

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENERGY**

GREAT LAKES HYDRO AMERICA, LLC

**MIS 2024-001 Great Lakes Hydro America, LLC
Proposed Process for Determining Generation Eligible for Participation
in Net Energy Metering Pursuant to RSA 362-A:9, XX**

Order Approving Proposal with Condition

In this Order, the Department of Energy (Department) approves a proposed process submitted by Great Lakes Hydro America, LLC (GLHA) for determining generation eligible for participation in net energy metering pursuant to RSA 362-A:9, XX. The approval is with condition, as described in this Order. The proposal and other filings and documents related to this matter, other than any information for which confidential treatment has been requested of, or granted by, the Department, are posted on the Department's website under the docket MIS 2024-001.¹

I. DEPARTMENT REVIEW AND INPUT FROM OTHERS

RSA 362-A:9, XX allows certain hydroelectric generators to participate in net metering without being a customer of an electric utility. To qualify, an eligible generator must first submit a proposed metering and billing process and methodology to the Department and the relevant utility prior to July 1, 2024.

A. GLHA's Proposal

¹ Proposed Process of GLHA for Determining Generation Eligible for Participation in Net Metering Pursuant to RSA 362-A:9, XX. The proposal can be found in the following link on the Department's website: [Miscellaneous Proceedings | NH Department of Energy](#)

On August 16, 2023, GLHA submitted a proposal to the Department and Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource) under RSA 362-A:9, XX. GLHA owns and operates six hydroelectric generating facilities on the Androscoggin River near Berlin and Gorham, New Hampshire. A GLHA-owned electrical system connects these facilities to each other and to the White Mountain Paper (WMP) Cascade Paper Mill (WMP Mill). The GLHA facilities supply the WMP Mill's full load requirements. Any excess energy produced by the GLHA hydroelectric facilities is exported to the electric grid through a single point of interconnection with Eversource's distribution system. WMP is Eversource's customer account of record at the point of interconnection with the distribution system.

GLHA proposed a process by which it would sequence the allocation of generation of the six hydroelectric facilities, including the two facilities ineligible for net metering, to first serve the full electrical energy requirements, determined by actual electric load, of the WMP Mill.² Once those requirements are met, any excess generation produced by the four eligible facilities would be eligible for net metering compensation under the applicable tariff.

To provide the necessary billing determinants for their proposed net metering arrangement, GLHA proposed to use hourly meter data to calculate the excess energy exported to the grid from each eligible hydroelectric facility after serving the WMP Mill's load. The proposed calculations would exclude generation from the two ineligible hydroelectric facilities, energy used to serve the load of the Mill, and energy flowing to and from the BESS battery storage facility from the energy eligible for net metering compensation. As proposed, these calculations would be done on a monthly basis, and GLHA would receive compensation from Eversource at the applicable net metering tariffed rate.

² Id. at 4-5.

B. Department Staff Review

The staff of the Department reviewed the proposal and engaged in discussions with GLHA, Eversource, and WMP regarding the proposed process. Department staff considered whether the GLHA proposal met the statutory eligibility requirements as well as the proposed process for metering and billing the energy produced by GLHA's four eligible generating facilities. The staff collected details related to the geographic layout of the generating facilities, including the distances between the facilities and the WMP Mill and its interconnection point with Eversource's distribution system. Department staff used the information to develop a model to test the energy-flow assumptions and the process for calculating energy eligible for net metering credits in the proposal.

During its review of the proposal, the Department staff met several times with GLHA and Eversource to collect information and share observations. The staff identified several details needed for approval of the proposal, which GLHA and Eversource agreed to memorialize and provide to the Department in an appendix to the original proposal. On April 11, 2024, Department staff filed a report detailing its review and analysis of the proposal; discussions with GLHA, Eversource, and WMP; and recommendation. That report is attached to this order and incorporated by reference. The Department staff recommended approval of the proposal, subject to the condition that GLHA and Eversource submit an appendix to GLHA's original proposal which addresses the following outstanding, statutory requirements:

- 1) Additional details regarding billing determinants to be provided to Eversource on a monthly basis necessary for Eversource's billing of WMP and net metering compensation to GLHA;
- 2) Details of methodology by which GLHA and Eversource will ensure that only "single compensation" occurs for capacity and energy related to eligible net metered energy;
- 3) Specifics of loss factors to be used in metering calculations;
- 4) Acknowledgement by GLHA that the Department can request audits of documentation and records relating to metering details used for calculation of eligible net metering costs; and
- 5) An explanation from Eversource for proposed collection of incremental costs for any necessary manual billing.

C. White Mountain Paper

WMP is the electric utility customer account of record with Eversource. In its discussions with the Department staff, WMP communicated it had reviewed the proposal and had no concerns.

D. Eversource

The Department staff's discussions with Eversource focused on logistical and technical aspects of the proposed metering and billing methodology from the perspective of the utility. After its discussions with Eversource, the Department staff was satisfied that the general approach is reasonable. The Department raised some logistical considerations with Eversource, which Eversource is now coordinating with GLHA to develop through the appendix to the

original proposal. Eversource indicated general satisfaction with the methodology subject to resolution of the details Department staff requested.

II. ANALYSIS

A. Threshold Eligibility

Notwithstanding any provision of law to the contrary, certain hydroelectric generators are eligible to participate in net energy metering as a customer-generator even if they are not a utility customer. According to the statute, RSA 362-A:9, XX, such a hydroelectric generator must meet the following criteria:

- 1) Total peak generating capacity that is at or below the capacity eligibility requirements set forth in RSA 362-A:1-a, II-b³;
- 2) First became operational before July 1, 2021;
- 3) Shares equipment or facilities with other generators, energy storage facilities, or electric utility customers for interconnection to the electric grid;
- 4) Was, at one time, owned by the current electric utility customer or a prior electric utility customer at the point of interconnection to the electric grid; and
- 5) Submit its initial proposed process and methodology, as described in RSA 362-A:9, XX, to the Department of Energy and the relevant utility prior to July 1, 2024.

³ RSA 362-A:1-a, II-b allows a total peak generating capacity of up to and including 1MW. RSA 362-A:1-a, II-c is an exception which allows a capacity of 1-5MW for municipal hosts. GLHA noted that it intends to register the four eligible facilities as municipal hosts.

Based on the Department staff's review of the proposal, the Department finds that GLHA's proposal meets all five threshold eligibility requirements outlined above.

RSA 362-A:9, XX provides that, "a hydroelectric generator shall be eligible to participate in net energy metering as a customer-generator based on the total peak generating capacity of each individual generating station." The four net metering-eligible generating stations included in the proposal each have a total peak generating capacity below 5MW, which is the maximum peak generating capacity eligible for net metering compensation. Such facilities need to register as municipal hosts pursuant to RSA 362-A:1-a, II-c, which GLHA has indicated it intends to do.

As required, the eligible generating facilities first became operational before July 1, 2021. Consistent with the statute, GLHA and the WMP Mill share equipment and facilities for interconnection to the electric grid.

A hydroelectric generator is eligible as a customer-generator, "as a matter of law without regard to whether such hydroelectric generator is the electric utility customer account of record at the point of interconnection to the electric grid, provided that [the] generator was, at one time, owned by the current electric utility customer or a prior electric utility customer at the point of interconnection to the electric grid and that such a hydroelectric generator that is not the electric utility customer account of record submits its initial proposed process and methodology described below to the department of energy and the relevant utility prior to July 1, 2024." The WMP Mill and the GLHA generating facilities were once owned by Pulp and Paper of America, LLC, which was at that time an electric utility customer of Public Service of New Hampshire⁴ at the point of interconnection to the electric grid.⁵ The WMP Mill and the generating facilities have since split into two separate entities with different ownership – GLHA and WMP. While

⁴ Public Service of New Hampshire is now Eversource.

⁵ GLHA Proposal at 2-3.

GLHA is no longer a utility customer at the point of interconnection to the electric grid, WMP remains a customer of Eversource at the point of interconnection to the electric grid.⁶

The Department finds and rules that GLHA's proposal meets the threshold eligibility criteria described above. Next, the Department turns to GLHA's proposed process and staff's review of it.

B. Proposed Process and Forthcoming Appendix

As described earlier, GLHA's proposal identified the four generating facilities that are eligible to receive net metering credit based on their rated size. It included some information about how energy from the generating stations flows to the WMP Mill, how it will be metered, and how GLHA will calculate the excess energy eligible for net metering credit. The proposal described using hourly meter data to calculate the amount of excess energy eligible for net metering compensation, which Eversource would then use to calculate the compensation due to GLHA under the appropriate net metering tariff.

Department staff rigorously reviewed GLHA's proposal and engaged GLHA, Eversource, and WMP in its analysis and resolution of concerns. In addition to confirming the eligibility of four GLHA generating facilities for net metering, staff carefully scrutinized the rationale and logic underlying, and the technical aspects of, the process proposed for calculating and compensating the excess energy eligible for net metering under the appropriate net metering tariff.

Staff identified billing determinant details that need to be resolved and memorialized before the proposed process goes into effect. For example, GLHA currently receives payments

⁶ Id. at 2.

for exported energy and generating capacity related to all six generating facilities from the regional transmission grid operator, ISO-NE, in its role as Lead Market Participant. The proposal was unclear about how that compensation would be used to offset the net metering compensation Eversource would be obligated to pay GLHA. Staff identified the possibility that, without clarification, GLHA could be doubly compensated - that is, by receiving payments from both Eversource and ISO-NE for the same energy.

As a result of staff's review and identification of missing detail, GLHA and Eversource have agreed to submit an appendix to the initial proposal to provide that additional detail consistent with Eversource's and GLHA's representations to Department staff, as outlined in the Department staff's recommendation. The details provided in the appendix will ensure that GLHA provides Eversource with the billing determinants necessary to ensure they are compensated accurately for excess energy exported to the grid by the eligible facilities, as required by RSA 362-A:9.

Under RSA 362-A:9, XX, as applied to this proposal, WMP may request audits (conducted by Eversource) of GLHA's meter reading and billing process, although not more frequently than annually. In addition, the Department may determine and authorize an audit (also to be conducted by Eversource) as needed. Staff further identified the value in the Department having the ability to also audit the information and calculations that will feed into the net metering credit calculations, and GLHA agreed and indicated that it fully expects to be subject to auditing by the Department. That additional feature of the process will protect utility ratepayers, who will pay the costs of the net metering credits to GLHA through Eversource's Stranded Cost Recovery Charge, consistent with how Eversource currently recovers costs for net metering payments. The forthcoming appendix will memorialize GLHA's consent to Department audits.

Finally, RSA 362-A:9, XX allows Eversource to recover incremental costs associated with the GLHA manual billing process from all utility customers. The Department understands that the appendix to be submitted by Eversource and GLHA will provide Eversource's proposal for recovery of any such incremental costs anticipated by Eversource.

C. White Mountain Paper

Pursuant to RSA 362-A:9, XX, the current electric utility customer account of record at the point of interconnection may identify its concerns, if any, regarding the proposed process. Here, WMP is the electric utility customer account of record, and it identified no concerns with the proposal.

D. Eversource

Pursuant to RSA 362-A:9, XX, the relevant electric utility must also approve the proposed process. GLHA must receive Eversource's approval before they are eligible to net meter. Because Eversource has agreed to memorialize and file additional details requested by Department staff in the forthcoming appendix, the Department expects that Eversource will approve GLHA's proposal.

E. Group Net Metering Eligibility

The Department notes that GLHA must submit group host registration applications to the Department and receive approval for each hydroelectric facility, individually, before they are eligible to begin receiving net metering credits for that facility. The Department staff communicated this to GLHA, and GLHA acknowledged their understanding of this requirement.

F. Rule Waivers Necessary to Implement Proposal

The Department understands that implementation of the GLHA proposal may require waiver of certain rules that fall within the jurisdiction of the Department.⁷ Should GLHA or Eversource request any rule waiver(s) from the Department, the Department will consider such requests and make a good faith attempt to grant such waivers necessary for implementation of the GLHA proposal in accordance with RSA 362-A:9, XX.

III. CONCLUSION

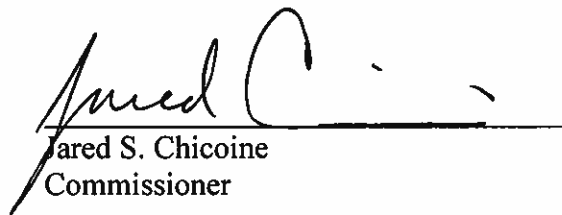
The Department finds that the GLHA metering proposal satisfies the requirements of RSA 362-A:9, XX, pending submission of the proposal appendix by GLHA and Eversource. The four hydroelectric generating facilities submitted by GLHA as eligible under the statute will be metered in accordance with the statutory requirements and the process proposed, and GLHA will provide Eversource with billing determinants necessary to ensure they are compensated accurately for excess energy exported to the grid by the eligible facilities. GLHA will be subject to periodic audit to ensure accuracy of its metering calculations and billing determinants. Following issuance of this Order, GLHA and Eversource will file an appendix to GLHA's initial proposal with further agreed-upon billing details consistent with Department staff's recommendation, this Order, and the statutory requirements of RSA 362-A:9, XX, and that address the five points detailed in Section I.B. of this Order. Provision of such appendix will satisfy the condition to the Department's approval, with no further review from the Department necessary other than confirmation that the appendix complies with this Order.

⁷ Namely, the Puc 900 rules, which fall under the Department's jurisdiction. Certain Puc 300 rules under the Department's jurisdiction may be implicated as well.

Based upon the foregoing, it is hereby

ORDERED, that, pursuant to RSA 362-A:9, XX, Great Lakes Hydro America, LLC's Proposed Process for Determining Generation Eligible for Participation in Net Energy Metering is APPROVED subject to the condition that GLHA and Eversource provide a proposal appendix as outlined in this Order.

So ordered April 17, 2024.



Jared S. Chicoine
Commissioner

Intra-Office Memorandum - New Hampshire Department of Energy

To: Jared Chicoine, Chris Ellms, Josh Elliott

From: Stephen Eckberg, Mark Toscano, Deandra Perruccio, Alexandra Ladwig

CC: Paul Dexter, Liz Nixon, Rorie Patterson, Tom Frantz

Date: 4/11/2024

RE: MIS 2024-001 Great Lakes Hydro America, LLC Net Metering Proposal Approval with Condition

SUMMARY

Great Lakes Hydro America, LLC (GLHA) submitted its “Proposed Process of GLHA for Determining Generation Eligible for Participation in Net Energy Metering Pursuant to RSA 362-A:9, XX” (Proposal) related to its system of six hydroelectric generating facilities located on the Androscoggin River near Berlin and Gorham, NH to the New Hampshire Department of Energy (DOE) for review and approval. GLHA’s eligibility to participate in Net Energy Metering (NEM) was facilitated by the passage of SB 40 (2023).

DOE’s Review Team¹ has evaluated the information provided by GLHA in its Proposal and has determined that the facility meets the eligibility requirements for submission of a proposed process and methodology as described in RSA 362-A:9, XX. Further, the Review Team has determined that GLHA’s proposal meets the basic requirements identified in SB 40 (2023). We provide a detailed review of the Proposal below. The Review Team finds that the Proposal’s process and methodology for determining the portion of generation from each eligible hydro-generator that is eligible for net metering credit is generally reasonable. There are, however, several areas which do not contain sufficiently detailed explanation regarding aspects of the actual implementation details. These areas are identified below. It is the understanding of the Review Team that the necessary details will be finalized in bilateral discussions between GLHA and Eversource, the interconnecting utility, and provided to DOE as an Appendix to the Original Proposal. The Review Team anticipates that it will review the Appendix for completeness, to ensure that the issues identified in our review of the Proposal have been addressed.

The Review Team recommends DOE approval of GLHA’s Metering Proposal conditioned on the submittal by GLHA and Eversource of an Appendix to the Original Proposal which addresses all the issues summarized in the Conclusion of this memo.

REVIEW OF PROPOSAL

GLHA owns and operates a system of six hydroelectric generating facilities (collectively, the “Berlin Hydroelectric Facilities”) on the Androscoggin River near Berlin and Gorham, NH. The Berlin Hydroelectric Facilities are electrically interconnected with each other via privately owned electrical

¹ Stephen Eckberg, Mark Toscano, Deandra Perruccio, and Alexandra Ladwig, Esq.

system and with the White Mountain Paper (WMP) Cascade Paper Mill². The Berlin Hydroelectric Facilities provide electricity to WMP's Mill with all excess energy being exported to the local/regional electric grid through a single point of interconnection with the Eversource electric distribution system at the Goebel Street substation in Berlin. The metered grid connection point is the meter point through which Eversource provides Tariff Rate GV and Rate B service to the WMP Mill. GLHA currently receives payments for exported energy and generating capacity related to the Berlin Hydroelectric Facilities from the regional grid operator, ISO-NE, through its role as the Lead Market Participant. GLHA will continue to receive these payments from ISO-NE. The Proposal and subsequent Appendix will address more specific details of sharing of these payments by GLHA with Eversource related to the net metering credit eligible energy such that GLHA receives only "single compensation" for eligible net metered energy.

The Proposal explains, generally, how GLHA will meter and calculate the amount of energy from each of the six hydroelectric facilities that is provided to the WMP Mill, how much excess energy which is exported to the grid will be attributable to each of the four hydros that is eligible for net metering credits, and how much of the exported excess energy is attributable to each of the two larger hydros which are ineligible for net metering credit. The net metering eligible energy amounts from each eligible hydro will be calculated monthly using hourly meter data provided by GLHA and will receive compensation from Eversource at its applicable tariff rate for Municipal Group Host net metering.³ The compensation that GLHA receives from ISO-NE corresponding to the net metering eligible energy will offset amounts that Eversource would be obligated to pay GLHA under its net metering tariff.⁴ This, and other aspects of the Proposal, represent a unique arrangement enabled by the provisions of SB 40 (2023).

RSA 362-A:9, XX requires the Proposal to "document[...] the data, including all necessary billing determinants that will be provided to the utility." This aspect of the Proposal did not initially contain sufficient detail for DOE to ensure that necessary billing determinant data would be available to Eversource to perform the necessary monthly calculations for billing and compensation purposes. GLHA provided additional information upon request in the form of a live Excel spreadsheet containing, for a sample month, hourly metered energy production data, corresponding ISO-NE LMP hourly energy price data, and other necessary billing determinant data for Eversource's use in calculating the monthly compensation for net metering credit eligible energy for each of the four eligible hydros. DOE is satisfied that the detail to be provided will meet Eversource's requirements. DOE expects that final specifications of monthly billing determinant data needed will be included in the Appendix to be submitted.

The table below identifies each of the six hydroelectric facilities, the order in which their monthly electric generation will be considered to be providing energy to the WMP Mill and whether each is eligible to receive net metering credit based upon the rated size of the generation facility.

² Gorham Acquisition, LLC d/b/a White Mountain Paper is the Eversource customer-of-record at the meter.

³ GLHA intends to submit separate municipal group host registration applications to the DOE for each participating hydro. DOE will review and approve such registrations upon review and confirmation that all applicable requirements have been met.

⁴ Additional operational and transactional details are expected to be included in an Appendix to GLHA's Original Proposal following final resolution of such details by GLHA and Eversource. The Appendix will be provided to DOE for review.

Hydroelectric Facility	FERC Project	Generator Size	Electrical Proximity to WMP Mill = "Electrical Order"	Eligible for Net Energy Metering?
Cascade	P-2327	7.9 MW	1	NO
(Upper) Gorham	P-2311	4.8 MW	2	YES
Shelburne	P-2300	3.7 MW	3	YES
Cross	P-2326	3.2 MW	4	YES
Riverside	P-2423	7.9 MW	5	NO
Sawmill	P-2422	3.1 MW	6	YES

The Review Team discussed additional aspects of the Proposal with GLHA and Eversource to ensure that the metering and billing approach is robust and sufficiently complete in its consideration of the local electrical system details. These details included requesting distances of electrical connections between each hydro, the WMP Mill, and the Goebel Street interconnection point. This additional information is provided on an annotated version of the electrical one-line drawing original provided by GLHA. DOE used this information, in conjunction with other information provided by GLHA to develop a model which was used to simulate energy production from each hydro facility, energy consumption by the WMP Mill, energy flows into and out of a large battery storage facility which also resides behind the meter, and energy flows onto the grid through the point of interconnection. This model was used to simulate a variety of generation and consumption scenarios to ensure that the Proposal represents a robust and reliable approach to determining the amount of net metering eligible energy. See Attachment 1 to this memo which shows a hypothetical example of 2MW of generation from each of the six hydros in a given hour, a hypothetical load of 2MW at the WMP Mill, resulting in 8MWH of energy exported eligible for net metering tariff rate, and 2MWH of energy exported at the ISO LMP rate.

To ensure an accurate and reasonable accounting of energy production, consumption, and billing, the Review Team discussed the issue of line losses with GLHA. While there is no engineering study available to measure the energy losses resulting from transmission of energy from the points of generation to the point of meter measurement at Goebel Street, reasonable estimates can be made. The Review Team expects that GLHA and Eversource will use their engineering experience to develop and agree on appropriate loss factors applicable either to each generator separately, or for the system as a whole. The Review Team expects that this issue will be addressed in the Appendix to be developed by both entities and provided to DOE as a supplement to the Original Proposal.

The Review Team met with representatives of the WMP Mill to ensure that WMP had the opportunity to express any concerns it may have with the proposal.⁵ WMP represented that it was comfortable with GLHA's Proposal and did not anticipate any change in the ongoing relationship whereby GLHA provides the majority of WMP's energy with backup service provided by and billed by Eversource.

GLHA's Proposal includes a provision for periodic audits of the documentation and records associated with the meter reading process to ensure compliance with all statutes, rules, and tariffs, in accordance with the requirements of RSA 362-A:9,XX. However, the Proposal states that audits "...may be requested by White Mountain Paper..." GLHA explained to DOE that this provision was to ensure that WMP would

⁵ RSA 362:A-9, XX allows the customer of record (WMP is Eversource's customer of record, taking service under Tariff Rate B) to express any concerns it may have with the proposal.

have the opportunity to review necessary records if there were concerns about energy usage billed to WMP's Mill. During discussions with GLHA, DOE expressed its concern that DOE may similarly wish to request an audit as DOE has the responsibility to review net metering costs that Eversource passes to ratepayers as a cost component currently included its Stranded Cost Recovery Charge. GLHA indicated it was amendable to DOE similarly requesting an audit of the documentation and records associated with the meter reading process which results in Eversource's net metering payments to GLHA. Therefore, DOE expects that the Appendix to Original Proposal under development will include language making it clear that DOE can make such an audit request not more than annually.

RSA 362-A:9,XX states that "[t]he utility shall recover the incremental costs for this manual billing process, as well as all net metering credits issued pursuant to this provision from all utility customers." DOE understands that Eversource's costs for payments to net metering group hosts are currently included as a component of the Company's Stranded Cost Recovery Charge and expects that costs for payments to GLHA resulting from the approval of this proposal will be included there. Eversource has not yet specified through which rate mechanism it proposes to collect the "incremental costs for this manual billing process," so it would be helpful if that proposal were included in the Appendix under development.

CONCLUSION

The DOE Review Team held several virtual Technical Sessions with GLHA and Eversource, separately, to discuss many various aspects of GLHA's Proposal. A joint Technical Session with all three parties was also held to clarify certain aspects of the Proposal. At this joint Technical Session, the parties agreed that GLHA and Eversource would work to finalize certain details of the Proposal to ensure a smooth implementation and integration of GLHA's four eligible hydroelectric generators (see table above) into Eversource's net metering tariff.

As described in the review section above, DOE expects to receive an Appendix to GLHA's Original Proposal which addresses: 1) additional details regarding billing determinants to be provided to Eversource on a monthly basis necessary for Eversource's billing of the WMP Mill and net metering compensation to GLHA; 2) details of methodology by which GLHA and Eversource will ensure that only "single compensation" occurs for capacity and energy related to eligible net metered energy; 3) specifics of loss factors to be used in energy calculations; 4) acknowledgement by GLHA that DOE can request audits of documentation and records relating to metering details used for calculation of eligible net metering costs; and, 5) an explanation from Eversource for proposed collection of incremental costs for any necessary manual billing.

When DOE receives the Appendix from GLHA and Eversource, the Review Team will ensure that details are provided about each of the above issues and will file a letter in this proceeding indicating completeness of the Appendix and providing GLHA approval to move forward with Group Host approval process. The intent of the Appendix review is not to determine whether DOE agrees with the final arrangements on the above items, only that GLHA and Eversource have reached agreement and provided sufficient documentation.

Brookfield Hydro NEM Metering Proposal: Hypothetical Example

Brookfield Hydro aka Great Lakes Hydro Association (GLHA)

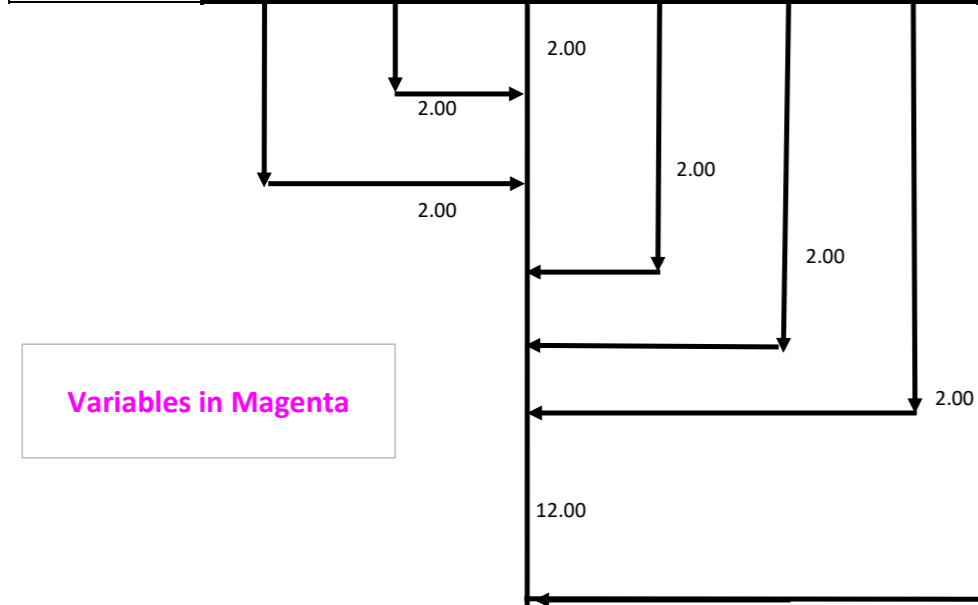
All values in MW

Reference: NH DOE Miscellaneous Proceedings, MIS 2024-001 Great Lakes Hydro America, LLC

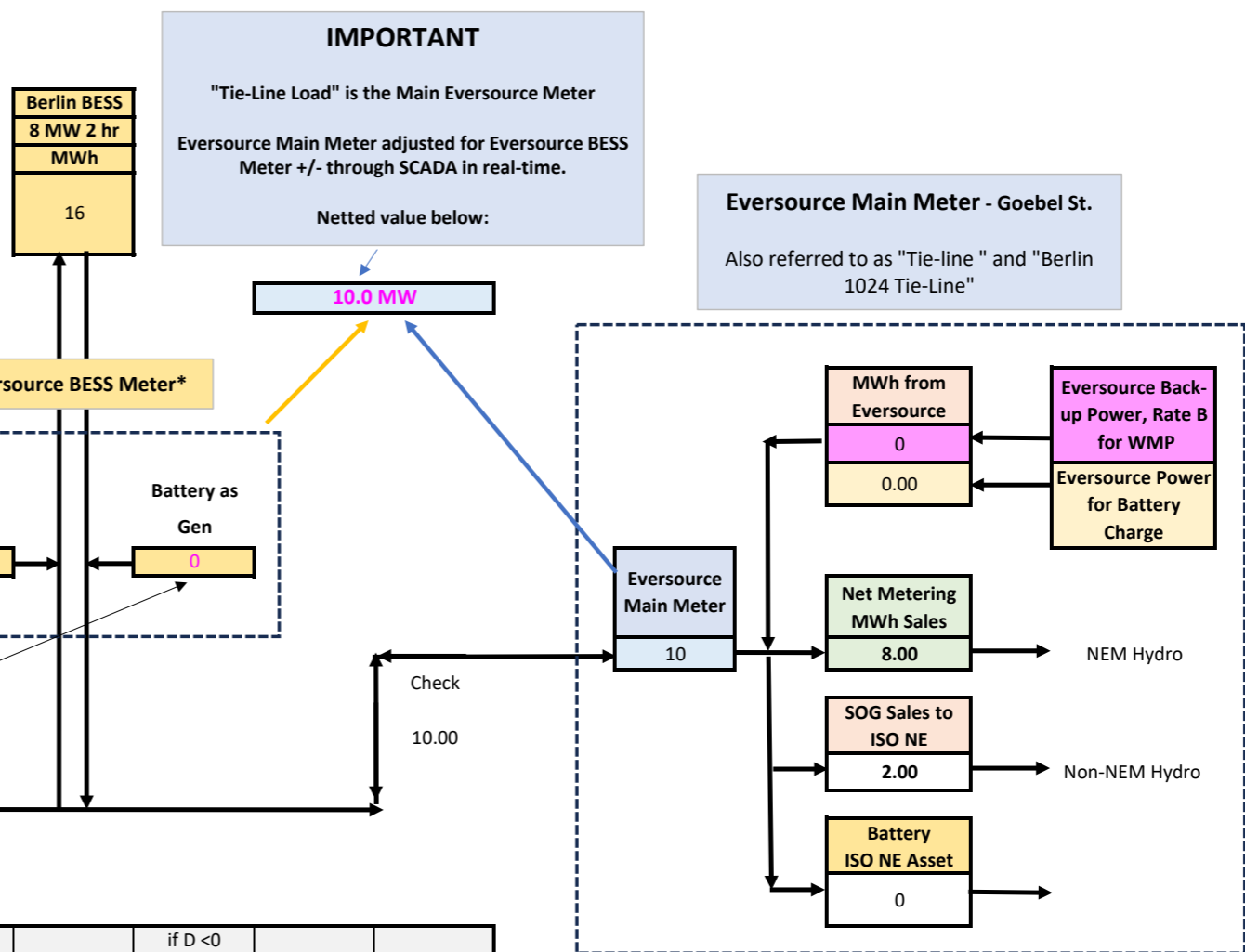
Example From **N/A** **0:00**

Eligible Hydro in Green

	Hydro Generators						Total Hydro	Total Eligible
	Order							
	1	2	3	4	5	6		
	Cascade	Gorham	Shelborne	Cross Power	Riverside	Sawmill		
Capacity	7.9	4.8	3.7	3.2	7.9	3.1	30.6	14.8
Gross Gen Out	2.00	2.00	2.00	2.00	2.00	2.00	12.00	8.00
Cumulative	2.00	4.00	6.00	8.00	10.00	12.00		



Variables in Magenta



IMPORTANT
 "Tie-Line Load" is the Main Eversource Meter
 Eversource Main Meter adjusted for Eversource BESS Meter +/- through SCADA in real-time.
 Netted value below:
10.0 MW

Eversource Main Meter - Goebel St.
 Also referred to as "Tie-line" and "Berlin 1024 Tie-Line"

Enter values to model effect

Proposed Sequential Generation for Net Metering

Renewable Source	Order	Nameplate MW	"Capacity" above	"Gross Generation" above
			A	B
Cascade	1	7.9		2.00
Gorham	2	4.8		2.00
Shelborne	3	3.7		2.00
Cross	4	3.2		2.00
Riverside	5	7.9		2.00
Sawmill	6	3.1		2.00
Total			30.6	12.00

Cum. of B	C + Mill Load	if D < 0 then 0 otherwise Min. D or B	Cum. of E	if D > 0, then D-F, otherwise 0
C	D	E	F	G
Cumulative Hydro MW Available to Mill	Cumulative Excess Hydro Net of Mill	Excess Eligible Hydro	Cumulative Excess Eligible Hydro	Cumulative Excess Net Hydro to ISO
2.00	0.00			0.00
4.00	2.00	2.00	2.00	0.00
6.00	4.00	2.00	4.00	0.00
8.00	6.00	2.00	6.00	0.00
10.00	8.00			8.00
12.00	10.00	2.00	8.00	2.00
12.00	10.00	8.00	8.00	2.00

Mill load = Total Generation Gross Output - Main Eversource Meter
 The Main Eversource Meter is also referred to as the Berlin 1024 Tie-Line.
 Tie-line load adjusted for battery through SCADA in real-time.
 Mill load is hypothetical

WMP Mill Load	8.00	8.00
	Check	Check
	2.00	-2.00
Check		

Notes:
 Hydro capacity from GLHA. *Gross generation output hypothetical example.*
 Mill load is a calculated value based on subtracting total generation total output from Main Eversource Meter, aka "Berlin 1024 Tie-Line". *Value of Mill load is hypothetical.*
 The Main Eversource meter (Tie-line) is automatically adjusted (netted + or -) for the Battery (BESS) meter. Done real-time through SCADA. Value 10 MW in Magenta at top is hypothetical. Therefore, to be able to keep mill load constant in this example the formulas reference this value.
 Battery Energy Storage System (BESS) not part of GLHA proposal and is separately metered. However it is behind the main Eversource meter at Goebel street. The Eversource main metering system has been modified to segregate the BESS Eversource meter.
 *When entering in values for battery in this example note the MWh for Eversource