STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Petition of GLOBALFOUNDRIES U.S. 2 LLC for a Certificate of Public Good, pursuant to 30 V.S.A. § 231 to operate a Self-Managed Utility	)))	Case No. 21-1107-PET
Petition of Green Mountain Power Corporation for approval to modify service territory pursuant to 30 V.S.A. § 249	)))	Case No. 21-1109-PET

Green Mountain Power's Responses to the Information Requests of the Public Utility Commission

Green Mountain Power ("GMP"), as a party in Case No. 21-1107-PET and Petitioner in Case No. 21-1109-PET, hereby responds by and through the undersigned counsel to the information requests of the Public Utility Commission ("PUC" or "Commission") issued on April 30, 2021.

INFORMATION REQUESTS

Q.PUC.GMP.1.1. Assuming GlobalFoundries' load is removed from GMP's service territory:

a) How would that affect GMP's power supply procurement and RES compliance plan?

b) Given that GMP's RES Tier III requirement is based on annual retail electric sales, by how much would GMP's RES Tier III requirement be reduced if it no longer had GlobalFoundries as a customer (i.e., how much less money would GMP put toward Tier III energy transformation projects annually)?

c) What would be the financial impacts to other utilities if the self-managed utility is approved and GMP's share of state load declines, especially in regard to the PURPA and Standard Offer programs?

d) Has GMP done an analysis of how much GMP's standard-offer obligation would decrease? If so, please provide this analysis and any supporting documentation. Please discuss how statewide reallocation of standard-offer obligations would affect other Vermont utilities. Please provide a quantitative analysis of standard-offer expenses that would be shifted to other Vermont utilities.

e) What impact would the decrease in load have on the amount of gross revenue tax GMP pays annually?

f) GMP operates a low-income energy assistance program and pays for the program through a charge on customer bills. To what extent, if any, would GMP's collection of energy assistance program funds be affected by the loss of GlobalFoundries'

load?

g) Please identify any other programs, costs, taxes, or fees not mentioned above or discussed in the prefiled testimony that are calculated based on GMP's load and provide an estimate and explanation of the impact that the loss of GlobalFoundries' load would have on those programs, costs, taxes, or fees.

A.PUC.GMP.1.1.

a. Power Procurement: During the four-year Transition Period agreed to by GMP and GLOBALFOUNDRIES U.S. 2, LLC ("GF"), there will be no effect on GMP's power procurement as GF will purchase its load requirements from GMP on a wholesale basis, keeping GMP's overall needs the same. After this period, the removal of the GF load will cause changes in the GMP approach to portfolio procurement, which can be grouped into short- and long-term effects to both the capacity and energy purchasing programs.

In the short term, the removal of the GF load causes a reduction in annual energy need of approximately 400,000 MWH per year. Because the usage profile of GF is very consistent from hour-to-hour within the year, GMP's overall load requirement exhibits a greater need for baseload, stable resources when GF is included in our obligations than when it is excluded. As a result, our purchase power portfolio has correspondingly contained more baseload supply sources than it otherwise would without this large, consistent-use customer. To address this loss of load in late calendar year 2026 and thereafter, we expect to purchase less overall energy in our short-term hedging program and our transaction activity within the program will include less baseload supply resources. On a longer-term basis for our energy purchases, this effect will continue but the impact is expected to be less pronounced as other factors beyond the departure of GF, like beneficial electrification and continued growth in distributed solar generation, are expected to create increases in our long-term energy requirements and overall level of hedging activity, offsetting the effects of GF's exit.

The loss of the GF load starting in late calendar year 2026 will impact our capacity procurement in similar ways. In this case, the change in procurement will follow the reduction in GMP obligations in the capacity market that are currently associated with GF peak annual demand coincident with the ISO peak. Historically, GMP has been buying approximately 15–25% of our expected future obligations from the annual ISO New England forward capacity auctions and short duration capacity hedge transactions. In the short term soon after GF's typical peak contributions toward future capacity obligations of between 55–60 MW are no longer GMP's responsibility, we would expect that our use of the short-term market to drop correspondingly, and our unhedged capacity position

would also drop to roughly 7–15% of our upcoming future need as a larger share of our remaining obligation will be met by long-term committed resources. However, in the longer term, the retirement of GMP's remaining aging fossil fuel peaking facilities (e.g., Rutland GT, Berlin) will increase capacity procurement requirements from today's levels even when GF capacity obligations are no longer present.

There will be some limited impacts to GMP RES compliance planning starting after 2026 due to the reduction in requirement associated with each RES program goal. GMP compliance planning and procurement would reflect this lower requirement; however, because of the very different supply profiles within each RES program tier, we expect any reduced procurement activity to be limited to the Tier 1 category. These limited Tier 1 reductions likely would come out of GMP's short-term REC transactions. Moreover, we would still expect to maintain our accelerated progress toward the overall RES renewable requirements and our own goals which currently exceed RES requirements. For Tier 2 and 3, we do not have plans to change our current compliance activity and planning.

b. GMP's projected annual Tier 3 requirements will decrease by approximate 9–10% on average after the Transition Period. However, GMP presently exceeds Tier 3 requirements; given climate and related goals, Tier 3 requirements may change in the interim, and regardless GMP expects to continue to invest in carbon reducing programs for the benefit of customers. GMP's average cost for Tier 3 measures is currently about $35/MWH. This would result in a reduction of about $1.1M of Tier 3 procurement expense once GF's load has shifted out of GMP's obligation in 2027 and continuing annually following our Tier 3 obligation. Please see Attachment Q.PUC.GMP.1.1.b.

c. If the petition is approved, no changes will be made to GMP's Standard Offer/PURPA purchase obligations during the Transition Period, and consistent with GMP's Memorandum of Understanding with other Vermont Distribution Utilities ("Vermont Distribution Utility MOU," or Exh. GMP-JC-2), GMP will continue to treat the energy and capacity delivered to GF as part of its annual load for purposes of its obligations under Chapter 89 of Title 30 during this period. GMP also will continue to cover any obligations related to Baseload Renewable Standard Offer in the event that program is extended, up to ten years. *See* Exh. GMP-JC-2 at ¶ 5(a). Following the Transition Period, removal of GF's energy and capacity sales will result in an approximately 9.5% drop in GMP annual retail sales, which would decrease GMP's PURPA and Standard Offer purchase requirements from approximately 83.2% to 81.8%. This would proportionally increase the other Distributed Utilities' purchase requirements from approximately 16.8% to 18.2% of the total, as would also be the case if GF were to leave the state. These estimates are based on GMP's current 83.2% Standard

Offer share, GMP retail sales of 4.1 million MWh, and GF sales of 390,000 MWh. Please see A.PUC.GMP.1.1.d below for an estimate of the financial impact related to Standard Offer.

d. As noted in A.PUC.GMP.1.1.c above, GMP estimates about a 1.4% (nominal) drop in its Standard Offer/PURPA share after the Transition Period. Assuming an average net decremental cost of $100/MWh +/- (after considering energy, capacity, and REC values), GMP's obligation would decrease by approximately $260,000+/- per year after the termination of Ryegate's projected contract extension (noting that a two-year extension passed the Legislature in Senate Bill 1 and awaits Governor review, that further extension may occur, and that the Vermont Distribution Utility MOU states that in the event of an extension, "GMP will agree to continue to receive its Baseload renewable power allocation with GF's load obligation included for the period of that statutory extension up to ten years"). This amount would offset revenue losses GMP otherwise will experience once GF is no longer a customer, and would shift to the other utilities in the event that load shares otherwise remained the same. GMP notes that this would also occur in the event that GF were to leave the state.

e. Based on the retail revenue decrease of $35,400,872, as shown in Exh. GMP-SRA-2 – GMP Financial Analysis, the current Gross Receipts Tax Rate of 0.525%, and the current Gross Fuel Receipts (Weatherization) Tax Rate of 0.50%, the amount of gross revenue tax paid by GMP would decrease by $362,859 once GF no longer is a Rate 70 customer of GMP. However, while the purchase power agreement between GMP and GF is pending in this proceeding, the Term Sheet calls for GF to receive all energy and capacity from GMP for a period of four years. Those purchase power payments made by GF are expected to be included in Commercial and Industrial revenue at a rate range of $48.20 per MWh—$52.50 per MWh. Therefore, during the Transition Period GMP would pay gross operating revenue tax of between $191,736 and $208,841, using normal forecasted GF sales. We also anticipate the Transition Fee, received during the four-year period, will be booked to FERC Account 456 – Other Electric Revenues and will be subject to the Gross Receipts tax only. Based on the range of transition fee dollars ($6.0M–$1.6M) the decrease associated with lost retail revenue from GF would be offset between $31,500 and $8,400.

f. The Energy Assistance Program ("EAP") is funded from meter fees that are collected from GMP's retail customer classes by meter. As a Rate 70 customer, GF now pays $55.50 per month into the EAP fund. When GF ceases to be a Rate 70 customer (at the conclusion of their term contact), they will not be obligated to contribute to this program. The approximately $666.00/year effect on EAP customers is small and manageable in the context of annual changes we have in customer contributions to this program.

g. In addition to the items above, Schedule 21-GMP network and point-to-point transmission costs to distribution utilities and generation facilities would change if GF's load is removed from GMP's service territory. Charges to these entities are based on a ratio of the customer's load and GMP's total load. To the extent the GMP total load is reduced, the customer's ratio increases. Consistent with the Vermont Distribution Utility MOU, costs from this wholesale transmission tariff would change only after the transition period starting in GMP FY2027, when GF's load is no longer considered part of GMP's total load. These costs would also change in the event GF were to exit Vermont. Given the many moving parts, such as other exiting/entering customers for GMP and shifting loads etc., estimating the exact impact in 2027 is not practicable. Nonetheless, for illustrative purposes, if the GF load were removed from the current year forecast, the total dollar increase would be approximately $300,000. The impact on the various Schedule 21 users would vary individually, but the range of increase would likely be between 8.1% and 10.7%.

Person/s Responsible for Response: (a) Chris Cole (Director, Market Operations); (b) Josh Castonguay (VP, Chief Innovation and Engineering Executive); (c) Chris Cole (Director, Market Operations); (d) Chris Cole (Director, Market Operations); (e) Scott Anderson (Manager of Rates) & Karen Young (Budget/Forecasting Supervisor); (f)–(g) Scott Anderson (Manager of Rates)
Title of Person/s: See parentheticals above
Date: May 17, 2021

Q.PUC.GMP.1.2. Did GMP prepare a financial analysis of a scenario under which GlobalFoundries remains in GMP territory and is not granted an extension or successor to the current special contract? If so, please provide it to the Commission along with the estimated rate impact of that scenario.

A.PUC.GMP.1.2. GMP did not prepare a financial analysis of a scenario under which GF remains in GMP territory and is not granted an extension or successor to the current special contract. Given the historical context in which both GF and its predecessor IBM have been granted rate accommodations, and GF's representations about its intentions to relocate existing manufacturing to other available alternative locations outside of the state absent greater control over its power purchases, we did not view this hypothetical as a reasonable or likely outcome for a point of comparison. Moreover, it would depend upon several variables, including continued rate design or any changes thereto, load levels, ability to serve through onsite generation or other behind-the-meter load shifting techniques, and GMP's rates, among others.

Person/s Responsible for Response: Scott Anderson
Title of Person/s: Manager of Rates
Date: May 17, 2021

Q.PUC.GMP.1.3. Please provide the underlying workbooks, in native format, for exhibit GMP-SRA-2.

A.PUC.GMP.1.3. See Attachment Q.PUC.GMP.1.3.

Person/s Responsible for Response: Scott Anderson
Title of Person/s: Manager of Rates
Date: May 17, 2021

Q.PUC.GMP.1.4. Referencing Exhibit GMP-SRA-2:

a) Under Scenario 1, please explain why GMP assumes that the Total Contract Revenue would increase in FY 2024 and then remain constant at FY 2023 levels through FY 2033. Would GMP expect to see the contract revenue increase as power costs increase? Similarly, under Scenarios 2 and 3, why does GMP assume that Loss of Revenue would increase in FY 2024 and then remain constant at FY 2023 levels for the remainder of the analysis period?

b) Please explain why the amounts of "Avoided Capacity Costs" for FY 2024, FY 2025, and FY 2026 are less than the amount for FY 2023.

c) Exhibit GMP-SRA-2 identifies approximately $16.2 million in power supply savings beginning in 2023. Please discuss the timing of GMP's energy and capacity contracts and resources regarding the 2023 timeline. Will GMP contracts or resources to supply $16.2 million in energy and capacity expenses expire in or around 2023? Will the projected $16.2 million in power supply savings be available immediately in 2023, or will GMP need to resell power supply products at a potential gain or loss?

d) Exhibit GMP-SRA-2, Scenario 2, footnote 1, states that Avoided Vermont Transmission Agreement ("VTA") costs are "reduced slightly" due to statewide reallocation. Please explain how the statewide reallocation of VTA would affect other Vermont utilities. Not accounting for the make-whole payments proposed in the Transmission MOU, please provide an estimate of the amount by which the other Vermont utilities' pro-rata share of the Vermont Transmission Agreement costs would increase.

A.PUC.GMP.1.4.

a. In Exh. GMP-SRA-2 Scenario 1, the Total Contract Revenue increases in FY2024 due to short-term recognition of increased sales due to an additional leap year day in February 2024. Sales levels returned to FY2023 levels for the remainder of the years forecast. GMP's rationale for modeling this baseline scenario at current frozen term contract rates is discussed on line 8, page 4 through line 22, page 5 of Scott R. Anderson's direct testimony. This scenario demonstrates the difficulty of continuing a rate freeze solution to GF's departure predictions as future power costs are unknown and subject to increase. Under normal circumstances, GMP would expect to see revenue from the customer increase as power costs increased through the traditional cost of service-based increases. However, as noted by Mr. Rieder in his testimony, the current Term Contract "does not provide the relief necessary to provide direct control that may allow us to reduce the competitive disadvantage facing the Vermont plant," and "[i]f the Self-Managed Utility is not approved, there is a significant likelihood that [GF] will have no choice but to

shift its operations to more competitively advantageous sites outside of Vermont." (Rieder at 16–17 and 34–35).

With respect to Scenarios 2 and 3, the same FY2024 leap year near-term forecast issue causes the small increase in Loss of Revenue, and the same assumption is made for the ensuing years. That is, rates are assumed to be frozen due to the risk of GF's immediate departure from the state if GF's rates increase as a retail customer of GMP.

b. GMP purchases a portion of its capacity needs through the Forward Capacity Market ("FCM") administered by the ISO. Forward Capacity Auction ("FCA") prices are known and are decreasing over the next couple (June–May) years, after which GMP projects them to increase, as follows:

2022-2023: $3.80/kW-month (FCA 13)

2023-2024: $2.00/kW-month (FCA 14)

2024-2025: $2.61/kW-month (projected)

2025-2026: $3.50/kW-month (projected)

The combination of the FCA price trend and the expiration of a bilateral capacity purchase with higher than projected prices in May 2023 result in the FY2024 cost drop followed by the annual increases thereafter.

c. If the SMU is approved, GMP will continue to supply energy and capacity to GF through FY2026, so there will be no material projected change in GMP's resource requirements during that period. Beginning in FY2027, GMP's MWh load requirement will decrease by about 400,000 MWh. In that year, approximately a net 303,000 to 440,000 MWh of committed energy supply (purchases) will have expired/terminated relative to FY2022. (This includes 762,000 MWh of bilateral forward purchase, offset by an addition of 270,000 MWh of Great River Hydro, 136,000 MWh of new Net-Metered, and about 66,000 MWh of net other, and a possible decrease of around 137,000 MWh of Ryegate (presently subject to a two-year extension bill pending Governor review)). Also, as GMP purchases a significant portion of its capacity requirement through the ISO FCM market, the portion of that related to GF load will transfer to GF—essentially a 100% transfer and cost reduction (priced at the then-effective FCM rate). Similarly, any other load-based products purchased through the ISO in the same manner as FCM will also transfer to GF.

To the extent that GMP has a new (or larger than otherwise would be experienced) surplus of power-related products due to GF no longer being a retail Rate 70 customer of GMP, GMP would resell them.

d. All Vermont distribution utilities are participants in the 1991 Vermont Transmission Agreement ("91 VTA"), and are billed through that structure. GF is not and will not be a part of the 91 VTA, and will be billed through the VELCO Local Network Service tariff, which (all other things equal) would yield a change in the amount(s) that other Vermont Distribution Utilities would pay (and also a decrease in the amount GMP pays, though GMP also will not be receiving revenue from GF after the transition period so this is not a net 'benefit' to GMP customers). Attachment Q.PUC.GMP.1.4.1 is GMP's estimated/projected cost changes for Vermont Distribution Utilities for FY2023 for the scenario in which GF leaves Vermont; see also Attachments Q.PUC.GMP.1.4.2 and Q.PUC.GMP.1.4.3,[1] which shows VELCO's projections as provided to all Distribution Utilities with regard to the make whole payment.

Person/s Responsible for Response: Scott Anderson (a) and Chuck Watts (b)–(d)
Title of Person/s: Manager of Rates; Power Supply Analyst
Date: May 17, 2021

[1] This document was originally marked Confidential but GMP has confirmed that VELCO no longer considers it to be confidential.

Q.PUC.GMP.1.5. Please provide the net book value for each asset listed on exhibits MOU-3, MOU-4, and MOU-5.

A.PUC.GMP.1.5. Please see Attachment Q.PUC.GMP.1.5 for the net book value for the assets listed in Exh. GMP-JC-1 exhibits MOU-3 and MOU-5. For MOU-4, GMP understands from GF that the net book value for the Williston Substation and equipment to be transferred to GMP is approximately $3,335 as of February 2021, but this amount will likely decrease by the time of the transfer in 2022.

Person/s Responsible for Response: Josh Castonguay and Matt Haley
Title of Person/s: VP, Chief Innovation and Engineering Executive; Manager of Fixed Assets and Fleet
Date: May 17, 2021

Q.PUC.GMP.1.6. Are there any assets located in the proposed new self-managed utility service territory, including net-metered or other generation assets, in which GMP has made any capital investments or provided other material support?

A.PUC.GMP.1.6. Yes, based on reasonably available GMP records from the past several years, GMP recently replaced a 115kV transmission structure that feeds the GF substation due to its proximity to the river. This capital improvement will be included in the Net Book Value of the Transmission assets when they are transferred to VELCO. There are no net-metered or other generation assets in which GMP has made any capital investments or provided other material support in the territory proposed to be excluded from GMP's service territory, except for GMP's investment in a Tier 3 project to help GF cease use of #6 Fuel Oil. That specific project included a cost share between GMP and GF for electrical components required for the fuel conversion, including high efficiency fuel pumps, fuel pump control systems, and a cathotic protection system.

Person/s Responsible for Response: Josh Castonguay
Title of Person/s: VP, Chief Innovation and Engineering Executive
Date: May 17, 2021

Q.PUC.GMP.1.7. What is the intended rate treatment of assets represented on exhibit MOU-3? Would those items be added to VELCO rate base? If so, would they be added at current net-book-value or some other value? Would the value of these assets be eligible for collection through regional network service (RNS) or would they be added to Local Network Service (LNS) component?

A.PUC.GMP.1.7. GMP contacted VELCO regarding this request, and understands from Michele Nelson at VELCO that the assets that are acquired from GMP will be added to VELCO's plant records at net book value. Ms. Nelson indicated that they are non-pooled transmission assets so they will be added to the Local Network Service ("LNS") Schedule 21 of the tariff and the '91 Vermont Transmission Agreement. GMP further understands that these assets would not be eligible for collection through regional network service ("RNS").

Person/s Responsible for Response: Josh Castonguay
Title of Person/s: VP, Chief Innovation and Engineering Executive
Date: May 17, 2021

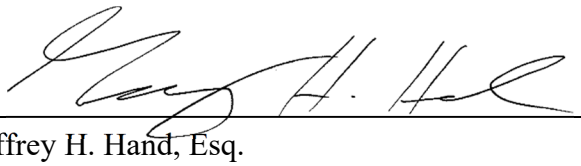
Q.PUC.GMP.1.8. What is the intended rate treatment of assets represented on exhibit MOU-4? Would those items be added to rate base? If so, would they be added at current net-book-value or some other value?

A.PUC.GMP.1.8. The assets in Exh. GMP-JC-1 exhibit MOU-4 will be added to GMP's rate base at net book value when purchased from GF.

Person/s Responsible for Response: Josh Castonguay
Title of Person/s: VP, Chief Innovation and Engineering Executive
Date: May 17, 2021

Dated at Burlington, Vermont this 17th day of May, 2021.

As to Objections:



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Attorneys for Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Rutland, Vermont this 11th day of May, 2021.

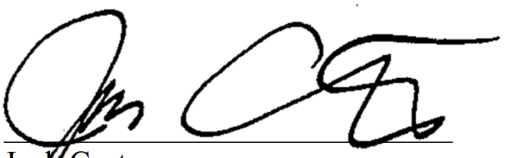
Respondent Signature

By: _____
Scott Anderson
Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Colchester, Vermont this 11th day of May, 2021.

Respondent Signature

By: 

Josh Castonguay
Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Colchester, Vermont this 14 day of May, 2021.

Respondent Signature

By: 

Chris Cole
Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Rutland, Vermont this 13 day of May, 2021.

Respondent Signature

By: _____
Matt Haley
Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Rutland, Vermont this 11th day of May, 2021.

Respondent Signature

By: _____
Chuck Watts
Green Mountain Power

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Rutland, Vermont this 14th day of May, 2021.

Respondent Signature

By: _____
Karen Young
Green Mountain Power