
Committee Report

REGULAR CALENDAR

February 27, 2019

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Majority of the Committee on Science, Technology and Energy to which was referred HB 183,

AN ACT establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply. Having considered the same, report the same with the following amendment, and the recommendation that the bill OUGHT TO PASS WITH AMENDMENT.

Rep. Howard Moffett

FOR THE MAJORITY OF THE COMMITTEE

**MAJORITY
COMMITTEE REPORT**

Committee:	Science, Technology and Energy
Bill Number:	HB 183
Title:	establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.
Date:	February 27, 2019
Consent Calendar:	REGULAR
Recommendation:	OUGHT TO PASS WITH AMENDMENT 2019-0561h

STATEMENT OF INTENT

The committee heard and then merged two bills intended to explore the potential use of microgrids in New Hampshire to enhance and strengthen the resiliency, safety, reliability, and flexibility of New Hampshire's portion of the regional energy grid. This bill is the merged bill. Microgrids would allow "islanding" of critical facilities (like hospitals, military bases, etc), and even whole communities served by distributed generation, to avoid being shut down in the event of a threat to the grid and to help the entire grid get back up as quickly as possible in the event of a black-out. But there are questions about whether any NH laws would need to be changed in order to allow them to function as proposed, and further questions about the kinds of situations that would be appropriate for microgrid development. Hence the majority voted to create a study committee that could point the way to developing the full potential of this new technological tool.

Vote 12-8.

Rep. Howard Moffett
FOR THE MAJORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

HB 183, establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply. **MAJORITY: OUGHT TO PASS WITH AMENDMENT. MINORITY: INEXPEDIENT TO LEGISLATE.**

Rep. Howard Moffett for the **Majority** of Science, Technology and Energy. The committee heard and then merged two bills intended to explore the potential use of microgrids in New Hampshire to enhance and strengthen the resiliency, safety, reliability, and flexibility of New Hampshire's portion of the regional energy grid. This bill is the merged bill. Microgrids would allow "islanding" of critical facilities (like hospitals, military bases, etc), and even whole communities served by distributed generation, to avoid being shut down in the event of a threat to the grid and to help the entire grid get back up as quickly as possible in the event of a black-out. But there are questions about whether any NH laws would need to be changed in order to allow them to function as proposed, and further questions about the kinds of situations that would be appropriate for microgrid development. Hence the majority voted to create a study committee that could point the way to developing the full potential of this new technological tool. **Vote 12-8.**

Original: House Clerk

Cc: Committee Bill File

Stapler, Carol

From: Howard Moffett <howard.m.moffett@gmail.com>
Sent: Wednesday, February 20, 2019 11:58 AM
To: Stapler, Carol
Cc: Bob Backus (robertbackus05@comcast.net)
Subject: Fwd: Majority Report (Blurb) for HB 183 re Microgrid Study Committee

✓
Carol--Bob has signed off on the majority report below for HB 183, so you can forward it to the Calendar folks.

THanks,

Howard

----- Forwarded message -----

From: Howard Moffett <howard.m.moffett@gmail.com>
Date: Wed, Feb 20, 2019 at 11:54 AM
Subject: Majority Report (Blurb) for HB 183 re Microgrid Study Committee
To: Bob Backus (robertbackus05@comcast.net) <robertbackus05@comcast.net>

Bob: Try this as a majority blurb for HB 183:

The committee heard and then merged two bills intended to explore the potential use of "microgrids" in New Hampshire to enhance and strengthen the resiliency, safety, reliability and flexibility of New Hampshire's portion of the regional energy grid. HB 183 is the merged bill. Microgrids would allow "islanding" of critical facilities (like hospitals, military bases, etc), and even whole communities served by distributed generation, to avoid being shut down in the event of a threat to the grid, and to help the entire grid get back up as quickly as possible in the event of a black-out. But there are questions about whether any NH laws would need to be changed in order to allow them to function as proposed, and further questions about the kinds of situations that would be appropriate for microgrid development. Hence the majority voted to create a study committee that could point the way to developing the full potential of this new technological tool.

Howard

Rep. Somssich, Rock. 27
Rep. Moffett, Merr. 9
Rep. P. Schmidt, Straf. 19
February 19, 2019
2019-0561h
10/04

Amendment to HB 183

1 Amend the title of the bill by replacing it with the following:

2

3 AN ACT establishing a committee to study the applications of microgrids in New Hampshire
4 and changes in law necessary to allow for microgrids in electrical supply.

5

6 Amend the bill by replacing section 1 with the following:

7

8 1 Committee Established. There is established a committee to study the applications of
9 microgrids in New Hampshire and changes in law necessary to allow for microgrids in electricity
10 supply.

11

12 Amend the bill by replacing section 3 with the following:

13

14 3 Duties. The committee shall study the applications of microgrids in New Hampshire and
15 changes in law necessary to allow for microgrids in electricity supply, with a view to both near-term
16 and long-term applications in the state. For this purpose, the committee shall consult with
17 representatives of utility companies, companies involved with microgrid development, and members
18 of the general public with specific knowledge regarding microgrids and their benefits, as well as
19 obstacles to their deployment.

2019-0561h

AMENDED ANALYSIS

This bill establishes a committee to study the applications of microgrids in New Hampshire and changes in law necessary to allow for microgrids in electricity supply.

REGULAR CALENDAR

February 27, 2019

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Minority of the Committee on Science, Technology and Energy to which was referred HB 183,

AN ACT establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply. 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. Troy Merner

FOR THE MINORITY OF THE COMMITTEE

**MINORITY
COMMITTEE REPORT**

Committee:	Science, Technology and Energy
Bill Number:	HB 183
Title:	establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.
Date:	February 27, 2019
Consent Calendar:	REGULAR
Recommendation:	INEXPEDIENT TO LEGISLATE

STATEMENT OF INTENT

The bill would establish a committee to study whether it would be advantageous to allow for microgrids in the electrical supply. Although the bill is well intended, the testimony before the committee by the utilities shows there is no need for this study committee since microgrids can be authorized by the Public Utilities Commission under existing law.

Rep. Troy Merner
FOR THE MINORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

HB 183, establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply. **INEXPEDIENT TO LEGISLATE.**

Rep. Troy Merner for the **Minority** of Science, Technology and Energy. The bill would establish a committee to study whether it would be advantageous to allow for microgrids in the electrical supply. Although the bill is well intended, the testimony before the committee by the utilities shows there is no need for this study committee since microgrids can be authorized by the Public Utilities Commission under existing law.

Original: House Clerk

Cc: Committee Bill File

MINORITY REPORT

COMMITTEE: Science Technology and Energy

BILL NUMBER: HB 183

TITLE: establishing a committee to study the changes in the law for microgrids

DATE: 2/19/19 CONSENT CALENDAR: YES NO

OUGHT TO PASS

OUGHT TO PASS W/ AMENDMENT

INEXPEDIENT TO LEGISLATE

INTERIM STUDY (Available only 2nd year of biennium)

Amendment No. ~~2019-0561h~~

STATEMENT OF INTENT:

would establish a committee -
The bill looks to study ~~how~~ ^{whether} it would be ^{advantageous} to allow for microgrids in the electrical supply. ^{ALTHOUGH} The bill is well intended, the testimony before the Committee by the utilities ^{shows} there is no need for this study committee ^{SINCE} as microgrids ^{CAN ALREADY BE AUTHORIZED} are already being installed around the state.
CAN ALREADY BE AUTHORIZED BY THE PUBLIC UTILITIES COMMISSION UNDER EXISTING LAW.

COMMITTEE VOTE: 12-8 OTP/A

RESPECTFULLY SUBMITTED,

• Copy to Committee Bill File

Rep. Tray Merner
For the Minority

OK w/ Edits, NAB

Voting Sheets

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

EXECUTIVE SESSION on HB 183

BILL TITLE: (New Title) establishing a committee to study the applications of microgrids in New Hampshire and changes in law necessary to allow for microgrids in electrical supply.

DATE: February 19, 2019

LOB ROOM: 304

MOTIONS: OUGHT TO PASS WITH AMENDMENT

Moved by Rep. Somssich Seconded by Rep. Saunderson AM Vote: 12-8

Amendment # 2019-0561h

Moved by Rep. Somssich Seconded by Rep. Balch Vote: 12-8

CONSENT CALENDAR: NO

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep Lee Oxenham, Clerk

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

EXECUTIVE SESSION on HB 183

BILL TITLE: establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.

DATE: 2-19-19

LOB ROOM: 304

Amendment

MOTION: (Please check one box)

[X] OTP [] ITL [] Retain (1st year) [] Adoption of Amendment # 0561h (if offered) [] Interim Study (2nd year) Moved by Rep. Samssich Secunded by Rep. Saunderson Vote: 12-8-0

MOTION: (Please check one box)

[] OTP [X] OTP/A [] ITL [] Retain (1st year) [] Adoption of Amendment # (if offered) [] Interim Study (2nd year) Moved by Rep. Samssich Secunded by Rep. Balch Vote: 12-8-0

MOTION: (Please check one box)

[] OTP [] OTP/A [] ITL [] Retain (1st year) [] Adoption of Amendment # (if offered) [] Interim Study (2nd year) Moved by Rep. Secunded by Rep. Vote:

MOTION: (Please check one box)

[] OTP [] OTP/A [] ITL [] Retain (1st year) [] Adoption of Amendment # (if offered) [] Interim Study (2nd year) Moved by Rep. Secunded by Rep. Vote:

CONSENT CALENDAR: YES NO

Minority Report? Yes No If yes, author, Rep: Melner Motion ITL

Respectfully submitted: [Signature] Rep Lee Oxenham, Clerk

Mr. Bell - Majority Report



2019 SESSION

Science, Technology and Energy

Bill #: HB 183 Motion: OTP AM #: 056/h Exec Session Date: 2-19-9

<u>Members</u>	<u>YEAS</u>	<u>Nays</u>	<u>NV</u>
Backus, Robert A. Chairman	X		
Moffett, Howard M. Vice Chairman	X		
Cali-Pitts, Jacqueline A.	X		
Mann, John E.	X		
Oxenham, Lee Walker Clerk	X		
Somssich, Peter F.	X		
Vincent, Kenneth S.	X		
Balch, Chris	X		
McGhee, Kat	X		
McWilliams, Rebecca J.	X		
Saunderson, George L.	X		
Wells, Kenneth D.	X		
Harrington, Michael D. <i>Long</i>		X	
Notter, Jeanine M.		X	
Aldrich, Glen C.		X	
Thomas, Douglas W.		X	
Merner, Troy E.		X	
Ober, Russell T.		X	
Webb, James C. <i>H</i>		X	
Plett, Fred R.		X	
TOTAL VOTE:			

12 8 0



2019 SESSION

Science, Technology and Energy

Bill #: HS 183 Motion: OTPA AM #: _____ Exec Session Date: 2-19-19

<u>Members</u>	<u>YEAS</u>	<u>Nays</u>	<u>NV</u>
Backus, Robert A. Chairman	X		
Moffett, Howard M. Vice Chairman	X		
Cali-Pitts, Jacqueline A.	X		
Mann, John E.	X		
Oxenham, Lee Walker Clerk	X		
Somssich, Peter F.	X		
Vincent, Kenneth S.	X		
Balch, Chris	X		
McGhee, Kat	X		
McWilliams, Rebecca J.	X		
Saunderson, George L.	X		
Wells, Kenneth D.	X		
Harrington, Michael D.			X
Notter, Jeanine M.			X
Aldrich, Glen C.			X
Thomas, Douglas W.			X
Merner, Troy E.			X
Ober, Russell T.			X
Webb, James C.			X
Plett, Fred R.			X
TOTAL VOTE:			

12 8 0

Rep. Somssich, Rock. 27
Rep. Moffett, Merr. 9
Rep. P. Schmidt, Straf. 19
February 19, 2019
2019-0561h
10/04

Amendment to HB 183

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10 supply.
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15 changes in law necessary to allow for microgrids in electricity supply, with a view to both near-term
16 and long-term applications in the state. For this purpose, the committee shall consult with
17 representatives of utility companies, companies involved with microgrid development, and members
18 of the general public with specific knowledge regarding microgrids and their benefits, as well as
19 obstacles to their deployment.

2019-0561h

AMENDED ANALYSIS

This bill establishes a committee to study the applications of microgrids in New Hampshire and changes in law necessary to allow for microgrids in electricity supply.

Hearing Minutes

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

PUBLIC HEARING ON HB 183

BILL TITLE: establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.

DATE: January 30, 2019

LOB ROOM: 304 **Time Public Hearing Called to Order:** 10:30 am

Time Adjourned: 10:55 am

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

Bill Sponsors:

Rep. P. Schmidt

Rep. Moffett

TESTIMONY

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

Rep. Howard Moffett, cosponsor- Introduced the bill by providing a brief overview of microgrids, highlighting their multiple benefits. Microgrids come in various shapes and sizes, what they share in common is their ability to function as “islanded,” or completely segregated, units, generating and consuming their own electricity. The ability to separate from the grid at will, or at need, makes microgrids particularly useful for critical emergency services such as hospitals, military bases, and municipal entities that cover police and fire stations. In the event of a disruption of the grid, due to weather emergencies, or cyber attack, the microgrid allows these entities to “island” themselves, and continue performing their essential services. Microgrids can also function completely separately from the grid, which may be useful for isolated communities. They can also serve as a guarantee of constant, uninterrupted power for manufacturing or commercial entities, university campuses or other interested organizational groupings. The bill is very short and straight-forward, simply calling for a study committee to look into the changes in NH law which would be needed to clear the way for the widespread adoption of this useful technological innovation. The committee’s report, with its findings and recommendations would be due by November 1, 2019.

Rep. Peter Schmidt, prime sponsor - Focused on his concern that outdated NH laws not stand in the way of the adoption of this vital technological innovation. Discussion followed on the possibility of merging the two microgrid-related bills before the committee. The prime sponsor said that he “was open to the committee doing that.” Further discussion was postponed until the Hearing on the second bill, when that bill’s prime sponsor, Rep. Peter Somssich, would be available.

Blue Sheet: Pro, 1; Con, 0

Respectfully Submitted;

A handwritten signature in black ink, appearing to read "Lee Oxenham". The signature is written in a cursive style with a large, looped initial "L".

Lee Oxenham, Clerk

HB 183 – Microgrids and Changes to NH Laws

Due to the initial absence of the prime sponsor, Peter Schmidt, the co-sponsor, Rep. Howard Moffett, introduced the Bill by providing a brief overview of microgrids, highlighting their multiple benefits. Microgrids come in various shapes and sizes, what they share in common is their ability to function as “islanded,” or completely segregated, units, generating and consuming their own electricity.

The ability to separate from the grid at will, or at need, makes microgrids particularly useful for critical emergency services such as hospitals, military bases, and municipal entities that cover police and fire stations. In the event of a disruption of the grid, due to weather emergencies, or cyberattack, the microgrid allows these entities to “island” themselves, and continue performing their essential services. Microgrids can also function completely separately from the grid, which may be useful for isolated communities. They can also serve as a guarantee of constant, uninterrupted power for manufacturing or commercial entities, university campuses or other interested organizational groupings.

The Bill is very short and straight-forward, simply calling for a study committee to look into the changes in NH law which would be needed to clear the way for the widespread adoption of this useful technological innovation. The committee’s Report, with its findings and recommendations would be due by November 1, 2019.

Once the prime sponsor arrived he was given an opportunity to speak briefly. He focused on his concern that outdated NH laws not stand in the way of the adoption of this vital technological innovation. Discussion followed on the possibility of merging the two microgrid-related Bills before the committee. The prime sponsor said that he “was open to the committee doing that.” Further discussion was postponed until the Hearing on the second Bill, when that Bill’s prime sponsor, Rep. Peter Somssich, would be available.

Public Hearing on HB 183

Due to the absence of the prime sponsor, Rep. Schmidt, the co-sponsor, Rep. Howard Moffett, introduced the Bill by providing an overview of microgrids. The Bill is very short and straight-forward, simply calling for a study committee to look into the changes in NH law which would be needed to clear the way for the widespread adoption of this useful technological innovation.

The committee received two Bills dealing with microgrids, and each calls for either a Task Force or a study committee. This Bill is quite simple, it calls for a study committee, made up of legislators only, to study the necessary changes in NH state law which would be needed in order to make microgrids a regular part of our grid. The Bill calls for the committee to make a report, with findings and Recommendations by November 1.

Microgrids allow a free-standing group of members to produce and consume their own energy separate from the grid, or, alternatively, for a group of customers to have the capability of islanding themselves in a load pocket, separate from the grid in the event of an emergency situation. This could be as a result of a weather event, a cyber attack or a terrorist action. Microgrids are often used by military bases, hospitals, police and fire stations, or other critical infrastructure to insure their ability to function and provide services during untoward events.

Microgrids require an independent source of electricity or electrical storage within their boundaries, and they also need a way to safely separate from the grid at need. ISO representatives told the committee that the grid's Eastern Interconnection interconnects about 240 million people. A problem in any one area can ripple across that area in seconds. ISO is also keenly aware that Russia has hacked our grid and placed malware on the system, which is latent, but could be activated at their command.

This Bill has a narrow focus. The study committee is called upon to look at necessary changes to NH statutory law that can enable the installation and proliferation of microgrids in NH.

Ques. – I have a question about the Senate staffing –isn't one unusual?

Ans – It's hard to get them to participate, so I only asked for one.

Ques. – Is it possible to merge the Bills? Could we continue and talk about both?

Chair – I want to wait for the prime sponsor on the other Bill, Rep. Somssich. He phoned and he is on the way, he had trouble plowing his driveway.

Chair – Do you know if anyone has had discussions with the PUC about this? Perhaps we could encourage that..

Ques – Could we postpone consideration of the Bills and see if the two sponsors can work it out and merge them.

Chair – Is this good for renewable energy?

Ans – Microgrids don't require renewable energy. They do involve some form of distributed generation, but it can also be done with diesel generators. Or with battery storage – it's not necessary to have a generation source.

2– Peter Schmidt – Prime sponsor arrived, given opportunity to speak.

Reiterated much of what had been said. Argued that it's time to take advantage of these types of modern resources, and get rid of outdated legal provisions that stand in the way.

Chair – Our committee has a second Bill on the same subject, they are very close in content. Would you support merging them if it were possible to meld them into a single Bill?

Ans – I'm open to the committee doing that.

Bill as Introduced

HB 188 - AS INTRODUCED

2019 SESSION

19-0136
10/05

HOUSE BILL **183**

AN ACT establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.

SPONSORS: Rep. P. Schmidt, Straf. 19; Rep. Moffett, Merr. 9

COMMITTEE: Science, Technology and Energy

ANALYSIS

This bill establishes a committee to study the changes in law necessary to allow for microgrids in electricity supply.

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.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Nineteen

AN ACT establishing a committee to study the changes in law necessary to allow for microgrids in electrical supply.

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

1 1 Committee Established. There is established a committee to study the changes in law
2 necessary to allow for microgrids in electricity supply.

3 2 Membership and Compensation.

4 I. The members of the committee shall be as follows:

5 (a) Four members of the house of representatives, appointed by the speaker of the house
6 of representatives.

7 (b) One member of the senate, appointed by the president of the senate.

8 II. Members of the committee shall receive mileage at the legislative rate when attending to
9 the duties of the committee.

10 3 Duties. The committee shall study the changes in law necessary to allow for microgrids in
11 electricity supply.

12 4 Chairperson; Quorum. The members of the study committee shall elect a chairperson from
13 among the members. The first meeting of the committee shall be called by the first-named house
14 member. The first meeting of the committee shall be held within 45 days of the effective date of this
15 section. Three members of the committee shall constitute a quorum.

16 5 Report. The committee shall report its findings and any recommendations for proposed
17 legislation to the speaker of the house of representatives, the president of the senate, the house
18 clerk, the senate clerk, the governor, and the state library on or before November 1, 2019.

19 6 Effective Date. This act shall take effect upon its passage.