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Withdrawn								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	м₩	Active Project M₩	Current Milestone	Overall Project Percent Complete	l.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

Versant Power

					Increase						Increase
					(Decrease) to						(Decrease) to
				Rate Year 3	Current Rate					Rate Year 3	Current Rate
	Rate Year 1	Rate Year 2	Rate Year 3	(March 2022	Year 3		Rate Year 1	Rate Year 2	Rate Year 3	(March 2022	Year 3
	(March 2023 -	(March 2024 -	(March 2025 -	- February	Revenue		(March 2023 -	(March 2024 -	(March 2025 -	- February	Revenue
	February 2024)	February 2025)	February 2026)	2023)	Requirement	BHD	February 2024)	February 2025)	February 2026)	2023)	Requirement
NEB Tariff Rate						NEB Tariff Rate Program Expenses	32,974,120	39,485,351	40,805,747	5,672,835	27,301,285
Bill Credits	\$100,511,252	\$136,654,443	\$ 158,348,226		100,511,252	NEB Resale Revenue	(10,323,503)	(11,925,759)	(13,034,449)	(4,419,641)	(5,903,862)
Revenues	(32,449,283)	(45,372,603)	(53,386,074)		(32,449,283)	NEB lost kWh	7,276,133	11,846,530	12,079,184	397,224	6,878,909
NEB Tariff Rate Subtotal	\$ 68,061,969	\$ 91,281,840	\$104,962,152		68,061,969	NEB Admin Costs	110,913	114,241	117,668	107,726	3,188
NEB kWh Netting Program	\$ 9,875,633	\$ 14,671,502	\$ 19,467,371		9,875,633	Net NEB Costs	\$ 30,037,663	\$ 39,520,363	\$ 39,968,150	\$1,758,143	\$28,279,520
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	\$78,027,879	MPD					
						NEB Tariff Rate Program Expenses	22,303,581	29,249,407	29,948,765	2,145,269	20,158,312
Docket 2022-00341						NEB Resale Revenue	(7,539,885)	(9,890,438)	(9,861,521)	(2,437,264)	(5,102,621)
DUCKET 2022-00341						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
 - 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.
- <u>Aggregated Generation Issues</u>
 - 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.
 - 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.