

Committee Report

REGULAR CALENDAR

May 24, 2021

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Majority of the Committee on Science, Technology and Energy to which was referred SB 91,

AN ACT (New Title) adopting omnibus legislation on renewable energy and utilities. Having considered the same, report the same with the following amendment, and the recommendation that the bill OUGHT TO PASS WITH AMENDMENT.

Rep. Douglas Thomas

FOR THE MAJORITY OF THE COMMITTEE

MAJORITY COMMITTEE REPORT

Committee:	Science, Technology and Energy
Bill Number:	SB 91
Title:	(New Title) adopting omnibus legislation on renewable energy and utilities.
Date:	May 24, 2021
Consent Calendar:	REGULAR
Recommendation:	OUGHT TO PASS WITH AMENDMENT 2021-1619h

STATEMENT OF INTENT

This omnibus bill originally contained five parts. As amended by the committee, it now has four parts, with the original part V, a mirror image of HB 315, deleted. Together, these sections enhance or explore certain renewable energy technologies. Part I modifies the statute governing customer energy storage and provides direction for the Public Utilities Commission (PUC) to adopt rules for the installation, interconnection, and use of energy storage systems by customers. The committee amendment made language changes to give more precise direction to the commission. Part II makes possible net metering for hydroelectric generators who own multiple facilities that each individually qualify for net metering but exceed the one megawatt limit when their facilities use the same connection point to the distribution grid. The committee amendment also added language to statute to provide clarity to the PUC as it deliberates future net metering tariffs by ensuring that no cost shifts shall occur between net metering and non-net metering customers. Part III clarifies that increases in net metering credits for low-income community solar projects applied after July 1, 2021 would affect the rate then in effect and be subsequently grandfathered similarly to other such statutory net metering protections. Lastly, Part IV sought to enable the purchase of the output of limited electrical energy producers in intrastate commerce, which could foster innovation in the community aggregation authority provided in the earlier-passed HB 315. The committee found that the submitted legislation, similar to the earlier-rejected HB 407, lacked clarity as to the mechanics of this process and changed this section of the bill into a study committee, which will determine if new legislation can be offered in the fall of 2021.

Vote 11-9.

Rep. Douglas Thomas
FOR THE MAJORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

SB 91, (New Title) adopting omnibus legislation on renewable energy and utilities. **MAJORITY: OUGHT TO PASS WITH AMENDMENT. MINORITY: OUGHT TO PASS WITH AMENDMENT.**

Rep. Douglas Thomas for the **Majority** of Science, Technology and Energy. This omnibus bill originally contained five parts. As amended by the committee, it now has four parts, with the original part V, a mirror image of HB 315, deleted. Together, these sections enhance or explore certain renewable energy technologies. Part I modifies the statute governing customer energy storage and provides direction for the Public Utilities Commission (PUC) to adopt rules for the installation, interconnection, and use of energy storage systems by customers. The committee amendment made language changes to give more precise direction to the commission. Part II makes possible net metering for hydroelectric generators who own multiple facilities that each individually qualify for net metering but exceed the one megawatt limit when their facilities use the same connection point to the distribution grid. The committee amendment also added language to statute to provide clarity to the PUC as it deliberates future net metering tariffs by ensuring that no cost shifts shall occur between net metering and non-net metering customers. Part III clarifies that increases in net metering credits for low-income community solar projects applied after July 1, 2021 would affect the rate then in effect and be subsequently grandfathered similarly to other such statutory net metering protections. Lastly, Part IV sought to enable the purchase of the output of limited electrical energy producers in intrastate commerce, which could foster innovation in the community aggregation authority provided in the earlier-passed HB 315. The committee found that the submitted legislation, similar to the earlier-rejected HB 407, lacked clarity as to the mechanics of this process and changed this section of the bill into a study committee, which will determine if new legislation can be offered in the fall of 2021. **Vote 11-9.**

Original: House Clerk

Cc: Committee Bill File

REGULAR CALENDAR

May 24, 2021

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Minority of the Committee on Science, Technology and Energy to which was referred SB 91,

AN ACT (New Title) adopting omnibus legislation on renewable energy and utilities. Having considered the same, and being unable to agree with the Majority, report with the following amendment, and the recommendation that the bill OUGHT TO PASS WITH AMENDMENT.

Rep. Lee Oxenham

FOR THE MINORITY OF THE COMMITTEE

MINORITY COMMITTEE REPORT

Committee:	Science, Technology and Energy
Bill Number:	SB 91
Title:	(New Title) adopting omnibus legislation on renewable energy and utilities.
Date:	May 24, 2021
Consent Calendar:	REGULAR
Recommendation:	OUGHT TO PASS WITH AMENDMENT 2021-1654h

STATEMENT OF INTENT

This is an omnibus bill that the minority largely supports. However, the minority cannot accept the amended language proposed for part II, section 2. This language received no public consideration – neither at a public hearing nor any work session in either the originating body or the House. Furthermore, this amendment seeks to amend a section of the law that was not part of this bill as introduced, nor as passed by the Senate, nor in any other bill. Equally importantly, this language would create an entirely new, and unattainable, legal standard for the Public Utilities Commission (PUC), one that goes beyond the well-established principle that electric rates should be “just and reasonable.” This new standard would be unworkable and would stymie the PUC’s three-year effort to develop new net metering rates. The minority believes adopting this bill as currently amended will lead to years of costly litigation and leave the current “rough justice” tariffs in place far longer than was intended, for better or worse.

Rep. Lee Oxenham
FOR THE MINORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

SB 91, (New Title) adopting omnibus legislation on renewable energy and utilities. **OUGHT TO PASS WITH AMENDMENT.**

Rep. Lee Oxenham for the **Minority** of Science, Technology and Energy. This is an omnibus bill that the minority largely supports. However, the minority cannot accept the amended language proposed for part II, section 2. This language received no public consideration – neither at a public hearing nor any work session in either the originating body or the House. Furthermore, this amendment seeks to amend a section of the law that was not part of this bill as introduced, nor as passed by the Senate, nor in any other bill. Equally importantly, this language would create an entirely new, and unattainable, legal standard for the Public Utilities Commission (PUC), one that goes beyond the well-established principle that electric rates should be “just and reasonable.” This new standard would be unworkable and would stymie the PUC’s three-year effort to develop new net metering rates. The minority believes adopting this bill as currently amended will lead to years of costly litigation and leave the current “rough justice” tariffs in place far longer than was intended, for better or worse.

Original: House Clerk

Cc: Committee Bill File

Voting Sheets

STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK

1/22/2021 10:09:50 AM
Roll Call Committee Registers
Report



2021 SESSION

Science, Technology and Energy

Bill #: SB91 Motion: OTPA AM #: _____ Exec Session Date: May 24 2021

<u>Members</u>	<u>YEAS</u>	<u>Nays</u>	<u>NV</u>
Vose, Michael Chairman	x		
Thomas, Douglas W. Vice Chairman	x		
Harrington, Michael D.	x		
Notter, Jeanine M.	x		
Melvin, Charles	x		
Plett, Fred R. Clerk	x		
Berezhny, Lex	x		
Bernardy, JD	x		
Cambrils, Jose E.	x		
Ploszaj, Tom	x		
White, Nick D.	x		
Somssich, Peter F.		x	
Cali-Pitts, Jacqueline A.		x	
Mann, John E.		x	
Oxenham, Lee Walker		x	
Vincent, Kenneth S.			x
McGhee, Kat		x	
McWilliams, Rebecca J.		x	
Chretien, Jacqueline H.		x	
Pimentel, Roderick L.		x	
Parshall, Lucius		x	

STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK

1/22/2021 10:09:50 AM
Roll Call Committee Registers
Report



2021 SESSION

Science, Technology and Energy

Bill #: SB91 Motion: OTPA AM #: _____ Exec Session Date: May 24 2021

TOTAL VOTE:			11		9		1
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STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK



1/22/2021 10:09:50 AM
Roll Call Committee Registers
Report

2021 SESSION

Science, Technology and Energy

Bill #: SB91 Motion: OTP AM #: 2021-1619h Exec Session Date: May 24 2021

<u>Members</u>	<u>YEAS</u>	<u>Nays</u>	<u>NV</u>
Vose, Michael Chairman	x		
Thomas, Douglas W. Vice Chairman	x		
Harrington, Michael D.	x		
Notter, Jeanine M.	x		
Melvin, Charles for Merner, Troy	x		
Plett, Fred R. Clerk	x		
Berezhny, Lex	x		
Bernardy, JD	x		
Cambrils, Jose E.	x		
Ploszaj, Tom	x		
White, Nick D.	x		
Somssich, Peter F.		x	
Cali-Pitts, Jacqueline A.	x		
Mann, John E.		x	
Oxenham, Lee Walker		x	
Vincent, Kenneth S.			x
McGhee, Kat		x	
McWilliams, Rebecca J.		x	
Chretien, Jacqueline H.		x	
Pimentel, Roderick L.		x	
Parshall, Lucius		x	

STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK



1/22/2021 10:09:50 AM
Roll Call Committee Registers
Report

2021 SESSION

Science, Technology and Energy

Bill #: SB91 Motion: OTP AM #: 2021-1619h Exec Session Date: May 24 2021

TOTAL VOTE:		12	8	1
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Hearing Minutes

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

PUBLIC HEARING ON SB 91

BILL TITLE: (New Title) adopting omnibus legislation on renewable energy and utilities.

DATE: April 19, 2021

LOB ROOM: Hybrid 301-303 **Time Public Hearing Called to Order:** 10:30 a.m.

Time Adjourned: 11:55 a.m.

Committee Members: Reps. Vose, Thomas, Plett, Harrington, Merner, Berezny, Bernardy, Cambrils, Ploszaj, White, Somssich, Cali-Pitts, Mann, Oxenham, Vincent, McGhee, McWilliams, Pimentel and Parshall

Bill Sponsors:
Sen. Watters

TESTIMONY

* Use asterisk if written testimony and/or amendments are submitted.

Bradley – Section 2 – Monadnock has 3 units behind meter, all under 1 MW but cumulatively over 1 MW. Current rules do not allow. Aggregation – HB 315 good job.

Senator Waters – Section 1 – Came from unanimous vote of energy committee, 23 to 1 on floor. Bill in tandem with HB 715. Legislature policy, not PUC. Storage, consumer choice, property rights. It is not counted as generation for ISO-NE rules. Replaces 374 H. 374 H definitions are essentially same. Lines 30-31 if PUC finds savings they should account for that. Storage still 374 G1. Page 2 374 H2 Section Part 1 B consumer rights – you have a right to do that. In 1C, ensure that reasonable and timely regulation, question about affordable – cut it. In D and E, whether or not transmission savings. NH's share among states. If indeed there are savings it should be reflected. H3 reproduces H2 in 374. This is what you approved last year. This works in tandem. 374 G2 – question as to how consider electric generation equipment, storage. What he hopes is committee finds that storage not generation for purpose of sale into the wholesale market. Reflects concern new technologies can benefit low income. Last part bottom of page 4, beginning of page 5, reflects Liberty Utilities Lebanon storage project. PUC like functions will continue. Harrington – As a matter of policy – singular company – should they adapt? It is being grandfathered.

Donna Gamache, Eversource – Neutral. One section, Part 4, questions. Wholesale – state relations. Concerns about separating transmission, etc. in Section 4.

Madeline Mineau. Support Part 1 storage, Part 2 clarify hydro, Part 3, grandfather low- moderate income solar adder.

Sen. Rebecca Perkins Kwoka. Sponsored Part 3. RSA 3629 – excess generation 3 Cents per kWh adder 2 years, dropping to 2.5 cents. Oxenham – breakneck speed. Reason for 3 and 22.5 cents.

Madeline Mineau question – Original bill. When bill creating adder was based on Consumer Advocate testimony – suggested by Vt Law School. Step down is a negotiation. Somssich – Motivation of your portion is to streamline business projects. Intent is clarity.

Heidi Kroll – Gallagher Callahan & Control – represent Monadnock Paper Mills, Granite State Hydropower. Both support Parts 2 and 4. Part 2 remedies Monadnock Paper Mills problem, single interconnection for 3 separate units. Part 4 makes long overdue LEEPA reforms. Happy to work with committee. LEEPA statute never been used.

John Gage – member of public. Section 5 – done,

Samuel Golding – member of public. Big picture is technology moving faster than legislature. Parts 1 & 4 do that. Transmission charges are imposed on energy procured from local sources. Changes that.

Henry Herndon – Energy professional. Supports SB 91, especially part 4 – Market based approach that avoids subsidies. Creates a mechanism to benefit. Harrington – specifically, how is it going to save transmission costs? When put on distribution, under 5 MW, sold locally, not imposing on transmission system, directly lowers transmission peaks. If measured, developers ought to benefit. McGhee – You opened a market-based approach, no subsidy. How does it not contribute to subsidies. Bilateral negotiated contract. Because contract price, no subsidy. Somssich – How do define difference between battery storage, and generation. Power would go on grid during transmission peak. Vose – why this is superior to purchase power agreements? LEEPA statute not currently used.

Catherine Corkerey – Chapter Director NH Sierra Club. Voicing concern about Department of Energy.

Joseph Kwasnik – Member of public – Part 5 should be replaced with HB 315. As amended ought to pass.

Kim Quirk – Support. Enfield Energy Committee.

Mark Vatter – Section 4 s/s 6 – Purchasers shall pay for power – according to rate class. Ask that of Clifton Below.

Clifton Below – Former PUC Commissioner, State Senator. – Answering question on page 7 – That is distribution rate, under Tariff, not purchase power agreement. Big picture -1997, serving on this committee, sponsor creating net metering, revised 362 2a eliminating requirement for utilities to purchase power. Net metering was one way for customers to have access. Early adopters language was eliminated. Part 4 effort to modernize. Part 4 real complement to HB 315. Property owners want to develop 1-5 MW solar. Want to sell through Lebanon Community Power to local purchasers. Developers interested to purchase local energy. Larger than 5 MW or smaller if connected to transmission. Part 1 – distributed storage, under 5 MW, on distribution. Need to develop market based approach without cross subsidies. Expands to any number of customers from 3. HB 295, 417 McGhee, inexpedient to legislate. Take the time to consider and work with the proponents. Part 1 – definition of wholesale electricity markets Compensation for transmission while also in wholesale market – can't do that. ISO-NE exception for alternative technology resources. Vose- weaknesses in part 1 – can we wait and rework? Urgency is now unclear when customer can install storage behind meter. Section 4 – amendments necessary to make it as useful as can be? Necessary now? McGhee – last frontier – sweet spot between 1 and 5 MW. Oxenham – Question statement that energy storage section – agree urgency moving forward. Can retain, but a lot of work has gone in. Pimental – timeline, question is if went to subcommittee could we do in time? Cali-Pitts – 4 different bills – could we retain pieces?

House Remote Testify

Science, Technology and Energy Committee Testify List for Bill SB91 on 2021-04-19

Support: 307 Oppose: 1 Neutral: 2 Total to Testify: 18

Export to Excel

12

<u>Name</u>	<u>City, State</u> <u>Email Address</u>	<u>Title</u>	<u>Representing</u>	<u>Position</u>	<u>Testifying</u>	<u>Non-Germane</u>	<u>Signed Up</u>
Bradley, Jeb	Concord, NH jeb.bradley@leg.state.nh.us	An Elected Official	SD3 (Prime, Parts 2 & 4)	Support	Yes (6m)	No	4/6/2021 12:59 PM
Kroll, Heidi	Concord, NH kroll@gcglaw.com	A Lobbyist	Granite State Hydropower Association and Monadnock Paper Mills	Support	Yes (6m)	No	4/15/2021 2:25 PM
Watters, Senator David	Dover, NH david.watters@leg.state.nh.us	An Elected Official	Myself (SD 4)	Support	Yes (5m)	No	4/6/2021 9:10 AM
Perkins Kwoka, Senator Rebecca	Portsmouth, NH rebecca.perkinskwoke@leg.state.nh.us	An Elected Official	Myself (SD 21)	Support	Yes (3m)	No	4/6/2021 9:11 AM
Corkery, Catherine	Concord, NH catherine.corkery@sierraclub.org	A Lobbyist	NH Sierra Club	Support	Yes (3m)	No	4/12/2021 12:48 PM
Herndon, Henry	Concord, NH henry@cpenh.org	A Member of the Public	Myself	Support	Yes (3m)	No	4/13/2021 5:52 PM
Maynard, Richard	Manchester, NH maynardrick@outlook.com	A Member of the Public	Myself	Support	Yes (3m)	No	4/17/2021 1:17 AM
BERK, BRUCE	Pittsfield, NH bruce.berk.nh@gmail.com	A Member of the Public	Myself	Support	Yes (3m)	No	4/16/2021 8:41 AM
Mineau, Madeleine	Concord, NH madeleine@cleanenergynh.org	A Lobbyist	Clean Energy NH	Support	Yes (3m)	No	4/16/2021 4:08 PM
Gage, John	Windham, NH jhgage@gmail.com	A Member of the Public	Myself	Support	Yes (3m)	No	4/18/2021 10:23 PM
Anderson, Lisa	Harrisville, NH landerson@universalthomedesign.org	A Member of the Public	Myself	Support	Yes (3m)	No	4/18/2021 10:24 PM
Golding, Samuel	Concord, NH golding@communitychoicepartners.com	A Member of the Public	Myself	Support	Yes (2m)	No	4/14/2021 12:41 AM

Quirk, Kim	Enfield, NH kim.quirk@gmail.com	A Member of the Public	Myself	Support	Yes (2m)	No	4/14/2021 2:29 PM
Gamache, Donna	Manchester, NH donna.gamache@eversource.com	A Lobbyist	Eversource Energy	Neutral	Yes (1m)	No	4/19/2021 6:32 AM
Below, Clifton	Lebanon, NH Clifton.Below@LebanonNH.gov	An Elected Official	City of Lebanon	Support	Yes (15m)	No	4/14/2021 9:31 AM
kwasnik, joseph	concord, NH jkwasnik25@gmail.com	A Member of the Public	Myself	Support	Yes (0m)	No	4/18/2021 9:48 AM
kwasnik, joe	concord, NH jkwasnik25@gmail.com	A Member of the Public	Myself	Support	Yes (0m)	No	4/15/2021 9:31 AM
Bushueff, Catherine	Sunapee, NH agawamdesigns@gmail.com	A Member of the Public	Myself	Support	Yes (0m)	No	4/14/2021 11:18 AM
Marchant, Sarah	Brookline, NH shaighth@yahoo.com	A Member of the Public	Myself	Support	No	No	4/14/2021 1:45 PM
Gish, Peter	Hanover, NH Peter.gish@firstsummitenergy.com	A Member of the Public	Myself	Support	No	No	4/14/2021 1:51 PM
Steele, Ben	Hanover, NH bsteele@colby-sawyer.edu	A Member of the Public	Myself	Support	No	No	4/14/2021 2:52 PM
Callaway, Barbara	Hanover, NH bcallaway65@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 3:00 PM
Heath, Ruth	Canterbury, NH ruthmheath@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 3:00 PM
Altschiller, Debra	STRATHAM, NH debra.altschiller@leg.state.nh.us	An Elected Official	Stratham, Rockingham 19	Support	No	No	4/14/2021 3:22 PM
Schapiro, Joe	Keene, NH joe.schapiro@leg.state.nh.us	An Elected Official	Cheshire 16, Keene	Support	No	No	4/14/2021 3:23 PM
Pfau, Thomas	Rye, NH tompfau15@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 3:32 PM
McPeck, Gail	Enfield, NH gailamcpeck@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 4:06 PM
Fuerst, Michael	Cornish Flat, NH lm@lmfuerst.com	A Member of the Public	Myself	Support	No	No	4/14/2021 4:07 PM
Eckstein, Sarah	Somersworth, NH sarahmeckstein@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 5:56 PM
Kubit, Joy	New London, NH joykubit@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 8:05 PM

Sweet, Lisa	Rye, NH lisacsweet@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 9:08 PM
Bemis, Jamie	Bristol, NH jamiEBemis@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 9:14 PM
Beck, Jerry	Holderness, NH bentrimone@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 10:16 PM
Morris, Ed	Claremont, NH citymanager@claremontnh.com	A Member of the Public	City of Claremont	Support	No	No	4/15/2021 7:22 AM
Currier, Dorothy	Concord, NH dorocurr@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 9:56 AM
McArt, Ebba	NH, NH ebba.m@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 12:25 PM
Nancy, Wightman	Cornish, NH Nwlaststraw@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 4:50 PM
Sutherland, Claude	Plainfield, NH mike.sutherland@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 4:51 PM
Sharf, Joanna	Cornish, NH josharf@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 8:36 PM
Robison, Louise	Hanover, NH Lmccrobison@yahoo.com	A Member of the Public	Myself	Support	No	No	4/14/2021 8:39 PM
Bravo, Sandra	Bradford, NH sandra.bravo@verizon.net	A Member of the Public	Myself	Support	No	No	4/14/2021 9:56 PM
White, Stuart	hanover, NH stu3778@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 5:29 AM
Hitzrot, Lewis	Exeter, NH Lhitzrot@exeter.edu	A Member of the Public	Myself	Support	No	No	4/15/2021 9:25 AM
Cadwallader, Mary	Hanover, NH marycad02@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 9:54 AM
Liebowitz, Susan	Plainfield, NH supawali@hotmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 11:08 AM
Orion, Janice	Cornish Flar, NH Jorion@myfairpoint.net	A Member of the Public	Myself	Support	No	No	4/15/2021 1:32 PM
Griffin, Julia	Hanover, NH julia.griffin@hanovernh.org	A Member of the Public	Town of Hanover	Support	No	No	4/15/2021 2:44 PM
Powell, margaret	Hanover, NH mepbox1@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 2:44 PM

Parker, Sharon	GRANTHAM, NH parker20@juno.com	A Member of the Public	Myself	Support	No	No	4/15/2021 3:16 PM
Jernstedt, Margaret	Hanover, NH Margaret.Jernstedt@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 10:05 AM
Schamberg, St Rep Tom	Wilmot/Sutton, NH tom@yourpromosolution.com	An Elected Official	Myself	Support	No	No	4/14/2021 10:06 AM
Huberman, Anne	Peterborough, NH Anne.Huberman@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 10:36 AM
Rogalski, Marjorie	HANOVER, NH marjorie890@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 10:44 AM
Taylor, Robert	Hanover, NH retaylor3d@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 2:45 PM
Grossman, Ken	Barrington, NH ken.grossman.100@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 3:53 PM
Weston, Joyce	NH, NH jweston14@roadrunner.com	An Elected Official	Myself	Support	No	No	4/14/2021 3:58 PM
Robison, Dennis	Hanover, NH robisode@yahoo.com	A Member of the Public	Myself	Support	No	No	4/14/2021 4:23 PM
Downs, Noreen	Madison, NH noreen@com3svce.net	A Member of the Public	Myself	Support	No	No	4/14/2021 5:42 PM
Burns, Gerald	Marlborough, NH burnsgt2@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 6:00 PM
Aman, Katie	Hanover, NH kathryn.aman@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 6:33 PM
Damon, Claudia	Concord, NH cordsdamon@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 10:15 PM
Mooney, Bridget	Wilton, NH Bridget@moonchick.com	A Member of the Public	Myself	Support	No	No	4/15/2021 11:02 PM
Mooney, Birdie	Wilton, NH Bridget@moonchick.com	A Member of the Public	Myself	Support	No	No	4/15/2021 11:03 PM
Spencer, Louise	Concord, NH lpskentstreet@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 2:49 AM
Torpey, Jeanne	Concord, NH jtorp51@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 5:05 AM
Bartlett, Rep Christy	Concord, NH christydbartlett@gmail.com	An Elected Official	Merrimack 19	Support	No	No	4/16/2021 8:10 AM

Bolton, William	Plymouth, NH Wbolton@live.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:11 AM
Wilke, Mary	CONCORD, NH wilke.mary@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:26 AM
Cawley, David	Concord, NH dcawley7@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:30 AM
Balch, Chris	Wilton, NH chris1953balch@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:30 AM
Fellows, Sallie	holderness, NH sallie.fellows@leg.state.nh.us	An Elected Official	Myself	Support	No	No	4/16/2021 9:39 AM
Scarborough, Valerie	Plymouth, NH val7@roadrunner.com	A Member of the Public	Myself	Support	No	No	4/16/2021 9:40 AM
Lucas, Janet	Campton, NH janluca1953@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 10:22 AM
Garvey, Irene "Grace"	PLYMOUTH, NH igracegarvey@gmail.com	A Member of the Public	Irene Grace Garvey	Support	No	No	4/16/2021 10:23 AM
Gordon, Laurie	Weare, NH Lmgord23@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 10:25 AM
Stavis, Laurel	West Lebanon, NH Laurel.stavis@leg.state.nh.us	An Elected Official	Myself	Support	No	No	4/16/2021 10:32 AM
Moore, Janet	Andover, NH Jmpcilley@tds.net	A Member of the Public	Myself	Support	No	No	4/16/2021 10:35 AM
Feder, Josh	New London, NH josh@nlbarn.org	A Member of the Public	Myself	Support	No	No	4/14/2021 2:18 PM
Lazinsky, Craig	Derry, NH craiglazinsky@comcast.net	A Member of the Public	Myself	Support	No	No	4/14/2021 8:23 AM
Decoteau, Mark	Town of Waterville Valley, NH wvmanager@watervillevalley.ort	A Member of the Public	Myself	Support	No	No	4/14/2021 8:25 AM
Bigford, Kathleen	BRADFORD, NH kathleen.bigford@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 9:16 AM
Baumgartner, Yolanda	Hanover, NH yfoursh@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 8:41 AM
Hamilton, Abbe	Gilsum, NH abbethh@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 8:55 AM
Hansel, Peter	KEENE, NH peterhansel61@twc.com	A Member of the Public	Myself	Support	No	No	4/14/2021 9:00 AM

Kaiser, Robin	Hanover, NH robinkaisergish1@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 9:09 AM
Till, Mary	Derry, NH maryforderry@yahoo.com	A Member of the Public	Myself	Support	No	No	4/12/2021 8:25 PM
Bates, David	Warner, NH dbates3@yahoo.com	A Member of the Public	Myself	Support	No	No	4/11/2021 1:43 PM
Pauer, Eric	Brookline, NH secretary@BrooklineGOP.org	A Member of the Public	Myself	Support	No	No	4/11/2021 7:36 PM
Ingold, Bret	warner, NH bretingold@gmail.com	A Member of the Public	Myself	Support	No	No	4/13/2021 8:38 AM
Fenner-Lukaitis, Elizabeth	Warner, NH glukaitis@mcttelecom.com	A Member of the Public	Myself	Support	No	No	4/11/2021 3:06 PM
Osborne, Stephanie	Campton, NH Osbornestephanie@me.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:43 AM
Platt, Elizabeth-Anne	CONCORD, NH lizanneplatt09@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:55 AM
Nardino, Marie	Andover, NH mdnardino@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:56 AM
Fargo, Kristina	Dover, NH Kristina.Fargo@leg.state.nh.us	An Elected Official	Myself	Support	No	No	4/16/2021 9:30 AM
Coffey, Gerry	Wilton, NH gerrycoffey123@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 9:30 AM
Covert, Susan	Contoocook, NH scovert@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 9:34 AM
Richman, Susan	Durham, NH susan7richman@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 7:24 PM
Weber, Jill	NH, NH jill@frajilfarms.com	A Member of the Public	Myself	Support	No	No	4/16/2021 7:36 PM
Blanchard, Sandra	Loudon, NH sandyblanchard3@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 7:53 PM
Boynton, Dan	Campton, NH notnyob@gmail.com	An Elected Official	Myself	Support	No	No	4/16/2021 8:40 PM
Kingsley, Barbara Jo	Peterborough, NH barbjokingsley@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 8:48 PM
Hunt, Martha A	Sutton, NH mahunt@tds.net	A Member of the Public	Myself	Support	No	No	4/16/2021 10:13 PM

Craxton, Edward	Hanover, New Hampshire, 0, NH ecraxton@yahoo.com	A Member of the Public	Myself	Support	No	No	4/16/2021 10:30 PM
Donahue, Nancy	Campton, NH Nancyd114@roadrunner.com	A Member of the Public	Myself	Support	No	No	4/17/2021 6:28 AM
Hunnewell, Richard	Holderness, NH hunnewell.richard@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 12:12 PM
Johnston, Cordell	Concord, NH cjohnston@nhmunicipal.org	A Lobbyist	NH Municipal Association	Support	No	No	4/17/2021 1:02 PM
Schmidt, Jan	NH, NH tesha4@gmail.com	An Elected Official	Myself	Support	No	No	4/17/2021 2:19 PM
Smith, Jennifer	Pembroke, NH jaycmd7699@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 2:30 PM
Caplan, Tony	Henniker, NH anthonycaplan1@gmail.com	An Elected Official	Merrimack 6	Support	No	No	4/17/2021 8:26 AM
Rawson, Kimberly	Waterville Valley, NH kimlovesnh@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 8:27 AM
Pugh, Barbara	Amherst, NH barbara.pugh@comcast.net	A Member of the Public	Myself	Support	No	No	4/17/2021 12:19 PM
Carter, Lilian	Deering, NH lcarter0914@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 1:24 PM
Almy, Susan	Lebanon, NH susan.almy@comcast.net	An Elected Official	Myself	Support	No	No	4/17/2021 5:48 PM
Perencevich, Ruth	Concord, NH rperence@comcast.net	A Member of the Public	Myself	Support	No	No	4/17/2021 5:59 PM
Butcher, Suzanne	Keene, NH SuzanneButcherNH@yahoo.com	A Member of the Public	Myself	Support	No	No	4/17/2021 9:45 PM
Arnold, Neil	Marlborough, NH krisarn@myfairpoint.net	A Member of the Public	Myself	Support	No	No	4/17/2021 9:54 PM
Martines, Kristina	Bedford, NH Martineskla@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 10:36 PM
Vogt, Robin	Portsmouth, NH robin.w.vogt@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 10:42 AM
Goggans, Ron	NH, NH rongoggans@gmail.com	An Elected Official	Myself	Support	No	No	4/18/2021 11:50 AM
Reardon, Donna	Concord, NH bugs42953@aol.com	A Member of the Public	Myself	Support	No	No	4/18/2021 11:54 AM

Chaffee, Jonathan	West Lebanon, NH jkchaffee@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 3:33 PM
Chase, Susan	Andover, NH srfchase@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 4:54 PM
Boynton, Jessica	Campton, NH jskinner05@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 9:33 AM
Johnson, Sara	Warner, NH nhchicagocubfan@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 9:37 AM
Townsend, Charles	Canaan, NH chucktownsend@me.com	A Member of the Public	Myself	Support	No	No	4/17/2021 9:57 AM
Roper, Margaret	Waterville Valley, NH terry@roperre.com	A Member of the Public	Myself	Support	No	No	4/17/2021 10:16 AM
levy, irit	Waterville Valley, NH irit.levy@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 12:07 PM
Spence, Richard	Dover, NH rtssds2@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 3:53 PM
Lindpaintner, Lyn	Concord, NH lynlin@bluewin.ch	A Member of the Public	Myself	Support	No	No	4/17/2021 5:18 PM
Martines, Julia	Bedford, NH martinesjta@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 10:47 PM
Saum, Judith	Rumney, NH judithsaum@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 6:10 AM
Engel, Craig	Campton, NH craig.engel@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:30 AM
Cadwallader, Leonard	Hanover, NH lennycad@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:40 AM
Field, Bryan	PETERBOROUGH, NH brysciguy@gmail.com	A Member of the Public	Myself	Support	No	No	4/17/2021 5:54 AM
Stephenson, Phillip	Hollis, NH phillip.stephenson@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 9:46 AM
Hampton, Doris	Canterbury, NH dandmhamp38@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 9:50 AM
Ladd, Steven	Meriden, NH stevenaladd@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 10:07 AM
Gallagher, Ann	Hanover, NH gallagh@whidbey.com	A Member of the Public	Myself	Support	No	No	4/15/2021 10:25 AM

Emerson, Anne	Canterbury, NH ademerson4180@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 3:07 PM
Reed, Barbara	North Swanzey, NH BDRreed74@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 6:53 AM
Russman, Rick	Kingston, NH richardrussman@gmail.com	An Elected Official	Myself	Support	No	No	4/16/2021 7:50 AM
Cusson, Jeanne	Concord, NH Jsirgus@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 9:18 AM
Widerstrom, Sally	Plymouth, NH sallyswid@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 9:18 AM
Waterman, Raymond	Merrimack, NH prwaterman@aol.com	A Member of the Public	Myself	Support	No	No	4/16/2021 9:54 AM
Waterman, Patricia	Merrimack, NH prwaterman@aol.com	A Member of the Public	Myself	Support	No	No	4/16/2021 9:54 AM
Ecklund, Peter	Mont Vernon, NH 10southmain@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 10:01 AM
King Ecklund, Susan	Mont Vernon, NH tensouthmain@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 10:02 AM
Vail, Suzanne	Nashua, NH Suzanne.vail@leg.state.nh.us	An Elected Official	Myself	Support	No	No	4/16/2021 10:56 AM
Abel, Rep. Richard	Lebanon, NH Richard.abel@leg.state.nh.us	An Elected Official	Myself	Support	No	No	4/16/2021 11:01 AM
Saunderson, George	Loudon, NH saunderson.george@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 11:04 AM
Allen, Renay	Exeter, NH rmallenNH@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 12:33 PM
jones, carolyn	Keene, NH carolynj1947@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 3:03 PM
Gordon, Margaret	Weare, NH Megordon98@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 10:36 AM
Shamel, Susan	Hillsborough, NH Susanshamel@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 11:23 AM
Campbell, Leonard	Meredith, NH lsoup03@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 12:18 PM
Willing, Maura	Concord, NH Maura.Willing@Comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 12:23 PM

Tirrell, Sara	Plymouth, NH stirrell@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 12:56 PM
Burr, Emily	Canterbury, NH revemilyburr@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 1:17 PM
Podlipny, Ann	Chester, NH apodlipny57@comcast.net	A Member of the Public	Myself	Support	No	No	4/16/2021 1:19 PM
Glass, Jonathan	Cornish, NH jglass1063@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 1:27 PM
Crandell, Jane	Cornish, NH bostonjane@me.com	A Member of the Public	Myself	Support	No	No	4/16/2021 1:28 PM
Osborne, Richard	Campton, NH Rgosborne23@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 1:36 PM
Wotowiec, Peter	Langdon, NH ticonel@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 1:36 PM
Howard, Sherrill	Campton, NH golfmoms@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 3:37 PM
Koch, Helmut	Concord, NH helmut.koch.2001@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 4:24 PM
Drachman, Dori	Peterborough, NH dori.drachman@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 5:20 PM
Henry, Annie	Peterborough, NH anniehenry107@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 5:22 PM
Haring-Smith, Robert	Peterborough, NH rharingsmith@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 5:41 PM
mcGraw, David	Campton, NH dcmcgraw@myfairpoint.net	A Member of the Public	Myself	Support	No	No	4/16/2021 9:24 PM
Lenahan, Carol	Campton, NH peaseporridgehot@roadrunner.com	A Member of the Public	Myself	Support	No	No	4/16/2021 10:45 PM
Martin, Patricia	Rindge, NH pmartin2894@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 3:47 PM
Clement, Ellen	WESTMORELAND, NH bruceaclement@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 4:19 PM
QUISUMBING-KING, CORA	Dover, NH coraq@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 4:40 PM
Larson, Ruth	Alton, NH ruthlarson@msn.com	A Member of the Public	Myself	Support	No	No	4/18/2021 4:42 PM

Minton, Faith	Warner, NH minton.faith@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:26 PM
Edwards, Beverly	Temple, NH Bev.j.edwards58@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 6:29 PM
O'Neill, Nan	SALISBURY, NH raptorko@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 6:30 PM
thompson, julia	durham, NH maple371@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 6:55 PM
Cody, Gloria	Dover, NH Gloriacody@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:01 PM
Currier, Paul	Andover, NH pcurrier@tds.net	A Member of the Public	Myself	Support	No	No	4/18/2021 7:01 PM
Bernstein, Judith	New hampton, NH jbernste@bu.edu	A Member of the Public	Myself	Support	No	No	4/18/2021 7:03 PM
Rand, Steven	Plymouth, NH rstevenrand@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:06 PM
Dunker, Susan	Dover, NH Sedunker15@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:10 PM
Hulbert, Ned	Harrisville, NH nhmonadnock@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:15 PM
Radzelovage, William	Andover, NH Radbill@earthlink.net	A Member of the Public	Myself	Support	No	No	4/18/2021 7:15 PM
Turnbull, Shauna	Andover, NH shaunaturnbull@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:21 PM
Lewandowski, Jean	Nashua, NH jlewando@hotmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:25 PM
Hackmann, Kent	Andover, NH hackmann@uidaho.edu	A Member of the Public	Myself	Support	No	No	4/18/2021 12:38 PM
KARRICK, DAVID	NH, NH davidonpumpkinhill@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:45 PM
Beaufays, Pecco	ANDOVER, NH innkeeper@highlandlakeinn.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:51 PM
Broshek, Mary Anne	Andover, NH mabandsadie@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:52 PM
Van der Bijl, Dana	Deerfield, NH Dana@vanderb.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:54 PM

Coolidge, John	Andover, NH 186282@tds.net	A Member of the Public	Myself	Support	No	No	4/18/2021 5:58 PM
Bernhard, Alexander	East Andover, NH aaberhard@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 6:01 PM
Sheehy, Clara	New London, NH CLARABEMA@COMCAST.NET	A Member of the Public	Myself	Support	No	No	4/18/2021 6:05 PM
Sheehy, John	New London, NH jjsheehy@yahoo.com	State Agency Staff	Myself	Support	No	No	4/18/2021 6:06 PM
Garland, Ann	Lebanon, NH annhgarland@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:30 PM
Koch, Laurie	Concord, NH kochlj@aol.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:04 PM
Schamberg, NH St Rep Tom	Wilmot, NH tom@yourpromosolution.com	An Elected Official	Myself	Support	No	No	4/18/2021 8:21 PM
Rardin, Laurie	Concord, NH rardins@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 8:28 PM
Dewey, Karen	NEWPORT, NH pkdewey@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 8:35 PM
Clark, Martha	Canterbury, NH mctraveler1@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 8:38 PM
Anastasia, Patricia	LONDONDERRY, NH patti@pattianastasia.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:39 PM
McCarty, Amy	Windham, NH mccarty5230@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:51 PM
Oxenham, Ian	Plainfield, NH ian.r.a.oxenham@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 5:12 PM
McCarty, Jason	Windham, NH mccarty5230@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:52 PM
Mawson, Julia Steed	Pelham, NH islandview999@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 8:52 PM
Rardin, Brynne	Concord, NH brardin@alumni.conncoll.edu	A Member of the Public	Myself	Support	No	No	4/18/2021 9:01 PM
McLane, Douglas	Plymouth, NH mclanedouglas@hotmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:04 PM
Rardin, Jared	Concord, NH revjared@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:05 PM

McCormick, Marie	Lebanon, NH marie.m.mccormick@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:21 PM
See, Alvin	Loudon, NH absee@4Liberty.net	A Member of the Public	Myself	Oppose	No	No	4/18/2021 9:23 PM
Laura, Vincent	Loudon, NH lvlauravincen5@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:38 PM
Wengenroth, Richard	Pembroke, NH rwengenroth2112@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:38 PM
Wengenroth, Jacqueline	Suncook, NH jacquelinerriddle30@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:40 PM
Weck, Sarah	West Chesterfield, NH sarah_weck@hotmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:50 PM
beaufays, gail	andover, NH gailsbeaufays@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:53 PM
Atherton, John	Dover, NH JMAtherton.3@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 9:58 PM
Mordecai, Mary	Harrisville, NH marydaymordecai@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 7:40 PM
Mayman, Myra	Andover, NH myra.mayman@comcast.net	A Member of the Public	Myself	Support	No	No	4/18/2021 7:44 PM
Wells, Lee	Andover, NH Leewells.locustfarm@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 10:59 PM
Wells, Ken	Andover, NH kenwells3@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 11:01 PM
Grassie, Chuck	Rochester, NH chuck.grassie@leg.state.nh.us	An Elected Official	Strafford 11	Support	No	No	4/18/2021 11:04 PM
Maskwa, Donna	Dover, NH donna.maskwa@gmail.com	A Member of the Public	Myself	Support	No	No	4/18/2021 11:11 PM
Hodson, Andrea	Harrisville, NH lamoishodson@mac.com	An Elected Official	Harrisville Select Board	Support	No	No	4/18/2021 11:52 PM
Whittier, AnaMaria	Sunapee, NH anamariawhittier@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 4:23 AM
Greenwood, Nancy	Concord, NH nancgreenwood@yahoo.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:00 AM
Briggs, Ron	Concord, NH Rongb1950@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:02 AM

Walker, Douglas	Harrisville, NH walkerdb.doug@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:02 AM
Letellier, Kathleen	Dover, NH Kathleenletellier@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:17 AM
McNamee, Brigid	Concord, NH brigidmcnamee@yahoo.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:19 AM
Nesbitt, Kristen	Wilmot, NH Kristengnesbitt52@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:21 AM
Jachim, Nancy	Newport, NH nancyjachim@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:25 AM
Beffa-Negrini, Patricia	Nelson, NH pbeffa@me.com	A Member of the Public	Myself	Support	No	No	4/14/2021 11:32 AM
Dell Orfano, Michael	Amherst, NH MikeD@BaseCamp.net	A Member of the Public	Myself	Support	No	No	4/14/2021 11:50 AM
Keene, Robert	Hanover, NH dmdsmile@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 12:09 PM
Keene, Jean	Hanover, NH rckdmd12@icloud.com	A Member of the Public	Myself	Support	No	No	4/14/2021 12:11 PM
Oxenham, Evan	Plainfield, NH evan.oxenham@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 12:12 PM
Gagnon, Brett	Hudson, NH brettprotectingnh@gmail.com	An Elected Official	Myself	Support	No	No	4/14/2021 12:30 PM
McCanne, Robert	MERIDEN, NH BobGod8@gmail.com	A Member of the Public	Myself	Support	No	No	4/14/2021 12:31 PM
Hunnewell, Anne	Holderness, NH ahunne@roadrunner.com	A Member of the Public	Myself	Support	No	No	4/16/2021 4:09 PM
Moffett, Howard	Canterbury, NH howard.m.moffett@gmail.com	A Member of the Public	Myself	Support	No	No	4/16/2021 4:11 PM
Hirshberg, Nancy	Wolfeboro, NH nancy@nhirshberg.com	A Member of the Public	Myself	Support	No	No	4/16/2021 5:07 PM
pastor, beatriz	Lyme, NH beatriz.pastor@dartmouth.edu	A Member of the Public	Myself	Support	No	No	4/16/2021 6:22 PM
Courtney, Jo-Ellen	Enfield, NH jecourtney820@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 3:54 PM
Shepardson, Marge	Marlborough, NH marge.shepardson@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 4:26 PM

Nupp, James	Wolfeboro, NH james.nupp@gmail.com	A Member of the Public	Myself	Support	No	No	4/15/2021 5:08 PM
kulbacki, peter	Enfield, NH pkulbacki@gmail.com	A Member of the Public	Myself	Support	No	No	4/19/2021 6:35 AM
Graham, James	Lyme, NH jamesg@blue-bottle.com	A Member of the Public	Myself	Support	No	No	4/19/2021 7:00 AM
FRIEDRICH, ED	Loudon, NH erfriedrich@yahoo.com	A Member of the Public	Myself	Support	No	No	4/18/2021 10:49 PM

Testimony

Prof. Amro M. Farid
Associate Professor of Engineering
Thayer School of Engineering at Dartmouth
14 Engineering Drive
Hanover, NH 03755

April 19, 2021

Hon. Michael Vose
Chair, Science, Technology & Energy Committee
New Hampshire House

RE: HB91, Part IV. Relative to the purchase of output of limited electrical energy producers in intrastate commerce and including qualifying storage system

Dear Rep. Vose & Members of the NH House Science, Technology & Energy Committee,

I write to you to express and explain my strong support for HB91 Part IV, relative to the purchase of output of limited electrical energy producers in intrastate commerce and including qualifying storage system. My personal and professional credentials can be found at the bottom of this correspondence.

HB91, Part IV is an example of sensible and expedient legislation that supports *free and fair* electricity markets. Currently, there exists a gap in our electricity markets for generators between 1 MW and 5MW; where generators smaller than 1MW are covered by net-metering and generators greater than 5MW participate in interstate wholesale exchanges in the ISO New England market. This bill serves to fill the gap in legislation, addresses the associated equity issues and resolves the equitable market entry problems for the *small and medium enterprise operators* of these facilities.

Furthermore, the equitable access created HB91, Part IV is likely to *reduce electricity prices* for everyday New Hampshire residents. As you know, the United States Department of Energy Energy Information Administration regularly shows New Hampshire as having one of the highest retail electricity rates in the nation. This bill creates a much more compelling value proposition for 1-5MW generators in the state and opens the door for bilateral power purchase agreements with businesses and aggregators alike.

Finally, by taking advantage of the *low-cost in-state generation resources*, we are likely to *reduce transmission charges* which are a significant portion of retail electricity rates in New Hampshire. As a general rule of thumb in power systems engineering, the further the electrons have to go the more expensive they are.

I thank you for your consideration of this brief correspondence and urge you to support HB91, Part IV. My personal and professional credentials are found below.

- I'm a resident of Lyme, NH an an Eversource customer.

- I'm an American citizen and vote regularly.
- I am an Associate Professor of Engineering at the Thayer School of Engineering at Dartmouth¹ and an Adjunct Associate Professor of Computer Science at the Department of Computer Science at Dartmouth College. My office is located at 14 Engineering Drive, Hanover, NH. I have taught power systems engineering at the graduate level since 2010.
- I maintain a research expertise in intelligent multi-energy engineering systems which includes power systems engineering, economics, and policy. I have published over 140 peer-reviewed publications in these areas and have been externally funded by ISO New England, the Electric Power Research Institute, the Department of Energy, the Department of Defense, the National Science Foundation, and Mitsubishi Heavy Industries. I have been invited to speak on energy related issues by the International Energy Agency, Hydro-Quebec, the Australian Energy Market Operator, Great River Hydro, the Energy Systems Integration Group, several national laboratories, and a number of prominent universities including MIT, Harvard, Princeton, Stanford and UC Berkeley.
- I am also the Chief Executive Officer of Engineering Systems Analytics (ESA) LLC which is located in Lyme, NH. ESA produces the EPECS (Electric Power Enterprise Control System) Simulation Software that ISO New England uses to conduct its annual renewable energy, energy storage, and demand-side resource integration studies.
- I am the Chair of the IEEE Smart Cities Research & Technical Development Committee², Chair of the IEEE Smart Buildings Load and Customers Architecture Subcommittee³ which oversees the IEEE's standard for Blockchain in Energy⁴ and Co-Chair of the IEEE Systems, Man & Cybernetics Technical Committee on Intelligent Industrial Systems⁵.
- I am a senior member of the IEEE and a member of the ASME and INCOSE.
- I received bachelors and masters degrees in mechanical engineering from MIT and a doctoral degree in engineering from the University of Cambridge, UK.
- I have won a Certificate of Merit for exceptional community service from the United States Congress.

Sincerely,



Dr. Amro M. Farid
Associate Professor of Engineering
Adjunct Associate Professor of Computer Science
Laboratory for Intelligent Integrated Networks of Engineering Systems (LIINES)
Thayer School of Engineering at Dartmouth
CEO of Engineering Systems Analytics LLC

¹ <https://engineering.dartmouth.edu/people/faculty/amro-farid>

² <https://smartcities.ieee.org/about/ieee-smart-cities-committees>

³ <https://site.ieee.org/pes-sblc/subcommittees/>

⁴ https://standards.ieee.org/project/2418_5.html

⁵ <https://sites.google.com/view/ieee-smc-tc-iis/>



Market Participation of Distributed Energy Resources

EPRI-Stanford Digital Grid Webinar

Tongxin Zheng

TECHNICAL DIRECTOR



ISO New England (ISO) Has More Than Two Decades of Experience Overseeing the Region's Restructured Electric Power System

Energy Market

Electric Energy: The Day-Ahead and Real-Time Energy Markets are forward and spot markets for trading **electric energy**. Energy prices **fluctuate** throughout the day and at different locations in New England, reflecting the amount of consumer demand, constraints on the system, and the price of fuel that resources use to generate electricity.

Ancillary Markets

Short-Term Reliability Services: Resources compete in the ancillary markets to provide backup electricity as well as services needed to support the physical operation of the system, such as frequency regulation and voltage support. These services are **critical** during periods of heavy demand or system emergencies.

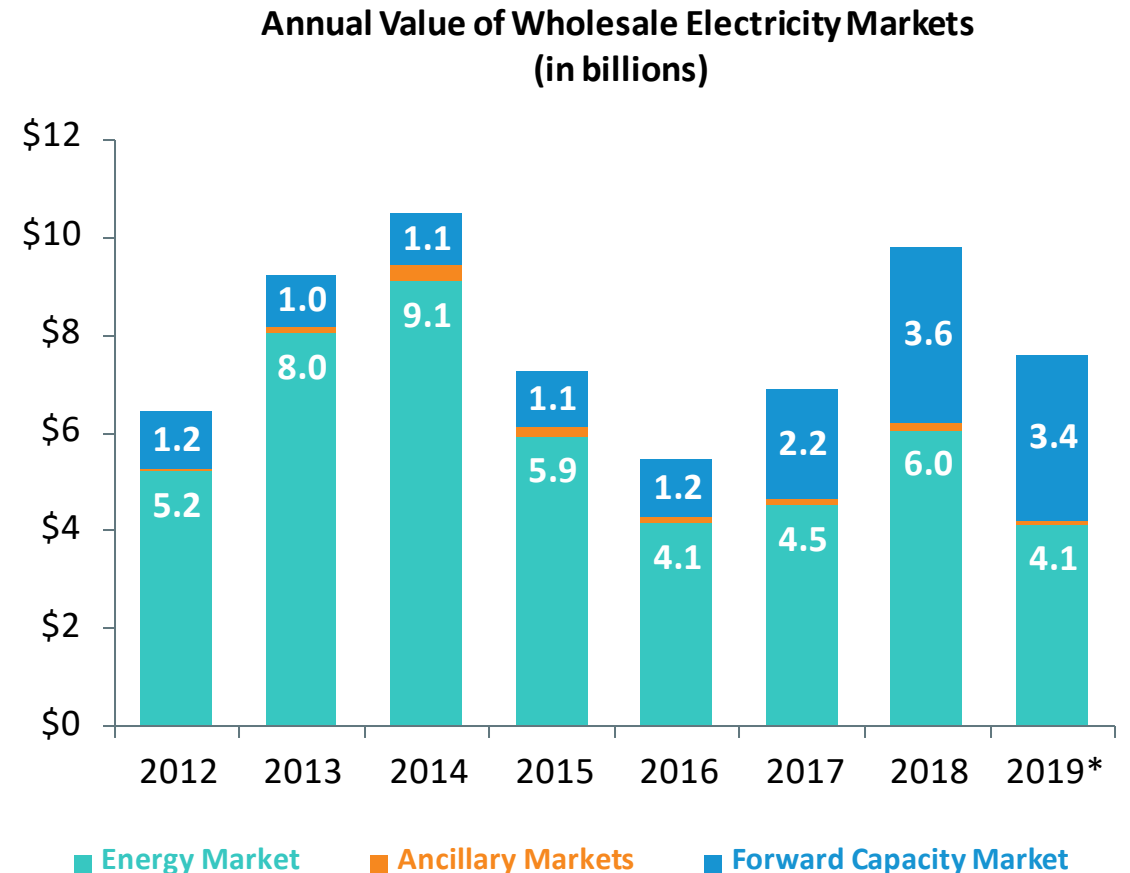
Forward Capacity Market

Long-Term Reliability Services: Resources compete to sell **capacity** to the system in three years' time through annual Forward Capacity Auctions. The Forward Capacity Market works in tandem with the Energy Markets to **attract** and **sustain** needed power resources today and into the future.



Many Resources Compete to Supply Electricity in New England's Wholesale Markets

- Close to **500** buyers and sellers in the markets
- **\$7.6 billion** in wholesale electricity market transactions in 2019
 - **\$4.1 billion** in the energy market
 - **\$100 million** in the ancillary services markets
 - **\$3.4 billion** in the capacity market

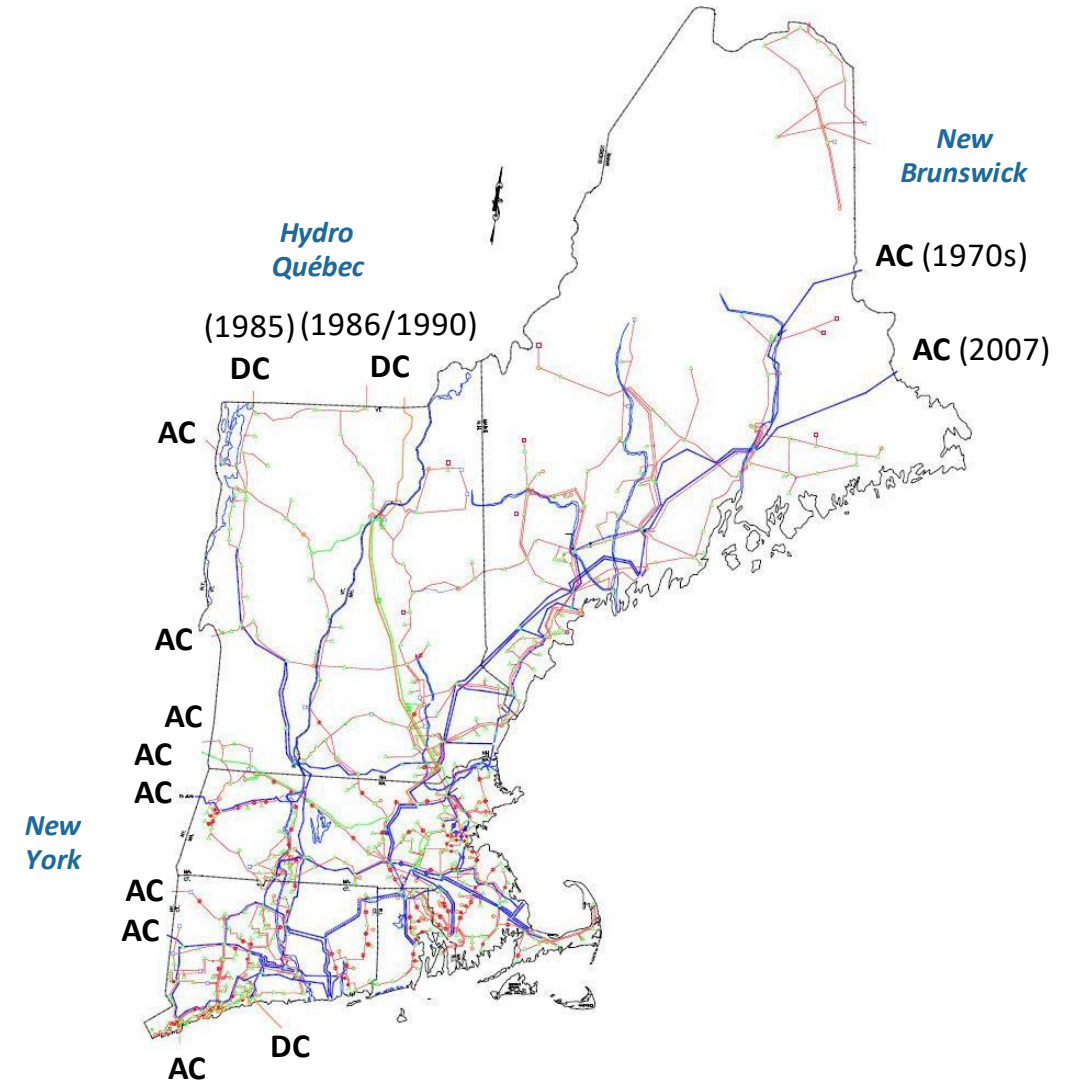


* 2019 data are subject to adjustment



Key Facts About ISO New England Grid

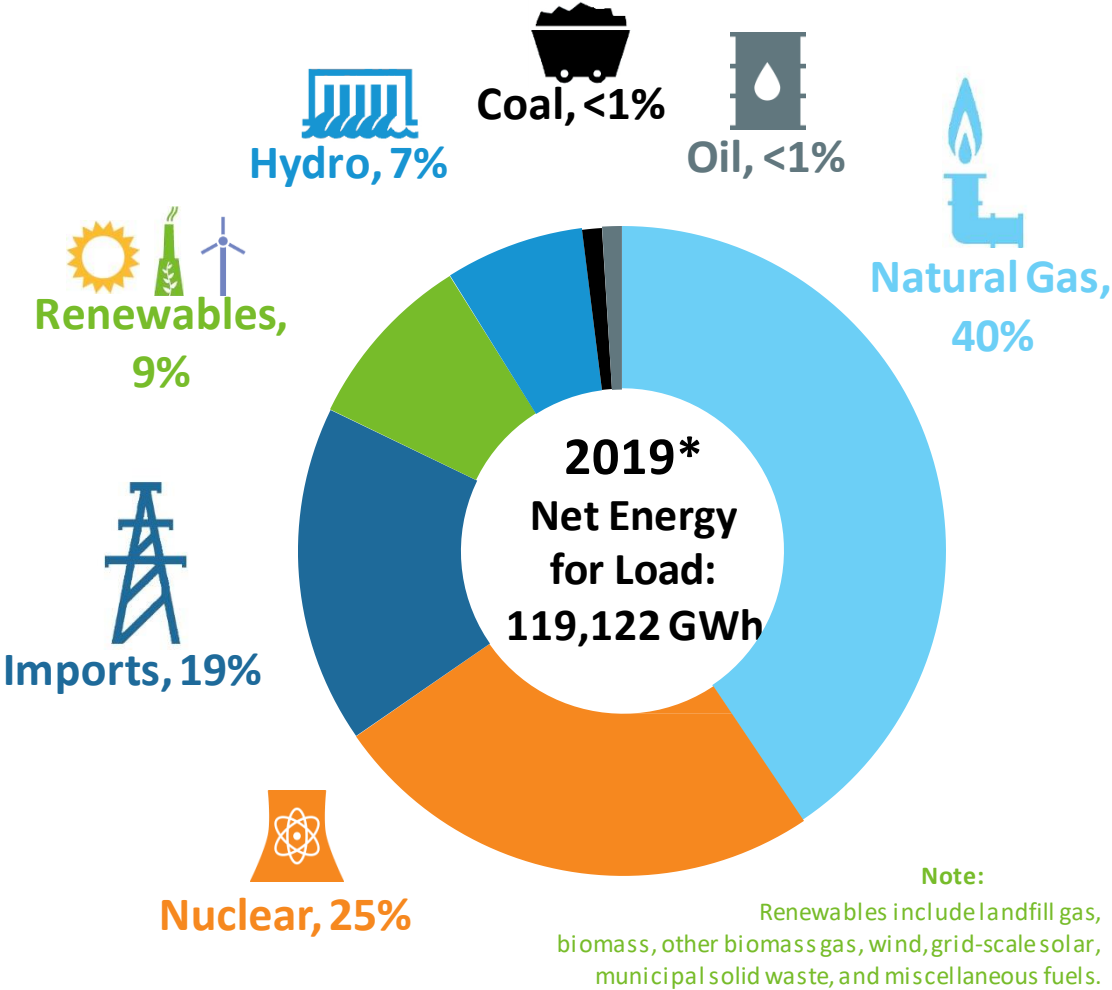
- **7.2 million** retail electricity customers drive the demand for electricity in New England (14.8 million population)
 - Region's all-time summer peak demand: **28,130 MW** on August 2, 2006
 - Region's all-time winter peak demand: **22,818 MW** on January 15, 2004
- Transmission system is tied to neighboring power systems in the U.S. and Eastern Canada:
 - New York (8 AC ties, 1 DC tie)
 - Hydro Québec (2 DC ties)
 - New Brunswick (2 AC ties)
- **19%** of the region's energy needs were met by imports in 2019



Note: AC stands for Alternating Current and DC stands for Direct Current

Generation and Demand Resources Are Used to Meet New England's Energy Needs

- 350 dispatchable generators in the region
- 31,500 MW of generating capacity
- Over 20,000 MW of proposed generation in the ISO Queue
 - Mostly wind proposals
- Roughly 7,000 MW of generation have retired or will retire in the next few years
- 580 MW of active demand response and 2,630 MW of energy efficiency with obligations in the Forward Capacity Market*



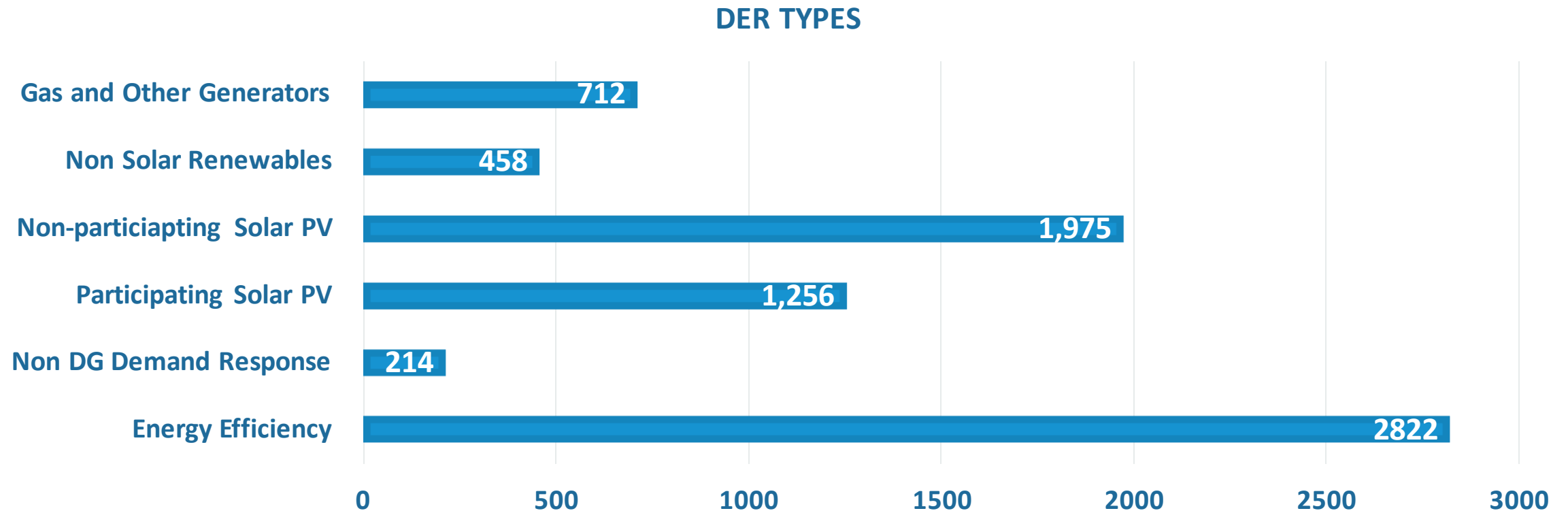
* In the Forward Capacity Market, demand-reduction resources are treated as capacity resources.

*Data is subject to adjustment



Distributed Energy Resources in ISO NE System

- 7437 MW, 19% of operating capacity



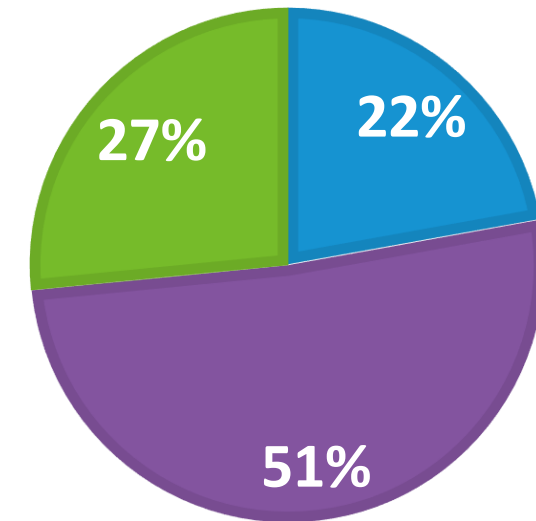
Data as of 9/1/2019, source: https://www.iso-ne.com/static-assets/documents/2019/10/rm18-9_resp_to_der_data_req.pdf

Current DER Market Participation

- Market participation programs
 - Demand Response (DR)
 - Passive demand resources
 - On-peak
 - Seasonal On-peak
 - Active demand resources
 - Price responsive demand (PRD)
 - Settlement Only Generator (SOG)
 - Energy Storage

DER MARKET PARTICIPATION

■ SOG ■ DR ■ Non Market Participation



PRD Program

- Product Eligibility
 - Capacity, Energy and Ancillary Services
 - Metering and baseline calculation are required
- DR aggregation at a DR zone
 - 20 DR zones
 - Registered resource with multiple assets within the same DR zone
 - Capable of 0.1MW demand reduction
 - No individual asset with Max Interruptible Capacity \geq 5MW
- DR resource at a single location
 - Capable of 0.1MW demand reduction
 - Max Interruptible Capacity \geq 10kW
 - Single Retail Delivery Point and Pricing Node

Reference: ISO New England Market Rule 1, Section III.8.1



SOG Program

- SOG scheme is basically a settlement construct
 - Capacity resource
 - Not explicitly considered in system operations and market clearing
 - Does not receive ISO dispatch signal
 - Self schedule by owners
 - Receive energy revenue
 - Settle at a designated pricing location
- Eligibility
 - Interconnected below 115kV
 - Less than 5MW

Reference: Operating Procedure 14, Section II.A



Energy Storage

- Program is established under FERC Order 841
- Qualification
 - One or more storage facilities at the same point of interconnection
 - Must be able to inject/consume at least 0.1MW
- Products offered
 - Capacity, Energy, and Ancillary Services
- Registered as both a generator and a dispatchable demand
- Can be either a “Binary Storage Facility” or a “Continuous Storage Facility”
 - Depends on the choice of regulation service provision

Reference: Market Rule 1, Section III.1.10.6



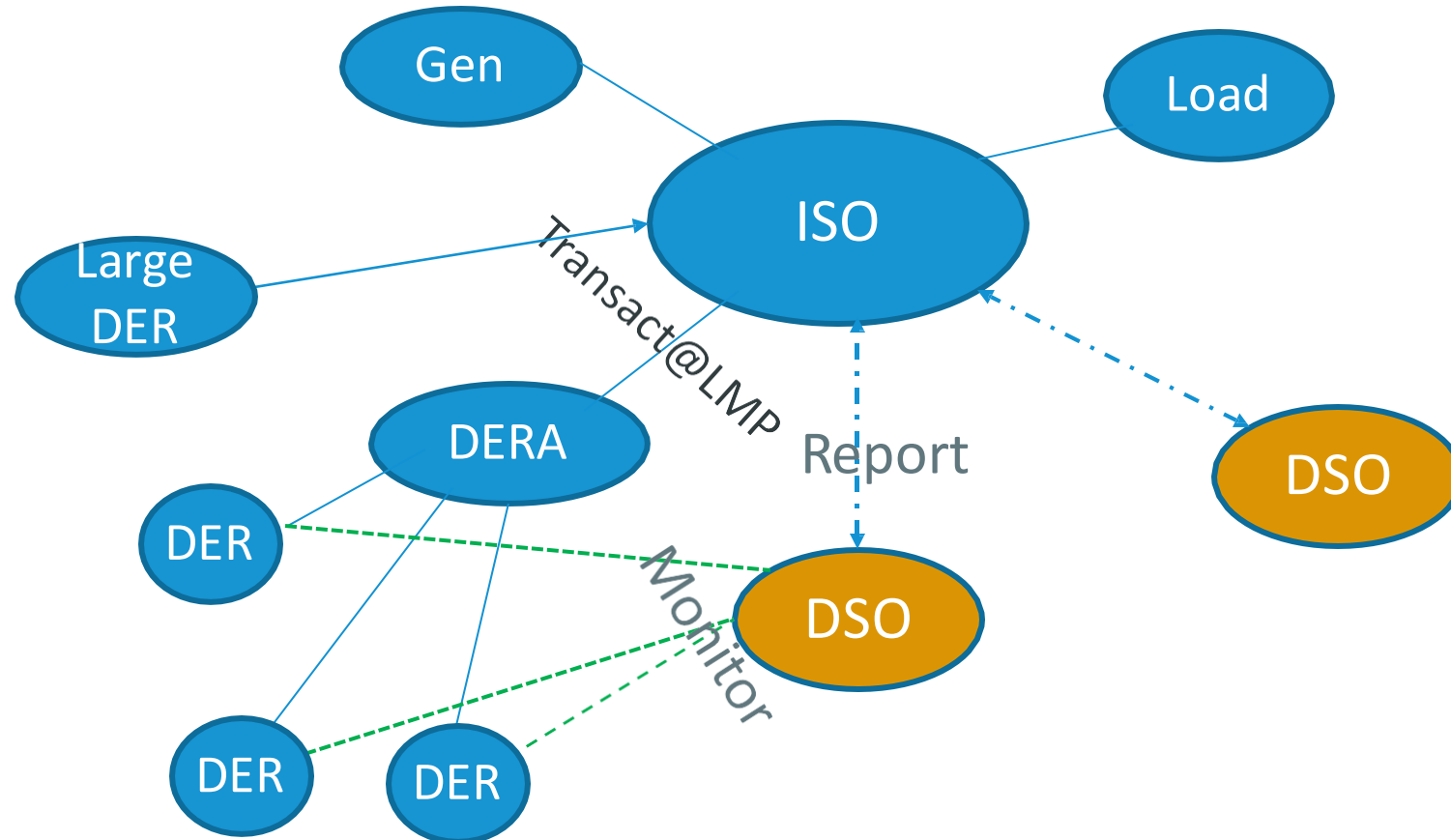
Challenges of DER Integration

- Distribution resource planning
- Transmission system planning
- Grid operation
- DER control and operation
- Market participation
- State and federal policy



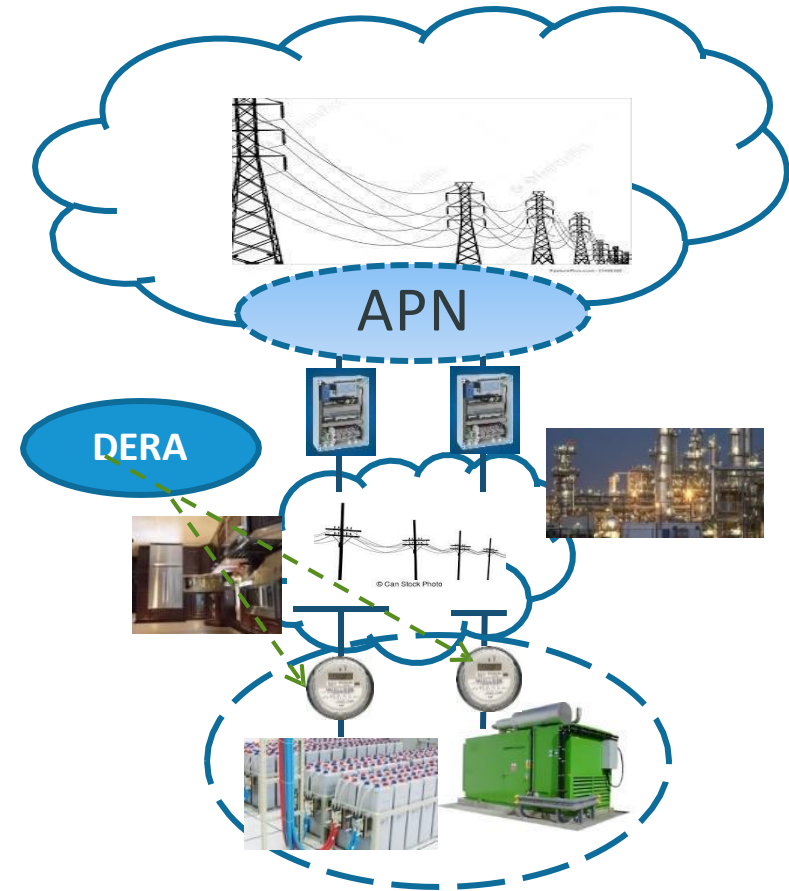
Current Market Structure for DER Integration

- ISO/DSO wholesale only market



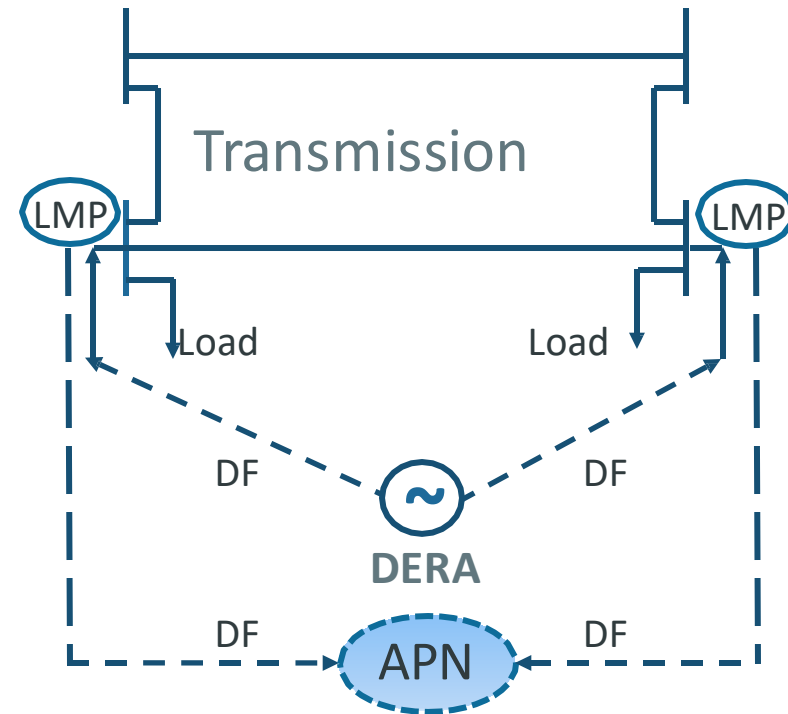
Thoughts on DER Aggregation Model

- A prosumer model
 - Individual DER participates the wholesale market through a DER aggregator
 - Provide energy, ancillary services, and capacity products
 - Aggregator is responsible for
 - Submitting bids to buy and offer to sell at an aggregation level
 - Following ISO dispatch instruction and disaggregating ISO dispatch signal for each DER
 - Reporting DERA telemetry
 - Communicating with ISO on distribution limitation on DERA output
 - No double compensation or double charge such as net metering
- TO/DSO should communicate with ISO on its operational issues and its requirements on DER dispatch and commitment



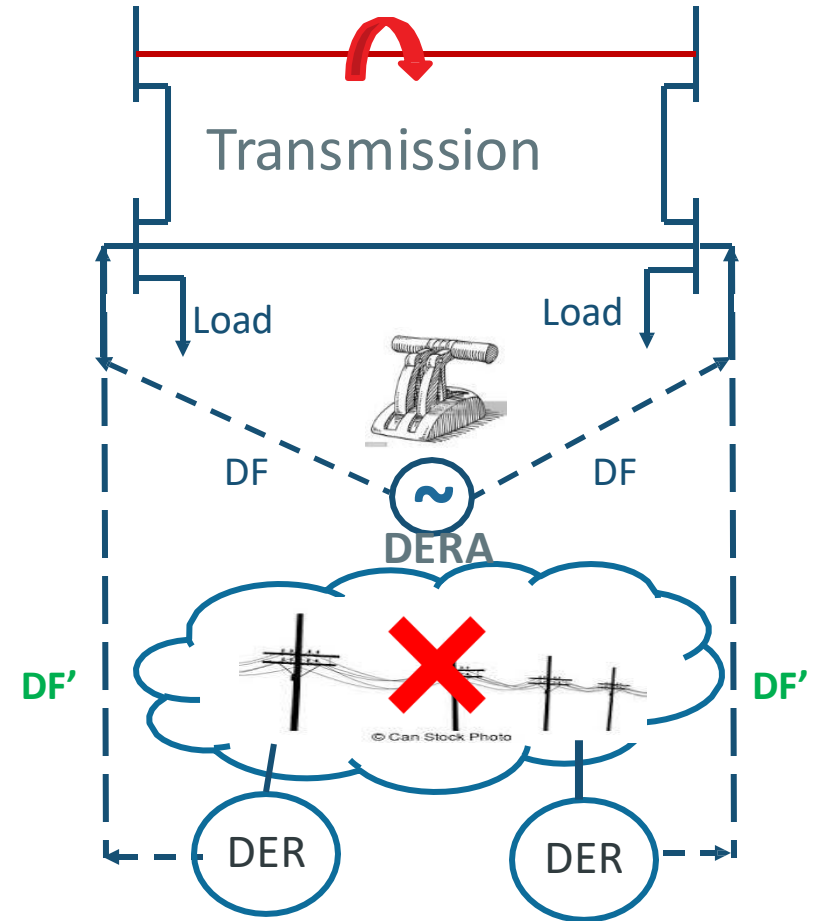
Challenges with the Aggregation Model

- DER visibility
 - ISO Market model is at the transmission system level
 - An aggregated resource is modeled at a virtual location through distribution factors (DFs)
 - No observability of distribution system creates challenges
 - DER to POI mapping
 - Dynamics of DF
 - Mismatch between the market model and the physical model



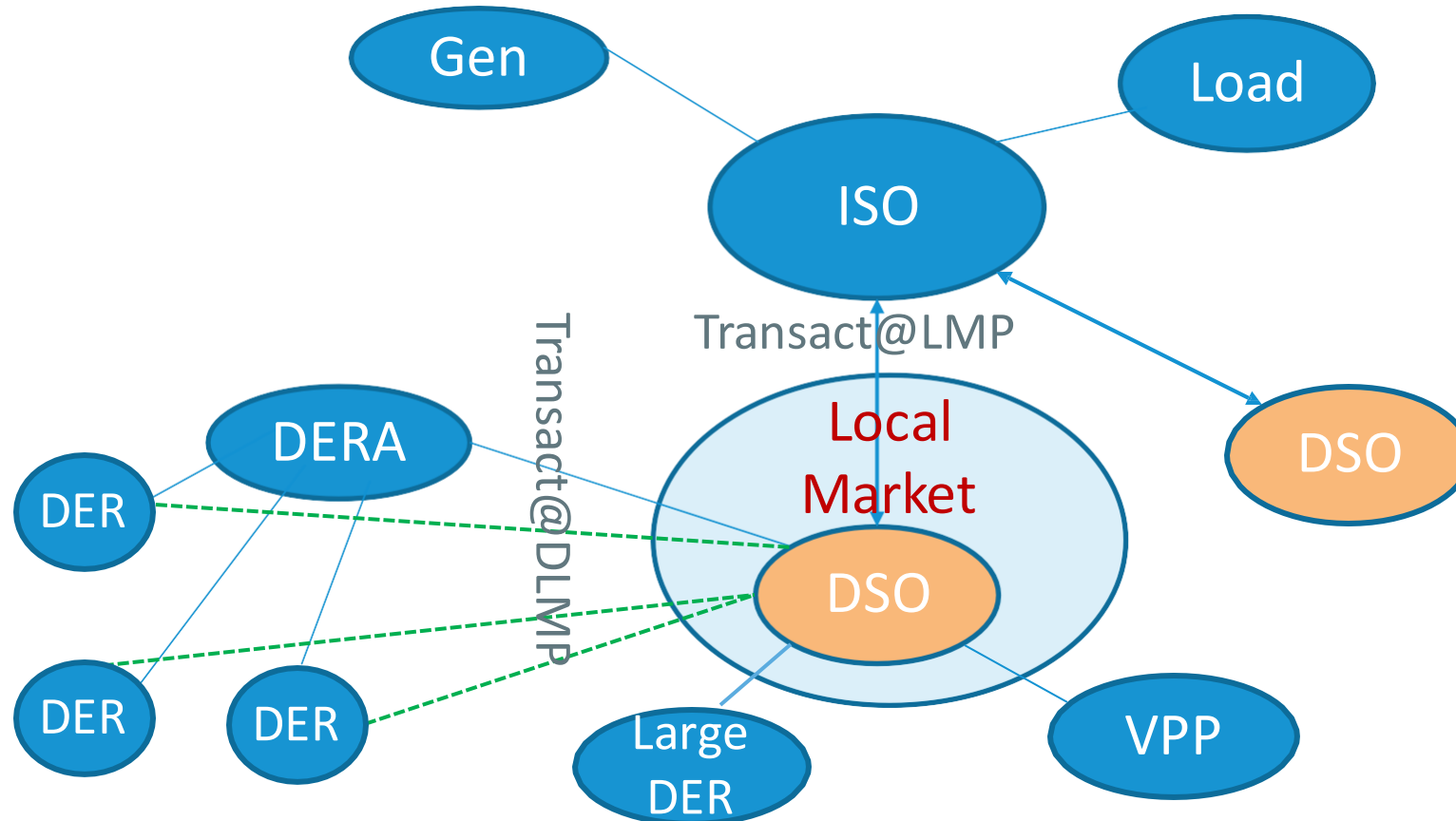
Challenges with the Aggregation Model

- Dispatch efficiency and transmission congestion management
 - Actual DER responses to the control room dispatch signal may not be consistent with what the dispatch model predicts.
 - Local congestion may require significant adjustment of an aggregated DER's output rather than a small set of DERs.
 - DER aggregator's control may result in issues in distribution system.
 - Feeder congestion
 - Voltage
 - Power quality



Possible Long-Term Market Structure for DER

- A local energy market construct



Conclusion

- A DER aggregation model should be considered for the future DER integration of wholesale electricity markets
- Direct participation of DERA in the wholesale markets requires a proper ISO/DSO/DERA coordination, and can be efficient in the short-run
- To fully resolve the TSO/DSO coordination issue, local energy markets could be established in the future when a large number of DERs participate in the wholesale markets



Questions



Bill as
Introduced

SB 91 - AS INTRODUCED

2021 SESSION

21-0945
10/06

SENATE BILL **91**

AN ACT adopting omnibus legislation on renewable energy, utilities, and net metering.

SPONSORS: Sen. Watters, Dist 4

COMMITTEE: Energy and Natural Resources

ANALYSIS

This bill adopts legislation relative to:

- I. Requiring the public utilities commission to adopt rules clarifying policy for the installation, interconnection, and use of energy storage systems by utility customers.
- II. Hydroelectric generators that share equipment for purposes of interconnection to the electric grid.
- III. Billing in an aggregation of electric utility customers.
- IV. Group host credits for net energy metering.
- V. The purchase of output of limited electrical energy producers in intrastate commerce and including qualifying storage system.
- VI. The aggregation of electric customers.
- VII. Net energy metering limits for customer generators.

Explanation: Matter added to current law appears in **bold italics**.
Matter removed from current law appears [~~in brackets and struck through~~].
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

21-0945
10/10

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty One

AN ACT adopting omnibus legislation on renewable energy, utilities, and net metering.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 Sponsorship. This act consists of the following proposed legislation:

Part I: LSR 21-0945, relative to the installation, interconnection, and use of energy storage systems by customers of utilities, sponsored by Sen. Watters, Prime/Dist 4; Sen. Perkins Kwoka, Dist 21; Sen. Rosenwald, Dist 13; Sen. Kahn, Dist 10; Sen. Sherman, Dist 24; Sen. D'Allesandro, Dist 20; Sen. Whitley, Dist 15; Rep. Oxenham, Sull. 1.

Part II: LSR 21-0881, relative to hydroelectric generators that share equipment for purposes of interconnection to the electric grid, sponsored by Sen. Bradley, Prime/Dist 3; Sen. Watters, Dist 4; Sen. Avard, Dist 12.

Part III: LSR 21-0975, relative to aggregation of electric utility customers, sponsored by Sen. French, Prime/Dist 7; Sen. Carson, Dist 14; Sen. Reagan, Dist 17; Sen. Sherman, Dist 24; Sen. Rosenwald, Dist 13; Sen. Gannon, Dist 23; Sen. Avard, Dist 12; Sen. Prentiss, Dist 5; Sen. Watters, Dist 4; Sen. Bradley, Dist 3.

Part IV: LSR 21-0988, relative to group host credits for net energy metering, sponsored by Sen. Perkins Kwoka, Prime/Dist 21; Sen. Watters, Dist 4; Sen. Sherman, Dist 24; Sen. Whitley, Dist 15; Rep. McWilliams, Merr. 27; Rep. Gourgue, Straf. 25.

Part V: LSR 21-0991, relative to the purchase of output of limited electrical energy producers in intrastate commerce and including qualifying storage system, sponsored by Sen. Bradley, Prime/Dist 3; Sen. Watters, Dist 4; Sen. Avard, Dist 12; Sen. Giuda, Dist 2.

Part VI: LSR 21-1007, relative to the aggregation of electric customers, sponsored by Sen. Avard, Prime/Dist 12; Sen. D'Allesandro, Dist 20; Rep. Lang, Belk. 4.

Part VII: LSR 21-1036, relative to net energy metering limits for customer generators, sponsored by Sen. Prentiss, Prime/Dist 5; Sen. Watters, Dist 4; Rep. McWilliams, Merr. 27; Rep. McGhee, Hills. 27; Rep. Oxenham, Sull. 1.

2 Legislation Enacted. The general court hereby enacts the following legislation:

PART I

Relative to the installation, interconnection, and use of energy storage systems by customers of utilities.

1 Customer Energy Storage. RSA 374-H is repealed and reenacted to read as follows:

CHAPTER 374-H

CUSTOMER ENERGY STORAGE

374-H:1 Definitions. In this chapter:

I. "Commission" means the public utilities commission.

II. "Bring your own device" means a program for encouraging non-utility owned, and especially retail-customer owned, behind-the-meter energy storage to provide the greatest value possible to the electricity system, particularly in terms of peak reduction and avoided transmission and distribution costs. Such a program shall compensate participating behind-the-meter energy storage for a fair share, as determined by the commission, of the value it provides to the electricity system.

III. "Energy storage" means batteries, flywheels, compressed air energy systems, sensible heat storage or any other technology, system, or device capable of taking electricity and storing it as some form of energy the technology, system, or device can either convert back into electricity or use to displace an electrical load at a later time. Such term shall include standalone technologies, systems, and devices, as well as those co-located with or incorporated into a renewable energy source.

IV. "Front-of-meter storage" means any energy storage that is not behind-the-meter storage and may include energy storage constructed, owned, and/or operated by utilities subject to the same use restrictions in RSA 374-G:3, I.

V. "ISO-New England" means the Independent System Operator New England or any successor entity.

VI. "Local network service" means the term as defined in ISO-New England's transmission, markets, and services tariff, section II.

VII. "Non-utility" means any entity that is not a utility that develops, builds, owns, operates, or assists in the operation of one or more energy storage projects, including retail customers that buy behind-the-meter storage installed on their property.

VIII. "Regional network service" means the term as defined in ISO-New England's transmission, markets, and services tariff, section II.

IX. "Renewable energy source" means a Class I, Class II, or Class IV renewable energy source as defined in RSA 362-F:4.

X. "Utility" and "utilities" mean public utilities as defined in RSA 362:2.

XI. "Wholesale electricity markets" means any energy, capacity, or ancillary service market that ISO-New England operates.

374-H:2 Customer Energy Storage Systems.

I. The commission shall adopt rules clarifying policy for the installation, interconnection, and use of energy storage systems by customers of utilities, and shall incorporate the following principles into the rules:

- (a) It is in the public interest to limit barriers to the installation, interconnection, and use of customer-sited, behind-the-meter energy storage systems in New Hampshire.
- (b) New Hampshire's consumers of electricity have a right to install, interconnect, and use energy storage systems on their property, subject to appropriate size and safety requirements established by the commission, without the burden of unnecessary restrictions or regulations and without unduly discriminatory rates or fees.
- (c) Utility approval processes and any required interconnection reviews of energy storage systems shall be simple, streamlined, and affordable for customers.
- (d) Utilities shall not require the installation of customer-sited meters in addition to a single net energy meter for the purposes of monitoring energy storage systems; except that the commission may authorize the requirement of metering for certain large energy storage systems, as determined by the commission.
- (e) The commission may approve mechanisms for a utility to compensate a non-utility for a fair share, as determined by the commission, of the value of any transmission or distribution costs actually avoided because of a non-utility energy storage project, to the extent practicable, based on determinable cost components.
- (f) For behind-the-meter storage, the rules or orders shall allow for a bring-your-own-device peak reduction program. The commission may approve mechanisms for utilities to compensate such projects for a fair share, as determined by the commission, of their peak reduction value, as well as any transmission or distribution costs actually avoided because of the non-utility energy storage project, to the extent practicable based on determinable cost components.
- (g) Utilities shall not own behind-the-meter battery storage, with the exception of the energy storage pilot approved by the commission in order number 26,209, including phase 2 of the pilot, unless the commission finds, after the pilot has been fully implemented, that additional utility ownership of behind-the-meter battery storage would be in the public interest and would not unreasonably encumber the deployment of non-utility behind-the-meter battery storage.

II. Nothing in this section alters or supersedes either:

- (a) The principles of net energy metering under RSA 362-A:9; or
- (b) Any existing electrical permit requirements or any licensing or certification requirements for installers, manufacturers, or equipment.

374-H:3 Commission Investigation of Energy Storage.

I. The commission shall investigate ways to enable energy storage projects to receive compensation for avoided transmission and distribution costs, including but not limited to avoided regional and local network service charges, while also participating in wholesale energy markets. The commission shall investigate how this might be done for both utility-owned and non-utility-owned energy storage projects, as well as for both behind-the-meter storage and front-of-the-meter storage.

II. The commission's investigative proceeding shall specifically consider the following:

- (a) How public policy can best help establish accurate and efficient price signals for energy storage projects that value their ability to avoid transmission and distribution costs while simultaneously reducing wholesale electricity market prices.
- (b) How to compensate energy storage projects that participate in wholesale electricity markets for avoided transmission and distribution costs in a manner that provides net savings to consumers.
- (c) How best to encourage both utility and non-utility investments in energy storage projects.
- (d) The costs and benefits of a potential bring your own device program; how such a program might be implemented; any statutory or regulatory changes that might be needed to create, facilitate, and implement such a program; and whether such a program should include all distributed energy resources or be limited to distributed energy storage projects.
- (e) Any statutory changes the general court should implement, including but not limited to changes to or exceptions from RSA 374-F or RSA 374-G, to enable energy storage projects to receive appropriate compensation for avoided transmission and distribution costs while also participating in wholesale energy markets.
- (f) Any other topic the commission reasonably believes it should consider in order to diligently conduct the proceeding.

III. The commission shall report its findings and recommendations to the standing committees of the house of representatives and senate with jurisdiction over energy and utility matters no later than 2 years after initiating

the proceeding. The report shall identify ways any recommended statutory changes can minimize any potential conflict with the restructuring policy principles of RSA 374-F.

2 Electric Generation Equipment Funded by Public Utility; Distributed Energy Resources. Amend RSA 374-G:3, I to read as follows:

I. The energy produced by electric generation equipment owned by the public utility shall be used **to benefit low-income customers** as an offset to distribution system losses or the public utility company's own use;

3 Electric Utility Investment in Distributed Energy Resources. Amend RSA 374-G:4, II to read as follows:

II. Distributed electric generation owned by or receiving investments from an electric utility under this section shall be limited to a cumulative maximum in megawatts of 6 percent of the utility's total distribution peak load in megawatts. ***This limitation shall not apply to front-of-meter energy storage, the energy storage pilot approved by commission order number 26,209, or demand response.***

4 Effective Date. Part I of this act shall take effect 60 days after its passage.

PART II

Relative to hydroelectric generators that share equipment for purposes of interconnection to the electric grid.

1 New Paragraph; Limited Electrical Energy Producers Act; Net Energy Metering. Amend RSA 362-A:9 by inserting after paragraph XIX the following new paragraph:

XX. A hydroelectric generator with a total peak generating capacity that is at or below the capacity eligibility requirements set forth in RSA 362-A:1-a, II-b and that first became operational before July 1, 2021 and that shares equipment or facilities with other generators or electric utility customers for interconnection to the electric grid, shall be eligible to participate in net energy metering as a customer-generator even if the aggregate capacity of the generators sharing equipment or facilities for interconnection to the electric grid exceeds the capacity eligibility requirements set forth in RSA 362-A:1-a, II-b. Such a hydroelectric generator shall be eligible to participate in net energy metering as a customer-generator based on its individual total peak generating capacity.

2 Effective Date. Part II of this act shall take effect 60 days after its passage.

PART III

Relative to aggregation of electric utility customers.

1 New Paragraph; Aggregation of Electric Customers; Regulation. Amend RSA 53-E:4 by inserting after paragraph VI the following new paragraph:

VII. For the purposes of billing aggregated retail electricity customers under this chapter and through the consolidated billing function of a distribution utility, when a customer makes a payment for less than the full amount billed, such payment shall be applied as follows:

- (a) First to any outstanding customer loans or deposit obligations with the utility;
- (b) Next to any utility current payment arrangement obligations;
- (c) Next to any utility budget billing arrangement obligations;
- (d) Next to the aged accounts receivable of any utility and aggregator or competitive electricity supplier serving an aggregation, in proportion to the balance due on such aged accounts receivable;
- (e) Next to the current charges of any utility and aggregator or competitive electricity supplier serving an aggregation, in proportion to the balance due on such current charges; and
- (f) Finally, to any other charges due on the utility bill as may be provided by utility tariffs.

2 Effective Date. Part III of this act shall take effect 60 days after its passage.

PART IV

Relative to group host credits for net energy metering.

1 Net Metering; Group Host; Low -Moderate Income Community Solar Projects. Amend RSA 362-A:9, XIV(c) to read as follows:

(c)(I) Notwithstanding paragraph V, a group host shall be paid for its surplus generation at the end of each billing cycle at rates consistent with the credit the group host receives relative to its own net metering under either subparagraph IV(a) or (b) or alternative tariffs that may be applicable pursuant to paragraph XVI. Alternatively, a group host may elect to receive credits on the customer electric bill for each member and the host, with the utility being allowed the most cost-effective method of doing so according to an amount or percentage specified for each member on PUC form 909.09 (Application to Register or Re-register as a Host), along with a 3 cent per kwh addition from July 1, 2019 through July 1, 2021 and a 2.5 cent per kwh addition thereafter for low-moderate income

community solar projects, as defined in RSA 362-F:2, X-a. ***The adder value shall be based on the date that the project qualifies for group host net metering and shall be applied to the group host and group members of that project for the term of the group net metering tariff for the project or a successor to that tariff.***

(2) On or before July 1, 2022, the commission shall report on the costs and benefits of such an addition and the development of the market for low-moderate income community solar projects, and provide a recommendation on whether the addition shall be increased or decreased. The commission shall report on the costs and benefits of low-moderate income community solar projects, as defined in RSA 362-F:2, X-a on or before June 1, 2020. The commission shall authorize at least 2 new low-moderate income community solar projects, as defined in RSA 362-F:2, X-a, each year in each utility's service territory beginning January 1, 2020. On an annual basis, for all group host systems except for residential systems with an interconnected capacity under 15 kilowatts, the electric distribution utility shall calculate a payment adjustment if the host's surplus generation for which it was paid is greater than the group's total electricity usage during the same time period. The adjustment shall be such that the resulting compensation to the host for the amount that exceeded the group's total usage shall be at the utility's avoided cost or its default service rate in accordance with subparagraph V(b) or paragraph VI or alternative tariffs that may be applicable pursuant to paragraph XVI. The utility shall pay or bill the host accordingly.

2 Effective Date. Part IV of this act shall take effect 60 days after its passage.

PART V

Relative to the purchase of output of limited electrical energy producers in intrastate commerce and including qualifying storage system

1 Definition; Limited Electrical Energy Producers; Limited Producer. Amend RSA 362-A:1-a, III to read as follows:
III. "Limited producer" or "limited electrical energy producer" means a qualifying small power producer, ***a qualifying storage system***, or a qualifying cogenerator, with a ~~[total]~~ ***maximum rated generating or discharge*** capacity of ~~[not more]~~ ***less*** than 5 megawatts, ***that does not participate in net energy metering, that is not registered as a generator, asset, or network resource with ISO New England, and does not otherwise participate in any FERC jurisdictional wholesale electricity markets. Such non-participation in FERC jurisdictional intrastate wholesale markets may be achieved by retirement from such markets.***

2 New Paragraph; Definition; Qualifying Storage System. Amend RSA 362-A:1-a by inserting after paragraph IX the following new paragraph:

IX-a. "Qualifying storage system" means an electric energy storage system as defined in RSA 72:84.

3 Limited Electrical Energy Producers Act; Purchase of Output in Intrastate Commerce. RSA 362-A:2-a is repealed and reenacted to read as follows:

362-A:2-a Purchase of Output of Limited Producers in Intrastate Commerce.

I. A limited producer of electrical energy may sell its produced electrical energy to one or more purchasers other than the franchise electric utility. Such purchasers may be any retail electricity customers located within the same New Hampshire electric distribution utility franchise area as where the limited producer is located or any electricity suppliers serving retail load within such area.

II. Intrastate sales of electricity across the distribution grid shall be facilitated and accounted for by competitive electricity suppliers registered with the commission under RSA 374-F:7 or by municipal or county aggregations under RSA 53-E that are load-serving entities.

III. To participate in such intrastate sales of electricity over the distribution grid a limited producer must be equipped with a revenue grade interval meter that can accurately measure hourly exports to the distribution grid and report such meter data for daily load settlement purposes.

IV. The commission shall establish procedures to enable limited producers to sell electricity at wholesale within intrastate commerce and at retail, either directly or indirectly through electricity suppliers. The commission may establish such requirements and conditions concerning intrastate sales of electricity pursuant to this section that it deems necessary to avoid substantial risk or uncompensated costs to the electric utility in whose franchise area the sales takes place.

V. The limited producer, or the purchasers of their output, as determined by the commission, shall receive credit for actual avoided transmission charges if the intrastate wholesale or retail sale of such electricity reduces the retail load measured at the wholesale meter point between the distribution system under state jurisdiction and transmission facilities under federal jurisdiction such that transmission charges allocated to the distribution utility

are reduced from what they otherwise would be absent the electricity exported to the distribution grid by the limited producer during hours of coincident peak on which transmission costs are allocated. Such credit shall be based on measurement of exports to the distribution grid at the retail meter point without additional credit for avoided line and transformation losses between the wholesale and retail meter points to provide some sharing of the benefit of reduced transmission charges with other ratepayers who do not participate in such intrastate electricity sales by limited producers.

VI. Purchasers of power from limited producers shall pay for the delivery of such power through tariffs, charges, and rates that are generally applicable to the customer's rate class, except for default energy service charges if not applicable and transmission charges as they may be adjusted pursuant to paragraph V.

4 New Section; Electric Renewable Portfolio Standard; Exclusion to Amount of Electricity Supplied. Amend RSA 362-F by inserting after section 3 the following new section:

362-F:3-a Exclusions to the Amount of Electricity Supplied. If a provider of electricity has revenue grade meter data on the quantity of exports to the grid from a qualifying storage system as defined in RSA 362-A:1-a to the extent that it is charged from the grid, such amounts may be deducted from the calculation of electricity supplied by the provider to its end-use customers for the applicable year for purposes of compliance with RSA 362-F:3 as determined and provided for by the commission.

5 Utility Property Tax; Exclusion From Definition of Utility Property. Amend RSA 83-F:1, V(d) to read as follows:

(d) The electrical generation, production, **storage**, and supply equipment of an "eligible customer-generator" as defined in RSA 362-A:1-a, II-b, **and of a "limited producer" as defined in RSA 362-A:1-a, III if selling under RSA 362-A:2-a, for facilities with a rated electricity production capacity of up to and including one megawatt;**

6 Effective Date. Part V of this act shall take effect 60 days after its passage.

PART VI

Relative to the aggregation of electric customers.

1 Aggregation of Electric Customers by Municipalities and Counties; Aggregation Program. Amend RSA 53-E:7, IV to read as follows:

IV. Services proposed to be offered by or through the aggregation shall be on an opt-in basis unless the approved aggregation plan explicitly creates an opt-out alternative default energy service program where the rate or price is known at least 30 days in advance of its application and, for a period of not less than 30 days from the date notification is mailed, the customer has the opportunity to opt out of being enrolled in such program, by return postcard, website, or such additional means as may be provided. Customers who are on default service provided by an electric distribution utility shall be automatically enrolled in an aggregation provided alternative default service if they do not elect to opt out. Customers opting out will instead remain on **utility-provided** default service.

Customers taking energy service from a competitive electricity supplier shall not be automatically enrolled in any aggregation program, but may voluntarily opt in. ~~[New customers to the electric distribution utility after the notification mailing required by paragraph II shall be given a choice of enrolling in utility provided default service or aggregation provided default service, where such exists. New customers shall be informed of pricing for each when they apply for service. Such new customers may also enroll with a competitive electricity supplier. New customers who do not make such a choice shall be enrolled in the default service of any geographically appropriate approved aggregation, or, if none exists, the utility provided default service.]~~ ***The utility shall periodically make available to each operating municipal aggregation, or county aggregation where there is no municipal aggregation, the names, account numbers, and mailing addresses of customers that are new to the electric distribution utility after they have provided the customer list for the initial customer mailing required by paragraph II and that are located within the aggregation. The aggregation shall periodically mail a written notification to such customers and shall enroll them in the aggregation consistent with the opt-in or opt-out requirements of this paragraph and paragraph II.*** Municipal aggregations shall take priority or precedence over any county aggregations. Customers automatically enrolled in a municipal or county provided default service shall be free to elect to return to utility provided default service or to transfer to a competitive electricity supplier with adequate notice in advance of the next regular meter reading by the distribution utility, in the same manner as if they were on utility provided default service or as approved by the commission.

2 Effective Date. Part VI of this act shall take effect 60 days after its passage.

PART VII

Relative to net energy metering limits for customer generators.

1 Findings. The general court finds that:

I. New Hampshire's electricity consumers, including municipalities, manufacturers, commercial businesses, and other large users, strongly support more competitive retail options to lower their energy costs.

II. These same consumers deserve the freedom to invest their own capital to become more self-sufficient and energy independent and less reliant on out-of-state electricity companies that control our high electricity rates.

III. ISO-New England, Inc., the independent, nonprofit regional transmission organization that oversees the operation of New England's bulk electric power system and transmission lines, has stated that infrastructure constraints could pose a challenge to the reliable operation of the regional power grid, create price increases and volatility, and contribute to increased air emissions, all of which would adversely impact New Hampshire's citizens, businesses, and economy.

IV. The current size limit of one megawatt on customer-generators that may participate in net energy metering is an unnecessary barrier that denies larger electricity users the same rights that smaller users already have to produce and use local renewable power that reduces their energy costs, increases supply, and insulates all New Hampshire ratepayers from electric price volatility and higher transmission costs.

V. The current size limit is also a barrier to significant investment in existing and new small renewable energy projects, which would help keep our energy dollars in-state, drive economic activity, support good-paying jobs, and increase state and local business and property tax revenues.

VI. The federal Public Utility Regulatory Policies Act (PURPA) as amended by the Energy Policy Act of 2005 calls upon states to consider the adoption and implementation of net metering policies. PURPA as amended states that electricity generated by an eligible on-site generating facility may be used to offset electric energy provided by the electric utility and allows states to define an eligible facility. Furthermore, under ISO New England's rules, a generating facility of less than 5 megawatts that is connected to the distribution grid is not required to register with ISO New England as a generator or participate in the wholesale energy markets; rather, if the generating facility elects not to register as a wholesale market participant or retires from such status, the customer generator is to be treated by ISO New England as a retail load reducer.

VII. It is therefore also in the best interests of all citizens of New Hampshire that the size limit on customer-generators that may participate in net energy metering and serve as retail load reducers be increased from one megawatt to up to but not including 5 megawatts to increase customer supply choice, foster a more robust retail market for local renewable energy, help mitigate the cost of electric service in the state, reduce the price volatility of that service, and reduce the potential for disruptions in electricity supply due to inadequate wholesale generating capacity in the New England marketplace.

2 Definition; Customer-generator. Amend RSA 362-A:1-a, II-b to read as follows:

II-b. "Eligible customer-generator" or "customer-generator" means an electric utility customer who owns, operates, or purchases power from an electrical generating facility either powered by renewable energy or which employs a heat led combined heat and power system, with a ~~[total peak generating]~~ **nameplate or maximum rated** capacity of ~~[up to and including one megawatt,]~~ **less than 5 megawatts and** that is located behind a retail meter on the customer's premises, is interconnected and operates in parallel with the electric grid, and is used to offset the customer's own electricity requirements **in the first instance**. Incremental generation added to an existing generation facility, that does not itself qualify for net metering, shall qualify if such incremental generation meets the qualifications of this paragraph and is metered separately from the nonqualifying facility.

3 Net Energy Metering; Net Effects. Amend RSA 362-A:9, VII to read as follows:

VII.(a) A distribution utility may perform an annual calculation to determine the net effect this section had on its default service and distribution revenues and expenses in the prior calendar year. The method of performing the calculation and applying the results, as well as a reconciliation mechanism to collect or credit any such net effects with appropriate carrying charges and credits applied, shall be determined by the commission.

(b) **For the purposes of accounting for any exports to the distribution grid by customer-generators, such exports shall be treated as reductions to the customer-generator's electricity supplier's wholesale load**

obligation for energy supply as a load serving entity, net of any applicable line loss adjustments as approved by the commission.

(c) A generator that first becomes operational on or after July 1, 2021 shall only be eligible to participate in net metering as a customer-generator if it does not register as a generator with ISO New England, is not considered a "Network Resource" or "Asset" by ISO New England, and does not participate in any other sale of electricity in interstate commerce.

(d) A generator that first became operational before July 1, 2021 and that has outstanding capacity commitments in the forward capacity market administered by ISO New England, is registered as a generator with ISO New England, or is considered a "Network Resource" or "Asset" by ISO New England, may elect to become a customer-generator and participate in net metering upon retirement from all wholesale electric markets administered by ISO New England. A generator in the process of retiring from FERC regulated electric markets may prospectively register as a group host pursuant to paragraph XIV provided that net metering tariffs under this section shall not be effective until such retirement is effective.

(e) Any provisions of settlement agreements or orders that have been approved or issued by the commission that relate to a distribution utility's treatment of the output from qualifying facilities or independent power producers shall not apply to the output from an eligible customer-generator participating in net metering.

4 Net Energy Metering; Transition of Tariffs. Amend RSA 362-A:9, XV to read as follows:

XV. Standard tariffs that are available to eligible customer-generators under this section shall terminate on December 31, 2040 and such customer-generators shall transition to tariffs that are in effect at that time. *Alternative tariffs shall be applicable and have such grandfathering provisions as may be approved or adopted by the commission under this section. Customer-generators with a nameplate or maximum rated capacity of more than one megawatt and less than 5 megawatts that are eligible for net metering before the commission adopts tariffs specifically for customer-generators with a generating capacity of more than one megawatt shall:*

(a) Be eligible to receive the export credit rate approved by the commission in Order No. 26,029 (DE 16-576) for one megawatt sized customer-generators on default service, namely, the applicable default energy service rate, minus any rate component for:

(1) Compliance with the electric renewable portfolio standard, RSA 362-F, net of prior period reconciliations for such; and

(2) Administrative costs of the electric distribution utility allocated to default energy service, net of prior period reconciliations for such, both as determined by the commission.

(b) Be eligible to receive, on a prospective basis after the commission has approved tariffs for such, credit for actual avoided wholesale transmission charges attributable to exports to the distribution grid during time periods when transmission charges are incurred by the distribution utility that reduce load at the meter point between the distribution and transmission grid and the resulting calculation of load used for apportioning such wholesale transmission charges. Such credit shall be based on measurement of exports at the retail meter point without additional credit for avoided line losses between the wholesale and retail meter points to provide a sharing of the benefit of reduced transmission charges from net metering with other ratepayers who do not participate in net metering.

(c) Be grandfathered by the terms of currently applicable tariff for customer-generators with a total peak generating capacity of one megawatt if the customer-generator's electrical generating facility or qualified storage system first becomes operational on or after July 1, 2021.

(d) Transition to such new tariffs specifically approved by the commission for customer-generators with a nameplate or maximum rated capacity of more than one megawatt if the customer-generator's electrical generating facility or qualified storage system first became operational before July 1, 2021.

5 Utility Property Tax; Eligible Customer-Generator; Exclusion Clarified. Amend RSA 83-F:1, V(d) to read as follows:

(d) The electrical generation, production, storage, and supply equipment of an "eligible customer-generator" as defined in RSA 362-A:1-a, II-b, *up to and including one megawatt;*

6 Effective Date. Part VII of this act shall take effect 60 days after its passage.