam Stability Project - Installation of Rock Anchors & Crest Concrete Resurface				
	Total Captial:	\$ 7,755,438.00								

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

Total O&M \$

Green Mountain Power Schedule I - Climate Plan Project Report - IT Projects For Information Only - No Impact on FY21 Base Rates

				Preliminary Budget		Completed Project			
	Climate Plan 'CP'			Anticipated In-					
	Department Designation			Service Date (month	Total Budget Amount (Capital	Oracle Project		Actual Project Amount (Capital	
Fiscal Year Project Project Name / Description	1]	Project	Description of Criteria Fit	/ year)	Installation)	Number	(month /year)	Installation) 2]	Notes
		Capital							Year 1 of multiyear effort to complete two RTU
2021 RTU Replacement Acceleration	IT/OT	Capital	Improved resiliency through addition of remote operation abiltiy	Sep-21	2,000,000				acceleration projects combined.
									Internet servie redundancy for critical HQ facilities
									and service centers to provide uninterrupted
									access to cloud-based outage management, work
									management, GIS, safety, and communications
									platforms in the event of carrier or main circuit
									loss. Goal is route these standby, backup
									connections through a provier with path and/or
2021 Enterprise Internet Redundancy	IT/OT	Capital	Improved resiliency through increased redudency for key enterprise systems	Sep-21	12,000				geographic diversity to ensure high availability.
2021 Enterprise Internet Redundancy Annual O&M Costs	IT/OT	O&M	Improved resiliency through increased redudency for key enterprise systems	Sep-21	16,000				
									Satellite phone failover capability to enable
									uninterrupted communications with field crews,
									law enforcement, stakeholders, etc, in the event
									land line infrastructure (poles and wires), radio,
2021 Satellite Communication Infrastructure	IT/OT	Capital	Improved resiliency through increased failover redudency for key enterprise systems	Sep-21	62,374				and/or cellular communciations services are lost.
2021 Satellite Communication Infrastructure O&M Costs	IT/OT	O&M	Improved resiliency through increased failover redudency for key enterprise systems	Sep-21	702				
									GMP's grid communications and management
									networks are highly-digitized. This project is
									intended to make those systems resilient by
									providing for wreless/cellular failover, so that, in
									the event of a climate-driven service interruption
									GMP operators can maintain an minimially-viable
									level of control, telemetry, and communications
									capability with SCADA and other grid equipment
2021 Enterprise Network Redundancy	IT/OT	Capital	Improved resiliency through increased redudency for key enterprise systems	Sep-21	24,000				until main carrier services are restored.
2021 Enterprise Network Redundancy O&M Costs	IT/OT	0&M	Improved resiliency through increased failover redudency for key enterprise systems	Sep-21	16,560				
·					· · · · · · · · · · · · · · · · · · ·				
									Unified digital messaging platform to facilitate
									storm, emergency and other communications wit
									customer and non-customer stakholders, includir
									first responders, public works, regulators, law
									enforcement. Creates the ability to communicate
									with multiple constituencies from a single, cloud-
									based source while also facilitating the ability for
									stakeholders to subsribe to the types and
2021 Enterprise Customer Communications Systems	IT/OT	Capital	Improved communications redundancy for stakeholder communications	Sep-21	117,000				frequency of notifications most useful to them.
ZOZI Enterprise Customer Communications systems	11/01	Capitai	improved communications redundancy for stakeholder communications	3ep-21	117,000				mequency of notifications most useful to them.
									<u></u>
	1			Total Captial:	\$ 2,215,374.00	l	1		ı
				rotar captial:	2,215,3/4.00				

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

Total O&M \$ 33,262.00