Maine Public Utilities Commission

Interconnection Update to the EUT Committee April 6, 2023 Philip L. Bartlett II, Chair



Versant Power Projects – Level 4

Versant Power Interconnection Queue

Application Year

2018 2019 2020 2021 2022 Total

| Applied | | | | | | |
|-------------------------------|------|-------|-------|------|------|-------|
| Number of Projects | | 3 | 9 | 10 | 47 | 69 |
| Total Nameplate Capacity (MW) | | 6.0 | 28.7 | 21.3 | 60.3 | 116.3 |
| Executed IA | | | | | | |
| Number of Projects | 1 | 27 | 57 | 30 | 6 | 121 |
| Total Nameplate Capacity (MW) | 5.0 | 113.4 | 160.9 | 59.1 | 8.4 | 346.7 |
| Complete | | | | | | |
| Number of Projects | 1 | 10 | 1 | | | 12 |
| Total Nameplate Capacity (MW) | 5.0 | 38.0 | 0.1 | | | 43.1 |
| All Projects | | | | | | |
| Number of Projects | 2 | 40 | 67 | 40 | 53 | 202 |
| Total Nameplate Capacity (MW) | 10.0 | 157.3 | 189.8 | 80.3 | 68.7 | 506.1 |

As Reported on 2/17/2023

CMP Project History – Level 4

| CMP Interconnection Queue | | | Application | Year | | | |
|-------------------------------|------|-------|-------------|-------|-------|------|---------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Applied | | | | | | | |
| Number of Projects | | 3 | 25 | 12 | 47 | 18 | 105 |
| Total Nameplate Capacity (MW) | | 11.0 | 79.2 | 38.8 | 99.1 | 17.4 | 245.4 |
| Executed IA | | | | | | | |
| Number of Projects | | 117 | 166 | 40 | 19 | | 342 |
| Total Nameplate Capacity (MW) | | 500.3 | 519.1 | 99.9 | 25.1 | | 1,144.3 |
| Complete | | | | | | | |
| Number of Projects | 6 | 59 | 10 | | | | 75 |
| Total Nameplate Capacity (MW) | 32.7 | 232.8 | 38.8 | | | | 304.2 |
| Withdrawn | | | | | | | |
| Number of Projects | | 113 | 125 | 18 | 10 | | 266 |
| Total Nameplate Capacity (MW) | | 0.0 | 28.2 | 1.8 | 3.9 | | 33.9 |
| All Projects | | | | | | | |
| Number of Projects | 6 | 292 | 326 | 70 | 76 | 18 | 788 |
| Total Nameplate Capacity (MW) | 32.7 | 744.0 | 665.2 | 140.4 | 128.2 | 17.4 | 1,728.0 |

As Reported on 2/27/2023

CMP Cluster Study Status

| Active Cluster Projects | | | | | | | | | | |
|--|-------------------------|-------------------|--------------------|-------|-------------------------|---|--|-----------------------------|--|--|
| Cluster Name | Cluster Entry Closed | Study Projects | Active Projects | MW | Active Project M₩ | Current Milestone | Overall Project Percent Complete | I.3.9 Approval Target | | |
| Cluster 03 - Kimball Rd-Lovell - 1 | 1/1/2021 | 23 | 22 | 80.6 | 80.0 | 6-Report Development | 90.00% | Mar-23 | | |
| Cluster 06 - Detroit-Guilford-Belfast - 1 | 2/1/2021 | 29 | 27 | 105.9 | 104.5 | 6-Report Development | 95.00% | Mar-23 | | |
| Cluster 07 - Raymond - 1 | 3/1/2021 | 13 | 13 | 51.1 | 51.1 | 5-PSCAD | 70.00% | Apr-23 | | |
| Cluster 08 - Sturtevant-Leeds-Livermore-Ludden-Riley - 1 | 3/1/2021 | 7 | 7 | 22.6 | 22.6 | 5-PSCAD | 70.00% | Apr-23 | | |
| Cluster 09 - Midcoast - 1 | 6/1/2021 | 15 | 15 | 49.4 | 49.4 | 4-Mitigations Identified & Analysis Completed | 60.00% | Mar-23 | | |
| Cluster 10 - Roxbury-Rumford-Woodstock - 1 | 5/1/2021 | 5 | 4 | 7.5 | 6.5 | 5-PSCAD | 70.00% | Apr-23 | | |
| Cluster 11 - Augusta E-Puddledock-Bowman St - 2 | 6/1/2021 | 11 | 10 | 33.5 | 32.5 | 4-Mitigations Identified & Analysis Completed | 60.00% | Jun-23 | | |
| Cluster 12 - Winslow-County Rd-Lakewood - 2 | 7/1/2021 | 8 | 8 | 27.9 | 27.9 | 4-Mitigations Identified & Analysis Completed | 60.00% | Jun-23 | | |
| Cluster 13 - Kimball Rd-Lovell - 2 | To Be Closed | 6 | 4 | 11.9 | 10.5 | Pending Cluster Entry Closure | 5.00% | | | |
| Cluster 14 - Louden-Biddeford IP - 1 | 7/1/2021 | 4 | 3 | 12.3 | 11.4 | 4-Mitigations Identified & Analysis Completed | 45.00% | May-23 | | |
| Cluster 15 - Greater Portland - 1 | 8/1/2021 | 6 | 5 | 18.1 | 17.2 | 4-Mitigations Identified & Analysis Completed | 45.00% | May-23 | | |
| Cluster 16 - Wyman Area - 1 | 10/1/2021 | 3 | 1 | 4.0 | 2.0 | 6-Report Development | 85.00% | Mar-23 | | |
| Cluster 17 - Detroit Guilford Belfast - 2 | To Be Closed | 31 | 22 | 76.9 | 73.9 | Pending Cluster Entry Closure | 5.00% | | | |
| Cluster 18 - Lewiston Loop - 2 | To Be Closed | 11 | 9 | 26.8 | 24.8 | Pending Cluster Entry Closure | 5.00% | | | |
| Cluster 19 - Sanford-Quaker Hill - 2 | To Be Closed | 10 | 9 | 17.9 | 17.9 | Pending Cluster Entry Closure | 5.00% | | | |
| | Total: | 182 | 115 | 413.0 | 405.3 | | | | | |

- 15 cluster studies comprised of 115 active projects and totaling 405 MW are underway or slated to commence.
- Cluster Entry Closed column indicates when CMP stopped accepting projects to be included in the cluster study.
- "To be closed" means that the cluster window is still accepting projects and has not closed. Study process only begins once the cluster window has closed.

Source: CMP D&G Cluster Study Workshop 2/23/2023

Stranded Cost: Net Energy Billing Forecast

CMP

| | | Rate Year 1 | | Rate Year 2 | ı | Rate Year 3 | | te Year 3 arch 2022 | (De Cur | ncrease crease) to rent Rate Year 3 |
|--------------------------|----|--------------|----|--------------|----|---------------|-----|------------------------|------------|--|
| | (N | March 2023 - | (n | March 2024 - | (N | /larch 2025 - | - F | ebruary | R | evenue |
| | Fe | bruary 2024) | Fe | bruary 2025) | Fe | bruary 2026) | | 2023) | Rec | uirement |
| NEB Tariff Rate | | | | | | | | | | |
| Bill Credits | \$ | 100,511,252 | \$ | 136,654,443 | \$ | 158,348,226 | | | 10 | 0,511,252 |
| Revenues | | (32,449,283) | | (45,372,603) | | (53,386,074) | | | (3 | 2,449,283) |
| NEB Tariff Rate Subtotal | \$ | 68,061,969 | \$ | 91,281,840 | \$ | 104,962,152 | | | 6 | 8,061,969 |
| NEB kWh Netting Program | \$ | 9,875,633 | \$ | 14,671,502 | \$ | 19,467,371 | | | 9 | 9,875,633 |
| NEB Capacity Revenue | \$ | (111,349) | \$ | (56,612) | \$ | (29,335) | | | | (111,349) |
| NEB Administrative Costs | \$ | 450,000 | \$ | 463,500 | \$ | 477,405 | \$ | 248,374 | \$ | 201,626 |
| Total Net Energy Billing | \$ | 78,276,253 | \$ | 106,360,230 | \$ | 124,877,593 | \$ | 248,374 | \$7 | 8,027,879 |

Docket 2022-00341

Versant Power

| | Rate Year 1 (March 2023 - | Rate Year 2 (March 2024 - | Rate Year 3 (March 2025 - | Rate Year 3 (March 2022 - February | Increase (Decrease) to Current Rate Year 3 Revenue |
|----------------------------------|------------------------------|------------------------------|------------------------------|--|--|
| внр | • | • | February 2026) | | Requirement |
| NEB Tariff Rate Program Expenses | 32,974,120 | 39,485,351 | 40,805,747 | 5,672,835 | 27,301,285 |
| NEB Resale Revenue | (10,323,503) | (11,925,759) | (13,034,449) | (4,419,641) | |
| NEB lost kWh | 7,276,133 | 11,846,530 | 12,079,184 | 397,224 | 6,878,909 |
| NEB Admin Costs | 110,913 | 114,241 | 117,668 | 107,726 | 3,188 |
| Net NEB Costs | \$ 30,037,663 | \$ 39,520,363 | \$ 39,968,150 | \$1,758,143 | \$28,279,520 |
| MPD | | | | | |
| NEB Tariff Rate Program Expenses | 22,303,581 | 29,249,407 | 29,948,765 | 2,145,269 | 20,158,312 |
| NEB Resale Revenue | (7,539,885) | | | | |
| NEB lost kWh | 1,141,582 | 1,529,357 | 1,758,919 | 560,665 | 580,917 |
| NEB Admin Costs | 38,862 | 40,028 | 41,229 | 37,745 | 1,117 |
| Net NEB Costs | \$ 15,944,140 | \$ 20,928,354 | \$ 21,887,391 | \$ 306,415 | \$15,637,725 |

Docket 2022-00356

Rulemaking – Docket No. 2021-00167

- Chapter 324 was last amended in December 2021. *Maine Public Utilities Commission, Amendments to Small Generator Interconnection Procedures Rule (Chapter 324)*, Docket No. 2021-00167, Order Amending Rule and Statement of Factual and Policy Basis (Dec. 21, 2021).
 - The amended rule declined to decrease the size of Level 2 projects (the NOR had proposed reducing from 2 MW to 500 kW).
 - The amended rule also defined "Aggregated Generation," which is used when screening projects. The rule defined "aggregated generation" to include all existing generation, generation from the proposed generator, and projects that have paid 100% of construction costs. A footnote in the Order Adopting Rule had stated that these costs would include both distribution and transmission costs, but the rule itself just referred to "interconnection-related costs attributable to it, including costs for studies, distribution facilities, system upgrades, metering, and other items which the ICGF has cost responsibility." Ch. 324, § 2(A).
 - The Commission declined to add a specific definition of "automatic sectionalizing device" due to the need for this issue to be more fully developed.

LD 1100 Related Activities and Requirements

- Pursuant to "An Act To Support the Continued Access to Solar Energy and Battery Storage by Maine Homes and Businesses" (L.D. 1100), the Commission engaged the IREC to evaluate Maine's procedures and practices to ensure solar and storage projects that serve a customer's own electricity needs are interconnected efficiently and without bearing costs for distribution grid upgrades.
- The Commission originally contracted with IREC in February 2022, resulting in the "IREC Report" issued in Docket No. 2022-00071.
- Section 2(1) of L.D. 1100 requires that the Commission ensure that for projects that install onsite solar generation and battery storage "to offset a customer's electrical consumption," interconnection costs be limited to Interconnection Facility upgrades and not Distribution Upgrades.
- Further, Section 2(3) of L.D. 1100 requires that the Commission ensure that such eligible facilities "do not bear prohibitive costs" for their projects to be studied and connected to the system.

Current Rulemaking Status

• Notice of Inquiry – Docket No. 2022-00345

- o The Commission issued a Notice of Inquiry on December 5, 2022. The NOI included a draft rule and requested comments from parties. The purpose of the Inquiry was to seek additional comments on the requirements of L.D. 1100 and proposed solutions for "leap-frogging."
- These issues will be addressed in the next rulemaking.

• Aggregated Generation Issues

- O Since the last rulemaking, the T&D utilities and Level generators have complained of "leap-frogging." Because Level 2 projects are meant to be "fast-tracked," and Level 4 projects cannot be counted as "aggregated generation" unless they pay their distribution costs (and the projects ahead of it in the queue do as well), the quick addition of Level 2 projects means that some Level 4 projects that have already undergone study and have an interconnection agreement can be required to be restudied.
- O Versant also raised the issue of cost allocation among Level 2 projects in its Request for Advisory Ruling in Docket No. 2022-00230. There, Versant noted that there is no cost sharing provision for Level 2 projects. However, if multiple Level 2 projects are being screened separately, they may pass individually, but in aggregate, cause a need for major upgrades.

Versant Small Project Interconnection Issue Resolution / Dispute Process

- Developers have raised issues regarding whether Versant is failing Level 1 and Level 2 projects due to overly conservative screening process.
- Commission staff is working with IREC to facilitate resolution of issues between Versant and the developers.
- Issues being addressed include some of the following:
 - Whether Versant is passing Level 1 and Level 2 projects, only to then do a site visit and determine additional upgrades are needed to pass.
 - Some developers have argued that the way Versant interprets "line section" and "automatic sectionalizing device" means that projects that should pass pursuant to Ch. 324, are not passing.