Committee Report

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REGULAR CALENDAR

May 23, 2019

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Majority of the Committee on Science, Technology

and Energy to which was referred SB 165,

AN ACT relative to net energy metering by low-moderate

income community solar projects. Having considered

the same, report the same with the following

amendment, and the recommendation that the bill

OUGHT TO PASS WITH AMENDMENT.

Rep. Peter Somssich

FOR THE MAJORITY OF THE COMMITTEE

Original: House Clerk

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MAJORITY COMMITTEE REPORT

Committee:	Science, Technology and Energy
Bill Number:	SB 165
Title:	relative to net energy metering by low- moderate income community solar projects.
Date:	May 23, 2019
Consent Calendar:	REGULAR
Recommendation:	OUGHT TO PASS WITH AMENDMENT 2019-1827h

STATEMENT OF INTENT

This bill, the "Low-Income Community Solar Act of 2019", attempts to ensure that low to moderate income residents of our state can afford to participate in community solar projects. It is the opinion of the majority that all residents should have an opportunity to participate in home-grown solar energy generation. The sponsor of this bill collaborated with the Governor's Office to offer the amendment before you. This aligns with one of the Governor's priorities which is to find ways that low income residents can more fully participate in renewable energy projects. For those low-moderate income community solar projects authorized by the Public Utilities Commission, the proposed amendment provides for an additional incentive payment of 3 cents per kWh of energy generated until July 1, 2021, after which the payment declines to 2.5 cents per kWh.

Vote 12-7.

Rep. Peter Somssich FOR THE MAJORITY

Original: House Clerk

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REGULAR CALENDAR

Science, Technology and Energy

SB 165, relative to net energy metering by low-moderate income community solar projects. MAJORITY: OUGHT TO PASS WITH AMENDMENT. MINORITY: INEXPEDIENT TO LEGISLATE.

Rep. Peter Somssich for the **Majority** of Science, Technology and Energy. This bill, the "Low-Income Community Solar Act of 2019", attempts to ensure that low to moderate income residents of our state can afford to participate in community solar projects. It is the opinion of the majority that all residents should have an opportunity to participate in home-grown solar energy generation. The sponsor of this bill collaborated with the Governor's Office to offer the amendment before you. This aligns with one of the Governor's priorities which is to find ways that low income residents can more fully participate in renewable energy projects. For those low-moderate income community solar projects authorized by the Public Utilities Commission, the proposed amendment provides for an additional incentive payment of 3 cents per kWh of energy generated until July 1, 2021, after which the payment declines to 2.5 cents per kWh. Vote 12-7.

Original: House Clerk

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SB 165

OTP/A

12-7

Majority Report

This bill, the "Low Income Community Solar Act of 2019" attempts to ensure that low-moderate income residents of our state can afford to participate in community solar projects. It is the opinion of the majority that all residents should have an opportunity to participate in home-grown solar energy generation. The sponsor of this bill collaborated with the Governor's Office to offer the amendment before you. This aligns with one of the Governor's priorities to find ways that low income residents can more fully participate in renewable energy projects. When authorized by the Public Utilities Commission, the proposed amendment would provide for an additional incentive payment of 3 cents for the energy generated. This incentive would be applicable until July 1, 2021, after which additional incentive would be reduced to 2 ½ cents.

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COMMITTEE REPORT

COMMITTEE: Science rechnology & Evily
BILL NUMBER: SB: 165 / Amendment 2019-1827 h
TITLE: Relative to Net Evergy Metering by Low Moderate Income community Solar projects
DATE: $\frac{5}{7}$ 20/9 CONSENT CALENDAR: YES NO
OUGHT TO PASS
OUGHT TO PASS W/ AMENDMENT INEXPEDIENT TO LEGISLATE Amendment No. 2019-1827 L
INTERIM STUDY (Available only 2 nd year of biennium)
STATEMENT OF INTENT:
This bill, the "Low-Income Community Solar Act of 2019"
attempts to ensure that low-moderate income vesitint
of our state can afford to participate in
community solar projects. It is the opinion of the
opportunity to participate in home-grown solar
energy generation. The sponsor of this bill
collaborated with the Governor's office to offer the
amendment before you. This aligns with one of the
Governor's priorities to And ways that low-income
energy projects. When athonized by the Public Utilities
COMMITTEE VOTE: 12 /4/7 Ne
RESPECTFULLY SUBMITTED, Copy to Committee Bill File Use Another Report for Minority Report Rep. Peter Som 55' Ch For the Committee

Commission, the proposed amendment would provide for an additional incentive payment of 34 for the energy generated. This incentive would be applicable until July 1, 2021, after which incentional incentive would be reduced to 2½ t.

Amendment to SB 165

Amend the bill by replacing all after section 1 with the following:

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2 Net Energy Metering; Group Host; Community Solar. Amend RSA 362-A:9, XIV(c) to read as follows:

- (c) 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. [Each group member of] Alternatively, a group host [for-a low moderate income community solar project, as defined in RSA 362 F:2, X-a, may elect to receive credits on the customer electric bill for each member and the host, provided that there shall be only one new project under this paragraph in each utility's service territory by December 31, 2019 with such projects available on a first-come, first-served basis, 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. 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 [such projects] low-moderate income community solar projects, as defined in RSA 362-F:2, X-a on or before [December 31, 2019] 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.
 - 3 Definition; Low-moderate Income Community Solar Project. Amend RSA 362-F:2, X-a to read

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Amendment to SB 165 - Page 2 -

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X-a. "Low-moderate income community solar project" means ground-mounted or rooftop solar arrays that directly benefit a group of at least 5 residential end-user customers, where at least a majority of the residential end-user customers are at or below 300 percent of the federal poverty guidelines. No more than 15 percent of the projected load for such project shall be attributable to non-residential end-user customers.

4 Effective Date. This act shall take effect July 1, 2019.

REGULAR CALENDAR

May 23, 2019

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Minority of the Committee on Science, Technology

and Energy to which was referred SB 165,

AN ACT relative to net energy metering by low-moderate

income community solar projects. Having considered

the same, and being unable to agree with the Majority,

report with the following resolution: RESOLVED, that it

is INEXPEDIENT TO LEGISLATE.

Rep. Fred Plett

FOR THE MINORITY OF THE COMMITTEE

Original: House Clerk

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MINORITY COMMITTEE REPORT

Committee:	Science, Technology and Energy
Bill Number:	SB 165
Title:	relative to net energy metering by low- moderate income community solar projects.
Date:	May 23, 2019
Consent Calendar:	REGULAR
Recommendation:	INEXPEDIENT TO LEGISLATE

STATEMENT OF INTENT

This bill would support low income solar installations by not only paying solar developers default service rates, but an additional 3 cents per kWh from July 1, 2019 through July 1, 2021, and 2.5 cents per kWh thereafter. As such, it raises electric rates for all other consumers. The bill requires that a solar project directly benefit at least 5 residential end-use customers, at least a majority of whom are at or below 300 percent of the poverty level, with no more than 15% of the generation attributable to non-residential end-user customers. Therefore, the application of this bill may wind up with few installations, but it is the principle of raising non-participant rates that drove the minority to vote against this bill.

Rep. Fred Plett FOR THE MINORITY

Original: House Clerk

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REGULAR CALENDAR

Science, Technology and Energy

SB 165, relative to net energy metering by low-moderate income community solar projects. INEXPEDIENT TO LEGISLATE.

Rep. Fred Plett for the **Minority** of Science, Technology and Energy. This bill would support low income solar installations by not only paying solar developers default service rates, but an additional 3 cents per kWh from July 1, 2019 through July 1, 2021, and 2.5 cents per kWh thereafter. As such, it raises electric rates for all other consumers. The bill requires that a solar project directly benefit at least 5 residential end-use customers, at least a majority of whom are at or below 300 percent of the poverty level, with no more than 15% of the generation attributable to non-residential end-user customers. Therefore, the application of this bill may wind up with few installations, but it is the principle of raising non-participant rates that drove the minority to vote against this bill.

Original: House Clerk

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HB 165 relative to net energy metering by low-moderate income community solar projects. Rep Fred Plett for the MINORITY. This bill would enable low income solar installations by not only paying solar developers default service rates, but an additional 3 cents per kWh from July 1, 2019 through July 1, 2021, and 2.5 cents per kWh thereafter. As such, it raises electric rates for all other consumers. The bill requires at least 5 residential end-use customers at or below 300 percent of the poverty level, and no more than 15% of a project attributable to non-residential end-user customers, so the application of this bill may wind up with few installations, but it is the principle of raising non-participant rates that drove the minority to vote against this bill.

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Voting Sheets

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HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

EXECUTIVE SESSION on SB 165

BILL TITLE:

relative to net energy metering by low-moderate income community solar

projects.

DATE:

May 7, 2019

LOB ROOM:

304

MOTIONS:

OUGHT TO PASS WITH AMENDMENT

Moved by Rep. Somssich

Seconded by Rep. Mann

AM Vote: 18-1

Amendment # 2019-1827h

Moved by Rep. Somssich

Seconded by Rep. Balch

Vote: 12-7

CONSENT CALENDAR: NO

Statement of Intent:

Refer to Committee Report

Respectfully submitted,

Rep Lee Oxenham, Clerk

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HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

EXECUTIVE SESSION on SB 165

relative to net energy metering by low-moderate income community solar

BILL TITLE:

projects.		
DATE: 5-7-19		
LOB ROOM: 304		
MOTION: (Please check one box	Am. 2019-1827.	1827
□ OTP □ ITL	□ Retain (1st year)	
	☐ Interim Study (2nd year)	Amendment # (if offered)
Moved by Rep. Samssill	Seconded by Rep. Mahh	Vote: 18
MOTION: (Please check one box	:)	
□ OTP □ OTP/A □ ITL	\square Retain (1st year)	Adoption of Amendment #
	☐ Interim Study (2nd year)	(if offered.)
Moved by Rep. 70056166	Seconded by Rep. Salch	Vote:
MOTION: (Please check one box	(3)	
□ OTP □ OTP/A □ ITL	\square Retain (1st year)	Adoption of Amendment #
	☐ Interim Study (2nd year)	
Moved by Rep	Seconded by Rep.	Vote:
MOTION: (Please check one box	(:)	
□ OTP □ OTP/A □ ITL	☐ Retain (1st year)	
	☐ Interim Study (2nd year)	Amendment # (if offered)
Moved by Rep	Seconded by Rep.	Vote:
	/	,
Plet CONSENT O	CALENDAR:YES	NO
Minority Report? Yes	No If yes, author, Rep:	Motion
	19	/
Respectfully submitt	ed: Anda	7

Rep Lee Oxenham, Clerk

OFFICE OF THE HOUSE CLERK



1/14/2019 3:25:56 PM Roll Call Committee Registers Report

2019 SESSION

3c	ience,	Techno	logy and	d Energy
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Motion:

2019 -AM #: 1827 Exec Session Date: 5-7-8

<u>Members</u>	YEAS	<u>Nays</u>	NV
Backus, Robert A. Chairman		* 1220 * 1220 * 1	12.50
Moffett, Howard M. Vice Chairman			. \
Cali-Pitts, Jacqueline A.	\sim		
Mann, John E.			1.00
Oxenham, Lee Walker Clerk	X		
Somssich, Peter F.			2" Vasa
Vincent, Kenneth S.	X		15473 a
Balch, Chris	X		74 <u>.8.8</u>
McGhee, Kat	λ		
McWilliams, Rebecca J.	X		e, a super
Saunderson, George L.	}		
Wells, Kenneth D.	X		, runt
Harrington, Michael D.	X		
Notter, Jeanine M.	λ		
Aldrich, Glen C. MC Guib	\times		lide 2007
Thomas, Douglas W.	λ		
Merner, Troy E.	X		
Ober, Russell T.			* ° ~
Webb, James C.			
Plett, Fred R.	1 2		e dien
TOTAL VOTE:	18	J	1 s s s



OFFICE OF THE HOUSE CLERK



1/14/2019 3:25:56 PM Roll Call Committee Registers Report

2019 SESSION

Science, Technology and Energy

3111 #SB 165	Motion:	OTPA	AM #:	Exec Session Date:	5-7-19	
	SERVICE THE STANDARD CONTRACTOR					

<u>Members</u>	YEAS	<u>Nays</u>	NV
Backus, Robert A. Chairman	\sim	## 2. 12 22.17	
Moffett, Howard M. Vice Chairman			\times
Cali-Pitts, Jacqueline A.	χ		1500
Mann, John E.	X		
Oxenham, Lee Walker Clerk	X		
Somssich, Peter F.	X		1.4826
Vincent, Kenneth S.	X		
Balch, Chris			
McGhee, Kat	X		11141250
McWilliams, Rebecca J.	λ		
Saunderson, George L.	\mathcal{X}		
Wells, Kenneth D.			
Harrington, Michael D.			
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Thomas, Douglas W.		7	
Merner, Troy E.	\sim		
Ober, Russell T.		λ	
Webb, James C. JANURIN Flanger		+	
Plett, Fred R.		λ	
TOTAL VOTE:	12	7	1

Amendment to SB 165

Amend the bill by replacing all after section 1 with the following:

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2 Net Energy Metering; Group Host; Community Solar. Amend RSA 362-A:9, XIV(c) to read as follows:

(c) 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. [Each group member of Alternatively, a group host | for-a low moderate income community solar project, as defined in RSA-362-F:2, X-a, may elect to receive credits on the customer electric bill for each member and the host, provided that there shall be only one new project under this paragraph in each utility's service territory by December 31, 2019 with such projects available on a first-come, first-served basis, 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. 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 |such projects] low-moderate income community solar projects, as defined in RSA 362-F:2, X-a on or before [December 31, 2019] 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.

3 Definition; Low-moderate Income Community Solar Project. Amend RSA 362-F:2, X-a to read

Amendment to SB 165 - Page 2 -

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X-a. "Low-moderate income community solar project" means ground-mounted or rooftop solar arrays that directly benefit a group of at least 5 residential end-user customers, where at least a majority of the residential end-user customers are at or below 300 percent of the federal poverty guidelines. No more than 15 percent of the projected load for such project shall be attributable to non-residential end-user customers.

4 Effective Date. This act shall take effect July 1, 2019.

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Hearing Minutes

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

PUBLIC HEARING ON SB 165

BILL TITLE:

relative to net energy metering by low-moderate income community

solar projects.

DATE:

April 24, 2019

LOB ROOM:

304

Time Public Hearing Called to Order:

1:05 pm

Time Adjourned:

2:25 pm

Committee Members: Reps. Backus Moffette Oxenham Cali-Pitts Mann, Somssich, Vincent Balck McGhee McWilliams Saunderson, Wells, Harrington, Notter, Aldrich, D. Thomas, Merner, R. Ober Webb and Plets

Bill Sponsors:

Sen. Feltes

Sen. Fuller Clark

Sen. Watters

Sen. Bradley Rep. Oxenham Sen. Hennessey

Rep. Moffett

Rep. Luneau

Rep. Myler

TESTIMONY

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

Sen. Dan Feltes, prime sponsor - Introduced the bill as a way to expand the benefits of renewable energy to low income communities. This legislature has endorsed community solar and we have found this to be one of the best ways to expand access across income groups. The solar market was necessarily supported initially by higher income groups who were able to either pay the still high costs involved, or who had the financial wherewithal to obtain financing. Groups living from paycheck to paycheck were effectively priced out of the market. Even today with substantially lower costs and prices, moderate and lower income groups (LMI) are still challenged in trying to access these resources. That is why we have developed community solar projects. We want to make sure everyone can benefit from solar savings. Two years ago we passed SB 129 and authorized a number of community solar projects. Last year the first 3 projects got up and running. They include ground-mounted solar in low income manufactured housing. Mascoma Meadows in the Upper Valley is up and running, providing benefits to those residents. We say we want an economy that works for everyone, with savings and investment opportunities open to all – this is how we get there. One of the biggest barriers is the absence of on-bill billing. Another useful practice included here is an adder of 3 cents per kWh for low and moderate income residents to get projects up and running. This bill calls for the PUC to authorize at least 2 new LMI projects every year, beginning in 2020. This bill would put in place that policy direction, and break down some of the barriers to access across the board. If we do this, we will be meeting the commitments we have been talking about making for years. Everyone can and should have access to solar savings in the new clean energy economy.

Q: Rep. Fred Plett - Who pays for this?

A: The 3 cent adder will be consistent with the way net-metering has worked over the past period. We will be making sure we incentivize these projects, and it's an important part of this bill.

Don Kreis, Director, Office of the Consumer Advocate- Supports.

Low income ratepayers are among our most important constituencies, but they are all too often left out of policy-making. On-bill crediting is also very important. The idea of adding a 3 cents per kWh adder had its genesis in testimony filed by his office, and in his best judgment it is the measure that would work best to make LMI projects viable, expanding access to under served members of our community. If we should find that three is the wrong number, and we want to change it, he didn't want the perfect to be the enemy of the good, he would still support it.

Q: Rep. Fred Plett - Who pays for this?

A: Obviously, it would be paid by all ratepayers. Ultimately, it's always the ratepayers.

Q: These are companies with shareholders who are entitled to a return on their capital. We are in effect borrowing their money. We rely on the private sector to allow us to have these facilities, and in exchange we can expect a degree of innovation from them.

Chairman Robert Backus – We no longer ask customers to make investments in generation.

Rep. Latha Mangipudi, from Nashua – Supports. In Nashua we have about 5 MW of hydro and several locations that could take up to 5 MW of solar. One is especially close to clusters of low income housing and would be suitable for community solar. She said she had taken the Governor down and showed him the area. They went to a low income housing project and also looked at a number of schools that could benefit from solar installations. She said this bill would greatly benefit her town. It would be a great tool in our tool box if it passed and would benefit many residents. She called on the committee to "do the right thing" for our towns and our environment.

Karen Cramton, Director, Sustainable Energy Division, PUC - Not taking a position. Ms. Cramton said she was available to answer questions concerning the 3 operational programs that were installed last year thanks to SB 129. She also stated that she was concerned about the provision that called for the commission to authorize at least 2 projects each year. She said she was looking for clarity. Just exactly what are we looking for? More of the same? Something different? Her division gets applications and approves them. Is that it, or is it something more? Please help us as we go forward to understand that.

Q: Rep. Plett - Do you have processes in place to even do this?

A: Yes. For group net-metering or community solar, we have two possible avenues, both need approval. In one, a group can submit an application, in the other there is a group net-metering queue, and that is handled by a different group at the PUC.

Chairman Backus - Can you tell us a little about Mascoma Meadows? A: SB 129 required us to undertake a number of projects. Five proposals came in from our first RFP. Mascoma Meadows was one that was selected. They have 50 members, all of whom will be benefiting from the project. Another was an affordable housing project with 6 multi-family houses, 12 families in all. That one is called Solar Shares, and it uses a subscription model. The 10 participants are getting an on-bill credit. The Common Man also has a project and they are using the panels on awnings for shade. They make the shares available to qualified low and moderate income participants.

Q: Rep. Howard Moffett - What is the low/moderate qualification?

A: The definition for LMI has already been established, there's no change to that. Basically, we use the federal definition - 200% of the US poverty line. The projects have to directly benefit low to moderate income customers. There was a question as to whether it had to be located on the premises of a low income community, or if it could be off site. Could it be ground-mounted or roof top mounted? That's all resolved now, we have a better view of the practicalities on the ground.

*Madeleine Mineau, Clean Energy NH - Our organization has a long history of working on low/moderate income projects. We worked with VLS to design critical financing for some of the initial projects that came out of SB 129. The greatest obstacle has been a lack of funding. This bill is needed and will help greatly. Having the on-bill credit is a key feature. It will help reassure prospective members and it will also help with the management of the group, preventing misunderstandings. As it is now, the group host has to pay each of the members their appropriate share, which can raise questions, and more importantly it can count as taxable income. Sometimes making that individual ineligible for incomelinked programs. On bill crediting avoids that. The adder is also very important. The net-metering credit is very conservative, but the adder can encourage more investors to take part. I have circulated a letter from the President of one of the resident owned communities supporting this bill. Virtual net-metering is written into the bill. Under the registration process the host has to find the off takers. So, let's say I recruit 4 members. Currently I would tell the PUC we had formed a group, and that I was the group host. I would put in my application and from then on it would be entirely my responsibility. I would get the payment every month, and then I would write a check to each member, according to our contract. Perhaps that would be that you would receive 2% per kWh rebated to you out of my payment. With this bill, each group member gets a 2% credit on their bill and I get the rest.

Sam Dionne, Sunpin Development - Supports. On bill for everyone is the best way to go. Using adders can be very beneficial too. You can target things you want to achieve. An extra adder if its ground-mounted if that's something you want. Or something for tenants. I think in MA they have a 6 cent adder for tenants. MA uses adders a lot. Would this measure be enough to get investors interested in putting money into NH? Yes. But if you want the really big companies to do this, you would need to make it at least 5 cents to the end-user. A 3 cent adder would be among the first things we would look for, even though it's really not enough on its own.

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Marc Brown, President of NERA - Opposes. I'm not sure exactly what you hope to accomplish with this. A low/moderate community host needs only to connect with 3 others. This could possibly be your buddies or just family members. I don't think there are sufficient safeguards.

Q: If you were going to try to benefit LMI consumers, shouldn't it benefit more than 5 people?

A: Yes. Why not give 100% of the benefits to LMI? We have pilots going on, shouldn't we let the pilots finish before we try to do more? I can see that this will benefit solar developers and a few LMI families, but I don't see this as much of a help for the larger LMI community.

Chairman Backus - Would you support this bill if it had higher numbers? **A:** Not sure, but I would be much more likely to support that.

Jack Ruderman, Revision Energy - Supports. Our company operates in ME, NH and Northern MA, and we have community solar projects in MA and ME, but not in NH. We see a strong need for this bill if we want to ensure that solar benefits everyone. At Revision Energy I am the Director for Community Solar Initiatives. I started working with municipalities, schools, and non-profits some time ago and came up with the idea for the power-purchase agreement, the PPA, an innovative form of financing that assists entities without access to the necessary large sums needed to invest in solar at the outset. Solar is very economical, but all the expenses are front-loaded to the outset. That can be the death knell for low income projects. This bill would be a very good thing. I'd just like to flag one possibly problematic issue. It says that you cannot allow customer generators to be involved, which means some people will have to choose to participate in the one or the other. I don't think there's any necessity to force people to choose, let them do both.

Q: I am curious as to why you find that you can develop LMI projects in ME, but not in NH? Do they offer a friendlier environment? Or, is it how we define low/moderate groups?

A: I may not have been clear, at this time we have one community solar project in ME, but it is not for LMI. But I can say that they provide greater engagement for solar than NH. For example, the issue of anchor tenants. Hospitals can be great anchor tenants, with large consistent loads and assured income streams. Involving them reassures investors and therefore lowers the cost of the investment. This can unlock private capital. There are numerous important provisions here. We strongly support this bill, and we have a letter from Dartmouth Hitchcock Hospital testifying to their support.

Q: Rep. Plett - Who funds the capital cost?

A: The funders, that would be the investors.

Q: But it comes back onto the ratepayers?

A: It increases access to an under served group of ratepayers.

<u>Donna Gamache</u>, <u>Eversource</u> - Opposes. We want you to understand that, of course, you are the ones that make policy. But you need to recognize that in this

case you are requiring the utilities to do various things, and in effect we will have to manage these groups. We already have multiple groups, now we will have to do this too. The utilities will have to manage all the disputes in the group. People move in and out. Someone will claim that the host promised something and it didn't happen. We may even have to get in an arbiter. There are different ways that you can use to help LMI families. The utilities are coming up with pilots. We will announce ours in the next week or two. As to the billing part, that can be a problem for some LMI. If they just get a check it effects income-linked issues, their eligibility for certain benefits. We'd have to get a whole new billing system, which would be costly. We have a process worked out with the CAPs. Recipients have to be qualified, and the CAPs can do that, then they get a bill credit - not a check.

Q: Rep. Plett - Do you have alternative language"

A: I can do it, if you want to go forward. I can bring you two sets of language. There are other things you might want to add on.

Q: The utility pays the default service rate, plus 3 cents. What happens if the customer doesn't pay?

A: I think it's the same as if it were a regular bill.

Q: So it's on the utilities and the ratepayers, not on the host if there's a default? I see this as a risk shift from the developer to the utilities.

Q: I don't see that. I hear you saying the relationship has a cost piece and the costing piece would go to the CAP agency. It would be better if the billing were more straightforward as I understand it is in other states. I have an array on my roof and I'm still trying to decipher what my bill means, without creating my own spreadsheet it doesn't seem possible.

<u>Huck Montgomery, Liberty Utilities</u> - Opposes. We have a problem with the proposed billing system. For us this would entail a laborious process, with someone physically typing in the amount for every group member. Or else we'd have to invest in a whole new billing system.

Chairman Backus - Maybe you need to get that done. The complexities are only going to increase.

*Matthew Willner, CERES - Supports; see written testimony? Pink card, no written testimony.

Blue Sheet: Pro, 22; Con, 2

Respectfully submitted:

Lee Oxenham, Clerk

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

PUBLIC HEARING ON SB 165

BILL TITLE:	relative to net end solar projects.	ergy metering by lo	w-moderate income community
DATE:	4-24-19		
ROOM:	304	Time Public He	aring Called to Order: 1:15 pm Time Adjourned: 2:25 pm
	(please circle if presen	t)
Thomas, Merner	nbers: Reps Backe McGhee, McWillian R. Ober, Webb an	s Moffett, Oxenhar ns, Saunderson We d Plett	n; Cali-Pitts; Mann, Somssieh, Ils, Harrington, Notter, Aldrich, D.
<u>Bill Sponsors:</u> Sen. Feltes	Sen.	Fuller Clark	Sen. Watters
Sen. Bradley		Hennessey	Rep. Moffett
Rep. Oxenham	Rep.	Luneau	Rep. Myler
		TESTIMONY	
* Use asterisk i	f written testimony ai	nd/or amendments are	e submitted.
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Public Hearing SB – 165

Sen. Dan Feltes, the prime sponsor, introduced the bill as a way to expand the benefits of renewable energy to low income communities. This legislature has endorsed community solar and we have found this to be one of the best ways to expand access across income groups. The solar market was necessarily supported initially by higher income groups who were able to either pay the still high costs involved, or who had the financial wherewithal to obtain financing. Groups living from paycheck to paycheck were effectively priced out of the market. Even today with substantially lower costs and prices, moderate and lower income groups (LMI) are still challenged in trying to access these resources. That is why we have developed community solar projects. We want to make sure everyone can benefit from solar savings.

Two years ago we passed SB 129 and authorized a number of community solar projects. Last year the first 3 projects got up and running. They include ground-mounted solar in low income manufactured housing. Mascoma Meadows in the Upper Valley is up and running, providing benefits to those residents. We say we want an economy that works for everyone, with savings and investment opportunities open to all – this is how we get there.

One of the biggest barriers is the absence of on-bill billing. Another useful practice included here is an adder of 3 cents per kWh for low and moderate income residents to get projects up and running. This bill calls for the PUC to authorize at least 2 new LMI projects every year, beginning in 2020. This bill would put in place that policy direction, and break down some of the barriers to access across the board. If we do this, we will be meeting the commitments we have been talking about making for years. Everyone can and should have access to solar savings in the new clean energy economy.

Q - FP — Who pays for this?

A – The 3 cent adder will be consistent with the way net-metering has worked over the past period. We will be making sure we incentivize these projects, and it's an important part of this bill.

2 - Don Kreis - Director, Office of the Consumer Advocate. Supports.

Low income ratepayers are among our most important constituencies, but they are all too often left out of policy-making. On-bill crediting is also very important. The idea of adding a 3 cents per kWh adder had its genesis in testimony filed by his office, and in his best judgment it is the measure that would work best to make LMI projects viable, expanding access to underserved members of our community. If we should find that three is the wrong number, and we want to change it, he didn't want the perfect to be the enemy of the good, he would still support it.

\mathbf{Q} - \mathbf{FP} – Who pays for this?

A – Obviously, it would be paid by all ratepayers. Ultimately, it's always the ratepayers.

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Q – These are companies with shareholders who are entitled to a return on their capital. We are in effect borrowing their money. We rely on the private sector to allow us to have these facilities, and in exchange we can expect a degree of innovation from them.

Chair BB – We no longer ask customers to make investments in generation.

3 - Rep. Mangipudi – State Rep. from Nashua – Supports.

In Nashua we have about 5 MW of hydro and several locations that could take up to 5 MW of solar. One is especially close to clusters of low income housing and would be suitable for community solar. She said she had taken the Governor down and showed him the area. They went to a low income housing project and also looked at a number of schools that could benefit from solar installations. She said this bill would greatly benefit her town. It would be a great tool in our tool box if it passed and would benefit many residents. She called on the committee to "do the right thing" for our towns and our environment.

4 - Karen Cramton - Director, Sustainable Energy Division, PUC. Not taking a position.

Ms. Crampton said she was available to answer questions concerning the 3 operational programs that were installed last year thanks to SB 129. She also stated that she was concerned about the provision that called for the commission to authorize at least 2 projects each year. She said she was looking for clarity. Just exactly what are we looking for? More of the same? Something different? Her division gets applications and approves them. Is that it, or is it something more? Please help us as we go forward to understand that.

Q - FP – Do you have processes in place to even do this?

A - Yes. For group net-metering or community solar, we have two possible avenues, both need approval. In one, a group can submit an application, in the other there is a group net-metering queue, and that is handled by a different group at the PUC.

Chair BB - Can you tell us a little about Mascoma Meadows?

A - SB 129 required us to undertake a number of projects. Five proposals came in from our first RFP. Mascoma Meadows was one that was selected. They have 50 members, all of whom will be benefiting from the project. Another was an affordable housing project with 6 multi-family houses, 12 families in all. That one is called Solar Shares, and it uses a subscription model. The 10 participants are getting an on-bill credit. The Common Man also has a project and they are using the panels on awnings for shade. They make the shares available to qualified low and moderate income participants.

Q - HM – What is the low/moderate qualification?

A – The definition for LMI has already been established, there's no change to that. Basically, we use the federal definition - 200% of the US poverty line. The projects have to directly benefit low to moderate income customers. There was a question as to whether it had to be located on the premises of a low income community, or if it could be offsite. Could it be ground-mounted

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or roof top mounted? That's all resolved now, we have a better view of the practicalities on the ground.

5 - Madeleine Mineau - Clean Energy NH

Our organization has a long history of working on low/moderate income projects. We worked with VLS to design critical financing for some of the initial projects that came out of SB 129. The greatest obstacle has been a lack of funding. This bill is needed and will help greatly.

Having the on-bill credit is a key feature. It will help reassure prospective members and it will also help with the management of the group, preventing misunderstandings. As it is now, the group host has to pay each of the members their appropriate share, which can raise questions, and more importantly it can count as taxable income. Sometimes making that individual ineligible for income-linked programs. On bill crediting avoids that.

The adder is also very important. The net-metering credit is very conservative, but the adder can encourage more investors to take part. I have circulated a letter from the President of one of the resident owned communities supporting this bill. Virtual net-metering is written into the bill. Under the registration process the host has to find the off takers. So, let's say I recruit 4 members. Currently I would tell the PUC we had formed a group, and that I was the group host. I would put in my application and from then on it would be entirely my responsibility. I would get the payment every month, and then I would write a check to each member, according to our contract. Perhaps that would be that you would receive 2% per kWh rebated to you out of my payment. With this bill, each group member gets a 2% credit on their bill and I get the rest.

6 - Sam Dionne - Sunpin Development. Supports.

On bill for everyone is the best way to go. Using adders can be very beneficial too. You can target things you want to achieve. An extra adder if its ground-mounted if that's something you want. Or something for tenants. I think in MA they have a 6 cent adder for tenants. MA uses adders a lot.

Would this measure be enough to get investors interested in putting money into NH? Yes. But if you want the really big companies to do this, you would need to make it at least 5 cents to the end-user. A 3 cent adder would be among the first things we would look for, even though it's really not enough on its own.

7 - Marc Brown - President of NERA. Opposes

I'm not sure exactly what you hope to accomplish with this. A low/moderate community host needs only to connect with 3 others. This could possibly be your buddies or just family members. I don't think there are sufficient safeguards.

Q – If you were going to try to benefit LMI consumers, shouldn't it benefit more than 5 people?

A – Yes. Why not give 100% of the benefits to LMI? We have pilots going on, shouldn't we let the pilots finish before we try to do more? I can see that this will benefit solar developers and a few LMI families, but I don't see this as much of a help for the larger LMI community.

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BB – Would you support this bill if it had higher numbers?

A – Not sure, but I would be much more likely to support that.

Jack Ruderman - Revision Energy. Supports.

Our company operates in ME, NH and Northern MA, and we have community solar projects in MA and ME, but not in NH. We see a strong need for this bill if we want to ensure that solar benefits everyone. At Revision Energy I am the Director for Community Solar Initiatives. I started working with municipalities, schools, and non-profits some time ago and came up with the idea for the power-purchase agreement, the PPA, an innovative form of financing that assists entities without access to the necessary large sums needed to invest in solar at the outset. Solar is very economical, but all the expenses are front-loaded to the outset. That can be the death knell for low income projects. This bill would be a very good thing.

I'd just like to flag one possibly problematic issue. It says that you cannot allow customer generators to be involved, which means some people will have to choose to participate in the one or the other. I don't think there's any necessity to force people to choose, let them do both.

Q-I am curious as to why you find that you can develop LMI projects in ME, but not in NH? Do they offer a friendlier environment? Or, is it how we define low/moderate groups?

A-I may not have been clear, at this time we have one community solar project in ME, but it is not for LMI. But I can say that they provide greater engagement for solar than NH. For example, the issue of anchor tenants. Hospitals can be great anchor tenants, with large consistent loads and assured income streams. Involving them reassures investors and therefore lowers the cost of the investment. This can unlock private capital. There are numerous important provisions here. We strongly support this bill, and we have a letter from Dartmouth Hitchcock Hospital testifying to their support.

Q - FP - Who funds the capital cost?

A – The funders, that would be the investors.

FP – But it comes back onto the ratepayers?

A – It increases access to an underserved group of ratepayers.

Donna Gamache - Eversource.

We want you to understand that, of course, you are the ones that make policy. But you need to recognize that in this case you are requiring the utilities to do various things, and in effect we will have to manage these groups. We already have multiple groups, now we will have to do this too. The utilities will have to manage all the disputes in the group. People move in and out. Someone will claim that the host promised something and it didn't happen. We may even have to get in an arbiter. There are different ways that you can use to help LMI families. The utilities are coming up with pilots. We will announce ours in the next week or two.

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FP - So it's on the utilities and the ratepayers, not on the host if there's a default? I see this as a risk shift from the developer to the utilities.

Q - KM - I don't see that. I hear you saying the relationship has a cost piece and the costing piece would go to the CAP agency. It would be better if the billing were more straightforward as I understand it is in other states. I have an array on my roof and I'm still trying to decipher what my bill means, without creating my own spreadsheet it doesn't seem possible.

Huck Montgomery - Liberty Utilities.

We have a problem with the proposed billing system. For us this would entail a laborious process, with someone physically typing in the amount for every group member. Or else we'd have to invest in a whole new billing system.

BB – Maybe you need to get that done. The complexities are only going to increase.

Resident Owned Community letter submitted by Clean Energy NII

SIGN UP SHEET

To Register Opinion If Not Speaking

Bill # SB 165	Date 4-24-19
Committee ST & E	

** Please Print All Information **

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Name Address		Representing	Pro	Con
tatricia Martin Rindge	603-899-2	1894 Self	V	
Dorothy Currier			V	
, Chad Whittaker	clai	Generation, Inc	V	
Victoria Parmel	350 M		V	
Rep. Latha Mangipuli		Hille 35	1	
Rep. Michael Pedersen 60	3-801-0878		-	/
Rep. Sue Hewman		41:1130	V	
Dennis Jakabowski	Ludan	Se/1=	V	
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Maura willing Concold		self	/	
Deborah Bruss Concor	Z	Self	V	
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Patricia Mle State Rep		Self	/	/
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Testimony

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ORAL TESTIMONY BEFORE HOUSE SCIENCE, TECHNOLOGY, AND ENERGY COMMITTEE SB 165, relative to net energy metering by low-moderate income community solar projects. Matthew Willner on behalf of Ceres April 24th at 1:00pm, LOB Room 304

Chairman Backus, Ranking Member Harrington, members of the Committee, thank you for the opportunity to testify today In support of SB 165. My name is Matthew Willner and I'm here representing Ceres. Ceres is a sustainability nonprofit that works with businesses and investors to accelerate our transition to a clean energy economy. I'd like to share with you our views on SB 165, and why the business community supports efforts to increase access to clean energy for low-income communities.

As many of you know, businesses are increasingly investing in clean energy because it lowers their energy costs and increases their competitiveness. I mention this because the business community knows that clean energy is not only good for the environment, but also good for their bottom lines. Businesses and institutions are also recognizing that all Granite Staters, regardless of income, should be able to benefit from our transition to clean energy. This is especially true because low-income communities are disproportionately affected by pollution. This bill includes important provisions in spurring investment in community solar projects across the state.

Businesses and institutions also have a unique role to play in this new market. Companies and hospitals are increasingly playing an important role as anchor tenants for community solar projects, helping to reduce the minimum credit score required for low-income residential customers. This is a perfect example of how low-income solar incentives unlock private capital to public benefit.

These kinds of deals are becoming more and more common in other states. If any of you are Bruins or Celtics fans, you'll be pleased to know that the owner of the TD Garden entered into a deal to be an anchor tenant for a 1.3 MW community solar array in Holliston Mass. The deal is saving the company hundreds of thousands of dollars on their electric bills, while making the grid cleaner and providing access to clean energy for low-income residents who otherwise wouldn't have access to it.

The inclusion of an adder for these projects is also critical. These projects are more complex than traditional solar developments and require risk appetite given the lower credit scores of low-income customers. The additional incentive is needed to ensure that these projects actually move forward

The bottom line is that community solar is a great way for low-income Granite Staters to participate in the clean energy economy while getting their own energy costs under control. Businesses and institutions stand to be a key supportive player in this effort, and good policies like SB 165 stand to unlock large amounts of private capital for the benefit of low-income communities.

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Dartmouth-Hitchcock Location



1 Medical Center Drive Lebanon, NH 03756-0001 Phone (603) 650-5946 Dartmouth-Hitchcock org

| Environmental Sustainability Council

New Hampshire General Court 107 N Main Street Concord, NH 03303

Dear Members of the House Science, Technology, and Energy Committee,

On behalf of Dartmouth-Hitchcock, I write today to express our support for SB 165, a bill that would increase access to clean energy for low-income New Hampshire communities. Public health and clean energy go hand in hand, which is why Dartmouth-Hitchcock supports accelerating investment in clean energy.

The bill's three main components – on-bill crediting, a 3 cent per kWh adder, and clear project expectations for each utility area are each vital elements of a cohesive policy. On-bill crediting for group host net metering is needed to ensure that renters and residents of multi-family buildings are able to see the benefit of their solar investment right on their electric bill. The 3 cent per kWh adder is critical because low income community solar projects require significantly more investment to complete and require additional risk appetite from developers and financial institutions. A direct, stable incentive to participate in these projects is essential. The requirement for utility areas to move community solar projects forward is an important way to build buy-in from key players, particularly as the program begins.

In sum, Dartmouth-Hitchcock is grateful for the bipartisan leadership to increase access to solar energy for low-income Granite Staters. These benefits will be transparent and our state will benefit from reduced pollution and greenhouse gas emissions, ensuring a healthier environment for generations to come.

Thank you for your consideration of this important matter. Please don't hesitate to contact me with any questions.

Sincerely,

Zac Conaway

Manager, Environmental Services Chairmen, Environmental Sustainability Council

Zachary.J.Conaway@hitchcock.org

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New England Ratepayers Association

April 24th, 2019

Hon. Robert Backus, Chair House Committee on Science, Technology and Energy New Hampshire State Capitol, LOB Room 304 107 North Main Street, Concord, NH 03301

RE: Opposition to Senate Bill 165 and Senate Bill 159

Dear Chairman Backus,

On behalf of the New England Ratepayers Association thank for the opportunity to express our strong opposition to both Senate Bill 165 and Senate Bill 159.

Senate Bill 165's short title, "The Low-Income Community Solar Act of 2019" explicitly refers to "...low-moderate income community solar projects, as defined by RSA-F:2, X-a" which reads, "'Low-moderate income community solar project' means ground-mounted or rooftop solar arrays that directly benefit a group of at least 5 residential end-user customers, where at least a majority of the residential end-user customers are at or below 300 percent of the federal poverty guidelines."

Based on this language a Group Host need only connect 3 low-moderate income (LMI) end-use customers and two non-LMI customers to satisfy the requirements of Senate Bill 365 AKA "The Low-Income Community Solar Act of 2019". The table below shows how the benefits from Senate Bill 165 could be dispersed (assuming both a 1MW system and a 4.99 MW system):

Facility Size	1	MW	4.99999	MW
Capacity Factor	14%		14%	
LMI Customers	3		3	
*Average Annual Usage (kWhs)/Customer	7,800.00		7,800.00	
Total LMI Usage (kWhs)	23,400.00		23,400.00	
Total Generation (kWhs)	1,226,400.00		6,131,987.74	
Default Service Rate (\$/kWh)	\$0.08		\$0.08	
SB 165 Adder	\$0.03		\$0.03	
Total Revenue from Generation	\$134,904.00		\$674,518.65	
Total (Minimum) Benefit to LMI	\$1,872.00		\$1,872.00	
Revenue to Developer from Generation	\$133,032.00	Per Year	\$672,646.65	Per Year
% of benefit to LMI customers	1.39%		0.28%	
* Based on 650 kWh/month				

As you can see from the table nearly all of the "benefit" from Senate Bill 165 flows to the project developer with (potentially) very little 1.39% to .28% being provided to LMI customers. This doesn't even include potential revenue to the project developer from Renewable Energy Certificates and

Capacity Market Payments. We have a difficult time believing that this was Senator Feltes' intent when he sponsored the bill. Shouldn't a bill that is intended to benefit LMI customers guarantee benefits to more than <u>three</u> end-use customers. Isn't it possible to design a program that limits incentives or subsidies to project developers and group net metering hosts while maximizing benefits to the LMI ratepayer community? Perhaps it would be more appropriate to have an entity (PUC, Utility, Municipality?) issue an RFP to develop a solar project on a cost-plus basis and have ALL of the benefits whether they be energy market, capacity market, environmental and/or other flow directly to LMI customers.

There are currently proposals for LMI pilots being solicited in PUC Docket DE 16-576—shouldn't we let those pilots play out and see how they provide benefits LMI customers and avoid additional solar energy cost shifting to the greatest extent possible before moving forward with a bill like SB 165. As currently drafted this legislation won't do much to guarantee benefits to LMI customers or communities but will *clearly* benefit solar developers and group net metering hosts. All the while it will expand the cost shifting promoted by the legislature that hurts families and businesses in this state.

For these reasons we ask that you vote ITL on Senate Bill 165.

Senate Bill 159 is a mirror image of House Bill 365 which has already passed the House and the Senate. We pointed out in our testimony on HB 365 that Massachusetts has studied cost-shifting in net metering policies and that they found a disproportionate impact on the low-income community. A September 30, 2016 order the Massachusetts Department of Public Utilities (DPU 15-155) increased the low-income discount by \$50 per year stating:

Pursuant to § 141, a fully compensating adjustment shall be made to the low-income discount where the scale of on-site generation would have an impact on affordability for low income customers. Based on our review of the record, the Department finds that on-site generation has grown with an increase in costs from associated incentives (i.e., the RPS solar D.P.U. 15-155 Page 470 carve out and the NMRS). The increased costs of these incentives are included in customers' bills, including bills of low-income customers (see Exhs. LI-JH-1, at 16-18; NG-PP-Rebutal-1, at 54-55; LI-1-5 (Supp.) & Atts.; Tr. 7, at 1034; RR-DPU-41 & Att.). Thus, low income customers have experienced an increase in bills as a result of the growth of on-site generation. Therefore, pursuant to § 141, the Department finds it appropriate to adjust the Company's low income discount.

Additionally, Paul Levy, former Chairman of the Massachusetts Department of Public Utilities in a Commonwealth Magazine op-ed stated that," ... Although it's difficult to calculate, it appears that the cumulative cost to consumers of these (net metering) credits is about \$500 million since 2009."

Regardless of the cost-shift why would we overpay for the power when we don't need to? Utility Dive reported that In June of 2018 NV Energy entered into a 25-year PPA with the Eagle Shadow Mountain solar project in Nevada at 2.4 cents /kWh—contracts for similar rates have been seen in Arizona and most recently a Municipal Utility in Texas entered into a long-term contract with a solar developer at 2.5 cents/kWh; more locally Connecticut's recent carbon-free energy procurement resulted in contracts

with solar developers, two of which are from New Hampshire at a levelized cost of approximately 4.9 cents/kWh. These contracts are all a quarter to half of the price that SB 159 and HB 365 would compensate developers.

To understand how quickly thing can change one only need look at what is happening in California with the potential PG&E bankruptcy. PG&E has long-term contract on its books with Genesis Solar for 25 years which it entered into in 2009 at \$0.26/kWh. It also has a contract with AV Solar at \$0.195/kWh and one with Topaz Solar at \$0.194/kWh. The point being—the cost of long-term solar contracts has come down dramatically. Why saddle ratepayers with long-term contracts which will no doubt continue to be well above-market for the entire term of the agreements all while doing very little to benefit LMI customers?

There have been numerous news articles, op-ed and white papers arguing that renewable energy technologies either are or soon will be grid competitive without subsidies or incentives. One in particular, a report from the International Renewable Energy Agency (IRENA), states: "With further price falls expected for these (referring to solar PV and onshore wind) and other green energy options, IRENA says all renewable energy technologies should be competitive on price with fossil fuels by 2020." This screams for allowing the market to dictate the resource mix. Yet by keeping the size of the generators under 5MW, and therefore outside of FERC's jurisdiction, it is clear that generators benefiting from SB 159 and HB 365 have no interest in competing in markets or providing ratepayers with low cost power. You can't have it both ways—technologies can't be both "ready for market" and having achieved "grid parity" and also require out-of-market subsidies.

Another argument made by supporters of these bills is that additional solar installations will lower our state's overall transmission costs. But there is little evidence that the expansion of net metering will result in lower Transmission charges for New Hampshire. The table below depicts each New England state's Regional Network Service (RNS) charges. As you can see states like Massachusetts and Vermont, who have aggressively pursued DER policies have seen its share of its RNS charges increase, not decrease. Meanwhile, New Hampshire which has not spent hundreds of millions (if not billions) of ratepayer money forcing higher levels of solar resources has seen its RNS portion virtually unchanged. In other words, legislators want to spend tens of millions of dollars a year for a presumed benefit that none of the other states have been able to generate. That is not good policy-making.

New England Total RNS Charges by Sta	ate (\$ in Millions)
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<u>Year</u>	CT	<u>%</u>	MA	<u>%</u>	ME	<u>%</u>	NH	<u>%</u>	RI	%	VT	<u>%</u>	Total
2008	195	26.64%	330	45.08%	61	8.33%	69	9.43%	49	6.69%	28	3.83%	732
2009	265	25.60%	478	46.18%	89	8.60%	95	9.18%	66	6.38%	43	4.15%	1,035
2010	336	25.38%	618	46.68%	109	8.23%	121	9.14%	89	6.72%	52	3.93%	1,324
2011	327	25.45%	598	46.54%	106	8.25%	118	9.18%	85	6.61%	51	3.97%	1,285
2012	355	25.84%	636	46.29%	112	8.15%	124	9.02%	92	6.70%	56	4.08%	1,374
2013	427	25.18%	790	46.58%	139	8.20%	158	9.32%	114	6.72%	69	4.07%	1,696
2014	438	25.32%	798	46.13%	147	8.50%	162	9.36%	113	6.53%	72	4.16%	1,730
2015	471	25.23%	860	46.06%	159	8.52%	177	9.48%	123	6.59%	77	4.12%	1,867
2016	506	25.34%	918	45.97%	167	8.36%	190	9.51%	132	6.61%	83	4.16%	1,997
2017	536	25.38%	977	46.26%	181	8.57%	200	9.47%	135	6.39%	84	3.98%	2,112
	R. Anna												
% Change	-4.7	732%	2.6	512%	2.8	41%	0.4	161%	-4.5	511%	3.9	77%	

What is Driving Changes in RNS in New England States? It's the Economy!

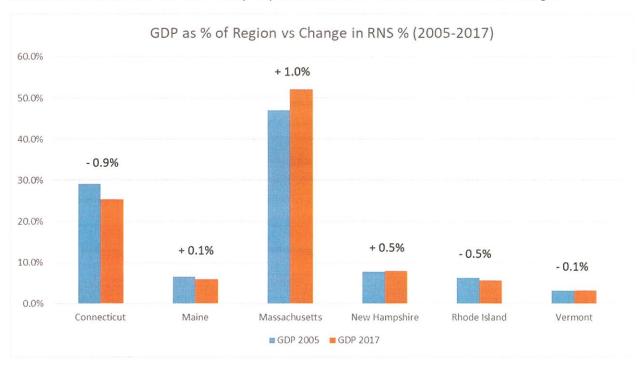
Looking at the change in GDP from 2005 to 2017, which are the years which ISO has provided RNS data for, we can see a direct relationship between economic growth and RNS charges.

From 2005 to 2017, we looked at the Federal Bureau of Economic Analysis data for state GDP. Using the chain weighted historic data we compared each states percentage of the regional GDP in both 2005 and 2017 in order to see which states were growing faster than the others. Only two states, Massachusetts and New Hampshire, have increased their share of the regional GDP over that time period.

We then looked at the historic annual RNS data and again examined each states percentage of the regional RNS charges between 2005 and 2017. When we compare the economic trends of GDP in the region with the changes in RNS in the region we see a clear correlation. The two states which increased their GDP relative to the other states are also the ones showing the largest increases in RNS vs the other states – Massachusetts (+1.0%) and New Hampshire (+0.5%).

Those states that showed a drop in GDP relative to the other states also showed a drop in RNS as a percentage of the regional costs.

Logically this makes sense as the more economically robust a state is in the region the more electricity it consumes and therefore the more likely its peak demand will drive a correlated RNS charge.



In fact, this relationship is the far more probable driver than how much the state is spending on DER programs to reduce peak demand. While Massachusetts has been by far the largest spender in these types of programs, they have also seen the largest shift *higher* in RNS charges – because their economy has grown substantially. Connecticut is 4th in the region in spending per capita on EE programs; yet its

share of RNS charges has seen the biggest drop -- and that drop is likely due to the state having the largest drop in GDP relative to the other states in the region.

One last point—SB 159 as currently drafted would continue the ever-growing practice of artificially suppressing wholesale energy market prices, which not only puts current market participants at risk of premature retirement due to out-of-market subsidies, but also completely contradicts the goals of restructuring and "harnessing the power of competitive markets." There is no competition in this bill—and with the exception of divestiture I cannot think of a single piece of legislation that this committee has taken up that actually fosters competition or benefits ratepayers. In fact, most of the more important pieces of legislation proposed by the legislature over the past five years has only done the opposite—subsidize favored generation while placing the costs of those subsidies and mandates on ratepayers.

For these reasons and those stated above regarding SB 165 we ask that you ITL SB 159.

Respectfully submitted,

Marc Brown

President, New England Ratepayers Association

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Bill as Introduced

SB 165 - AS AMENDED BY THE SENATE

03/28/2019 1169s

2019 SESSION

19-1079 10/08

SENATE BILL

165

AN ACT

relative to net energy metering by low-moderate income community solar

projects.

SPONSORS:

Sen. Feltes, Dist 15; Sen. Fuller Clark, Dist 21; Sen. Watters, Dist 4; Sen.

Bradley, Dist 3; Sen. Hennessey, Dist 5; Rep. Moffett, Merr. 9; Rep. Oxenham,

Sull. 1; Rep. Luneau, Merr. 10; Rep. Myler, Merr. 10

COMMITTEE:

Energy and Natural Resources

ANALYSIS

This bill modifies the method for calculating net energy metering credits for low-moderate income community solar group host projects.

Explanation:

Matter added to current law appears in bold italics.

Matter removed from current law appears [in brackets and struckthrough.]

Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

03/28/2019 1169s

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STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Nineteen

AN ACT relative to net energy metering by low-moderate income community solar projects.

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

- 1 Short Title. This act shall be known as the "Low-Income Community Solar Act of 2019."
- 2 Net Energy Metering; Group Host; Community Solar. Amend RSA 362-A:9, XIV(c) to read as follows:
- (c) 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. [Each group member of] Alternatively, a group host [for a low-moderate income community solar project, as defined in RSA 362 F:2, X-a,] may elect to receive credits on the customer electric bill for each member and the host[, provided that there shall be only one new project under this paragraph in each utility's service territory by December 31, 2019 with such projects available on a first come, first-served basis], 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 for low-moderate income community solar projects, as defined in RSA 362-F:2, X-a. The commission shall report on the costs and benefits of [such projects] low-moderate income community solar projects, as defined in RSA 362-F:2, X-a on or before [December-31, 2019] 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.
 - 3 Effective Date. This act shall take effect 60 days after its passage.