

Bill as Introduced

SB 258 - AS INTRODUCED

2012 SESSION

12-2950
06/05

SENATE BILL **258**

AN ACT authorizing group net metering for limited electrical energy producers.

SPONSORS: Sen. Kelly, Dist 10; Sen. Merrill, Dist 21; Sen. Larsen, Dist 15; Sen. D'Allesandro, Dist 20; Sen. Houde, Dist 5; Rep. Hawkes, Ches 3

COMMITTEE: Energy and Natural Resources

ANALYSIS

This bill adds and modifies certain definitions related to net energy planning.

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Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.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

AN ACT authorizing group net metering for limited electrical energy producers.

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

1 1 Limited Electrical Energy Producers; Definitions. Amend RSA 362-A:1-a, II-b to read as
2 follows:

3 II-b. "Eligible customer-generator" ~~{or}~~, "customer-generator", **or "customer-generator**
4 **group"** means an electric utility customer **or group of customers** who ~~{owns}~~ **own** or ~~{operates an}~~
5 **operate qualifying** electrical generating ~~{facility}~~ **facilities** either powered by renewable energy or
6 which ~~{employs}~~ **employ** a heat led combined heat and power system, with a total peak generating
7 capacity of not more than ~~{100}~~ **200** kilowatts, or that first ~~{begins}~~ **begin** operation after July 1,
8 2010 and ~~{has}~~ **have** a total peak generating capacity of ~~{100}~~ **200** kilowatts or more up to one
9 megawatt, that ~~{is}~~ **are** located behind a retail meter on the customer's premises ~~{is}~~ **or, in the case**
10 **of a group of a net metering system, on the premises of a customer who is a member of the**
11 **group, are** interconnected and ~~{operates}~~ **operate** in parallel with the electric grid, and ~~{is}~~ **are**
12 used in the first instance to offset the customer's own electricity requirements.

13 2 New Paragraph; Limited Electrical Energy Producers. Amend RSA 362-A:1-a by inserting
14 after paragraph III the following new paragraph:

15 III-b. "Group net metering" means group systems using multiple net meters under RSA 362-
16 A:9 and defined in paragraph II-b as a "customer-generator group."

17 3 Net Energy Metering. Amend RSA 362-A:9, I to read as follows:

18 I. Standard tariffs providing for net energy metering shall be made available to eligible
19 customer-generators, **or customer-generator groups**, by each electric distribution utility in
20 conformance with net metering rules adopted and orders issued by the commission. Each net energy
21 metering tariff shall be identical, with respect to rates, rate structure, and charges, to the tariff
22 under which a customer-generator would otherwise take default generation supply service from the
23 distribution utility. Such tariffs shall be available on a first-come, first-served basis within each
24 electric utility service area under the jurisdiction of the commission until such time as the total rated
25 generating capacity owned or operated by eligible customer-generators, **or customer-generator**
26 **groups**, totals a number equal to 50 megawatts multiplied by each such utility's percentage share of
27 the total 2010 annual coincident peak energy demand distributed by all such utilities as determined
28 by the commission. No more than 2 megawatts of such total rated generating capacity shall be from
29 a combined heat and power system as defined in RSA 362-A:1-a, I-d.

30 4 Net Energy Metering. Amend RSA 362-A:9, III to read as follows:

1 III. Metering shall be done in accordance with normal metering practices, *except as*
2 *indicated in paragraph XIV for customer-generated groups*. A single net meter that shows
3 the customer's net energy usage by measuring both the inflow and outflow of electricity internally
4 shall be the extent of metering that is required at facilities with a total peak generating capacity of
5 not more than 100 kilowatts. A bi-directional metering system that records the total amount of
6 electricity that flows in each direction from the customer premises, either instantaneously or over
7 intervals of an hour or less, shall be required at facilities with a total peak generating capacity of
8 more than 100 kilowatts. Customer-generators *or customer-generator groups* shall not be
9 required to pay for the installation of net meters, but shall pay for the installation of all bi-
10 directional metering systems as outlined in utility interconnection tariffs or rules.

11 5 Net Energy Metering. Amend RSA 362-A:9, IX to read as follows:

12 IX. Renewable energy credits shall remain the property of the customer-generator *or*
13 *customer-generator groups* until such credits are sold or transferred. If an electric distribution
14 utility acquires renewable energy credits from a customer-generator in conjunction with purchasing
15 excess generation, it may apply such generation and credits to its renewable energy source default
16 service option under RSA 374-F:3, V(f).

17 6 Net Energy Metering. Amend RSA 362-A:9, XIII to read as follows:

18 XIII. Customer-generators *or customer-generator groups* shall be responsible for all costs
19 associated with interconnection with the distribution system.

20 7 New Paragraph; Net Energy Metering. Amend RSA 362-A:9 by inserting after paragraph XIII
21 the following new paragraph:

22 XIV. Electric energy measurement for group net metering shall be calculated in the
23 following manner:

24 (a) Net metering customers that are customer-generator groups may credit on-site
25 generation against all meters designated to the customer-generator group.

26 (b) Electric energy measurement for customer generator groups shall be calculated by
27 subtracting total usage of all meters included in the customer generator group from total generation
28 by the customer-generator group. If the electricity generated by the customer generator group is less
29 than the total usage of all meters included in the customer-generator group during the billing period,
30 the group net metering system shall be credited for any accumulated kilowatt-hour credit and then
31 billed for the net electricity supplied by the electric company, in accordance with paragraph IV.

32 (c) If electricity generated by the customer generator group exceeds the electricity
33 supplied by the electric company, the provisions of paragraph V and VI shall apply, with credits
34 allocated to and appearing on the bill of each member of the customer generator group.

35 8 Effective Date. This act shall take effect July 1, 2012.

SB 258 - AS AMENDED BY THE SENATE

03/28/12 1401s

2012 SESSION

12-2950
06/05

SENATE BILL **258**

AN ACT authorizing group net metering for limited electrical energy producers.

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AN ACT authorizing group net metering for limited electrical energy producers.

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1 1 Limited Electrical Energy Producers; Definitions. Amend RSA 362-A:1-a, II-b to read as
2 follows:

3 II-b. "Eligible customer-generator" ~~[or]~~, "customer-generator", **or "customer-generator**
4 **group"** means an electric utility customer **or group of customers** who ~~[owns]~~ **own** or ~~[operates-an]~~
5 **operate** electrical generating ~~[facility]~~ **facilities** either powered by renewable energy or which
6 ~~[employs]~~ **employ** a heat led combined heat and power system, with a total peak generating capacity
7 of ~~[not more than 100 kilowatts, or that first begins operation after July 1, 2010 and has a total peak~~
8 ~~generating capacity of 100 kilowatts or more]~~ up to one megawatt, that is located behind a retail
9 meter on the customer's premises ~~[is]~~ **or, in the case of a customer-generator group, on the**
10 **premises of a customer who is a member of the group, are** interconnected and ~~[operates]~~
11 **operate** in parallel with the electric grid, and ~~[is]~~ **are** used in the first instance to offset the
12 customer's own electricity requirements. **A customer generator may be incremental generation**
13 **added to an existing generation facility, that does not itself qualify for net metering, as**
14 **long as such incremental generation meets the qualifications of this paragraph and is**
15 **metered separately from the nonqualifying facility. An eligible customer-generator group**
16 **shall only include customers located in the same municipality and served by the same**
17 **electric distribution utility.**

18 2 Net Energy Metering. Amend RSA 362-A:9, I to read as follows:

19 I. Standard tariffs providing for net energy metering shall be made available to eligible
20 customer-generators, **or customer-generator groups**, by each electric distribution utility in
21 conformance with net metering rules adopted and orders issued by the commission. Each net energy
22 metering tariff shall be identical, with respect to rates, rate structure, and charges, to the tariff
23 under which a customer-generator would otherwise take default generation supply service from the
24 distribution utility. Such tariffs shall be available on a first-come, first-served basis within each
25 electric utility service area under the jurisdiction of the commission until such time as the total rated
26 generating capacity owned or operated by eligible customer-generators, **or customer-generator**
27 **groups**, totals a number equal to 50 megawatts multiplied by each such utility's percentage share of
28 the total 2010 annual coincident peak energy demand distributed by all such utilities as determined
29 by the commission. No more than 2 megawatts of such total rated generating capacity shall be from
30 a combined heat and power system as defined in RSA 362-A:1-a, I-d.

1 3 Net Energy Metering. Amend RSA 362-A:9, III through VI(a) to read as follows:

2 III. Metering shall be done in accordance with normal metering practices. A single net
3 meter that shows the customer's net energy usage by measuring both the inflow and outflow of
4 electricity internally shall be the extent of metering that is required at facilities with a total peak
5 generating capacity of not more than 100 kilowatts. A bi-directional metering system that records
6 the total amount of electricity that flows in each direction from the customer premises, either
7 instantaneously or over intervals of an hour or less, shall be required at facilities with a total peak
8 generating capacity of more than 100 kilowatts. Customer-generators *or customer-generator*
9 *groups* shall not be required to pay for the installation of net meters, but shall pay for the
10 installation of all bi-directional metering systems as outlined in utility interconnection tariffs or
11 rules.

12 IV.(a) For facilities with a total peak generating capacity of not more than 100 kilowatts,
13 when billing a customer-generator *or customer-generator group* under a net energy metering
14 tariff that is not time-based, the utility shall apply the customer's net energy usage when calculating
15 all charges that are based on kilowatt hour usage. Customer net energy usage shall equal the
16 kilowatt hours supplied to the customer over the electric distribution system minus the kilowatt
17 hours generated by the customer-generator and fed into the electric distribution system over a
18 billing period.

19 (b) For facilities with a total peak generating capacity of more than 100 kilowatts, the
20 customer-generator shall pay all applicable charges on all kilowatt hours supplied to the customer
21 over the electric distribution system, less a credit on default service charges equal to the metered
22 energy generated by the customer-generator and fed into the electric distribution system over a
23 billing period.

24 V. When a customer-generator's *or customer-generator group's* net energy usage is
25 negative (more electricity is fed into the distribution system than is received) over a billing period,
26 such surplus shall either:

27 (a) Be credited to the customer-generator's *or customer-generator group's* account on
28 an equivalent basis for use in subsequent billing cycles as a credit against the customer's net energy
29 usage or bill in a manner consistent with either subparagraph IV(a) or IV(b), as applicable; or

30 (b) Except as provided in paragraph VI, the customer-generator may elect to be paid or
31 credited by the electric distribution utility for its excess generation at rates that are equal to the
32 utility's avoided costs for energy and capacity to provide default service as determined by the
33 commission consistent with the requirements of the Public Utilities Regulatory Policy Act of 1978
34 (PURPA). The commission shall determine reasonable conditions for such an election, including the
35 frequency of payment and how often a customer-generator may choose this option versus the option
36 in subparagraph (a).

37 VI. Instead of the option in subparagraph V(b), an electric distribution utility providing

1 default service to customer-generators may voluntarily elect, annually, on a generic basis, by
2 notification to the commission, to purchase or credit such excess generation from customer-
3 generators at a rate that is equal to the generation supply component of the applicable default
4 service rate, provided that payment is issued at least as often as whenever the value of such credit,
5 in excess of amounts owed by the customer-generator, is greater than \$50.

6 4 Net Energy Metering. Amend RSA 362-A:9, IX to read as follows:

7 IX. Renewable energy credits shall remain the property of the customer-generator *or*
8 *customer-generator groups* until such credits are sold or transferred. If an electric distribution
9 utility acquires renewable energy credits from a customer-generator in conjunction with purchasing
10 excess generation, it may apply such generation and credits to its renewable energy source default
11 service option under RSA 374-F:3, V(f).

12 5 Effective Date. This act shall take effect July 1, 2012.

LBAO
12-2950
Amended 04/23/12

SB 258 FISCAL NOTE

AN ACT authorizing group net metering for limited electrical energy producers.

FISCAL IMPACT:

The Public Utilities Commission states this bill, as amended by the Senate (Amendment #2012-1401s), will have an indeterminable fiscal impact on state, county and local expenditures in FY 2013 and each year thereafter. There is no fiscal impact on state, county and local revenue.

METHODOLOGY:

The Public Utilities Commission states this bill allows net metered customers to be groups of customers and credits electricity produced and fed back into the utility electric system at different rates depending on the size of the electric generation facility and the class of customer. The Commission states any potential fiscal impact on expenditures would depend on the extent to which any such net metering groups are established that include state, county, or local governmental entities.

Amendments



Amendment to SB 258

1 Amend the bill by replacing all after the enacting clause with the following:

2
3 1 Limited Electrical Energy Producers; Definitions. Amend RSA 362-A:1-a, II-b to read as
4 follows:

5 II-b. "Eligible customer-generator" ~~[or]~~, "customer-generator", or "**customer-generator**
6 **group**" means an electric utility customer **or group of customers** who ~~[owns] own~~ or ~~[operates an]~~
7 **operate** electrical generating ~~[facility] facilities~~ either powered by renewable energy or which
8 ~~[employs] employ~~ a heat led combined heat and power system, with a total peak generating capacity
9 of not more than 100 kilowatts, or that first ~~[begins] begin~~ operation after July 1, 2010 and ~~[has]~~
10 **have** a total peak generating capacity of 100 kilowatts or more up to one megawatt, that ~~[is] are~~
11 located behind a retail meter on the customer's premises ~~[is] or, in the case of a customer-~~
12 **generator group, on the premises of a customer who is a member of the group, are**
13 interconnected and ~~[operates] operate~~ in parallel with the electric grid, and ~~[is] are~~ used in the first
14 instance to offset the customer's own electricity requirements. **A customer generator may be**
15 **incremental generation added to an existing generation facility, that does not itself qualify**
16 **for net metering, as long as such incremental generation meets the qualifications of this**
17 **paragraph and is metered separately from the nonqualifying facility.**

18 2 Net Energy Metering. Amend RSA 362-A:9, I to read as follows:

19 I. Standard tariffs providing for net energy metering shall be made available to eligible
20 customer-generators, **or customer-generator groups**, by each electric distribution utility in
21 conformance with net metering rules adopted and orders issued by the commission. Each net energy
22 metering tariff shall be identical, with respect to rates, rate structure, and charges, to the tariff
23 under which a customer-generator would otherwise take default generation supply service from the
24 distribution utility. Such tariffs shall be available on a first-come, first-served basis within each
25 electric utility service area under the jurisdiction of the commission until such time as the total rated
26 generating capacity owned or operated by eligible customer-generators, **or customer-generator**
27 **groups**, totals a number equal to 50 megawatts multiplied by each such utility's percentage share of
28 the total 2010 annual coincident peak energy demand distributed by all such utilities as determined
29 by the commission. No more than 2 megawatts of such total rated generating capacity shall be from
30 a combined heat and power system as defined in RSA 362-A:1-a, I-d.

31 3 Net Energy Metering. Amend RSA 362-A:9, III through VI to read as follows:



1 III. Metering shall be done in accordance with normal metering practices. A single net
2 meter that shows the customer's net energy usage by measuring both the inflow and outflow of
3 electricity internally shall be the extent of metering that is required at facilities with a total peak
4 generating capacity of not more than 100 kilowatts. A bi-directional metering system that records
5 the total amount of electricity that flows in each direction from the customer premises, either
6 instantaneously or over intervals of an hour or less, shall be required at facilities with a total peak
7 generating capacity of more than 100 kilowatts *or for customers with demand charges as*
8 *described in paragraph IV.* Customer-generators *or customer-generator groups* shall not be
9 required to pay for the installation of net meters, but shall pay for the installation of all bi-
10 directional metering systems as outlined in utility interconnection tariffs or rules.

11 IV. ~~[(a) For facilities with a total peak generating capacity of not more than 100 kilowatts,]~~
12 When billing a customer-generator *or customer-generator group* under a net energy metering
13 tariff that is not time-based, the utility shall apply the customer's net energy usage when calculating
14 all charges that are based on kilowatt hour usage. Customer net energy usage shall equal the
15 kilowatt hours supplied to the customer over the electric distribution system minus the kilowatt
16 hours generated by the customer-generator and fed into the electric distribution system over a
17 billing period. *For any billing period, all charges related to the utility's avoided costs of*
18 *energy, distribution, transmission, and capacity (collectively the customer demand*
19 *charges) which are based on peak kilowatt usage shall be calculated as follows: the peak*
20 *demand charge (peak kilowatts times demand rate) shall be divided by the total kilowatt*
21 *hours supplied to the customer to arrive at an equivalent kilowatt hour rate (cents per*
22 *kilowatt hour). Such rate shall then be applied to the customer net energy usage to arrive*
23 *at the customer demand charges for that billing period.*

24 ~~[(b) For facilities with a total peak generating capacity of more than 100 kilowatts, the~~
25 ~~customer-generator shall pay all applicable charges on all kilowatt hours supplied to the customer~~
26 ~~over the electric distribution system, less a credit on default service charges equal to the metered~~
27 ~~energy generated by the customer-generator and fed into the electric distribution system over a~~
28 ~~billing period.]~~

29 V. When a customer-generator's *or customer-generator group's* net energy usage is
30 negative (more electricity is fed into the distribution system than is received) over a billing period,
31 such surplus shall either:

32 (a) Be credited to the customer-generator's *or customer-generator group's* account on
33 an equivalent basis for use in subsequent billing cycles as a credit against the customer's net energy
34 usage ~~[or bill in a manner consistent with either subparagraph IV(a) or IV(b), as applicable;]~~ or

35 (b) Except as provided in paragraph VI, the customer-generator may elect to be paid or
36 credited by the electric distribution utility for its excess generation at rates that are equal to the
37 utility's avoided costs for energy, *distributing, transmission,* and capacity to provide ~~[default]~~



1 *retail* service as determined by the commission consistent with the requirements of the Public
2 Utilities Regulatory Policy Act of 1978 (PURPA). The commission shall determine reasonable
3 conditions for such an election, including the frequency of payment and how often a customer-
4 generator may choose this option versus the option in subparagraph (a).

5 VI. Instead of the option in subparagraph V(b), an electric distribution utility providing
6 default service to customer-generators may voluntarily elect, annually, on a generic basis, by
7 notification to the commission, to purchase or credit such excess generation from customer-
8 generators at a rate that is equal to the generation supply [~~component~~], *distribution, and*
9 *transmission components* of the applicable [~~default service~~] *retail* rate, provided that payment is
10 issued at least as often as whenever the value of such credit, in excess of amounts owed by the
11 customer-generator, is greater than \$50.

12 4 Net Energy Metering. Amend RSA 362-A:9, IX to read as follows:

13 IX. Renewable energy credits shall remain the property of the customer-generator *or*
14 *customer-generator groups* until such credits are sold or transferred. If an electric distribution
15 utility acquires renewable energy credits from a customer-generator in conjunction with purchasing
16 excess generation, it may apply such generation and credits to its renewable energy source default
17 service option under RSA 374-F:3, V(f).

18 5 New Paragraph; Net Energy Metering. Amend RSA 362-A:9 by inserting after paragraph XIII
19 the following new paragraph:

20 XIV. Customer-generator groups shall be limited to either:

21 (a) A group of no more than 10 electric utility customers located within the same electric
22 utility service territory, at least one of whom is an eligible customer-generator, that has elected to
23 combine meters as a single billing entity in order to offset that billing against the renewable energy
24 facility; or

25 (b) A municipality that is an eligible customer-generator, and that has elected to
26 combine meters on properties owned by the municipality that are located within the same electric
27 utility service territory as a single billing entity in order to offset such billing against the renewable
28 energy facility.

29 6 Effective Date. This act shall take effect July 1, 2012.



Amendment to SB 258

1 Amend the bill by replacing all after the enacting clause with the following:

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3 1 Limited Electrical Energy Producers; Definitions. Amend RSA 362-A:1-a, II-b to read as
4 follows:

5 II-b. "Eligible customer-generator" ~~[or]~~, "customer-generator", or "*customer-generator*
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7 *operate* electrical generating ~~[facility]~~ *facilities* either powered by renewable energy or which
8 ~~[employs]~~ *employ* a heat led combined heat and power system, with a total peak generating capacity
9 of not more than 100 kilowatts, or that first ~~[begins]~~ *begin* operation after July 1, 2010 and ~~[has]~~
10 *have* a total peak generating capacity of 100 kilowatts or more up to one megawatt, that ~~[is]~~ *are*
11 located behind a retail meter on the customer's premises ~~[is]~~ *or, in the case of a customer-*
12 *generator group, on the premises of a customer who is a member of the group, are*
13 interconnected and ~~[operates]~~ *operate* in parallel with the electric grid, and ~~[is]~~ *are* used in the first
14 instance to offset the customer's own electricity requirements. *A customer generator may be*
15 *incremental generation added to an existing generation facility, that does not itself qualify*
16 *for net metering, as long as such incremental generation meets the qualifications of this*
17 *paragraph and is metered separately from the nonqualifying facility. An eligible*
18 *customer-generator group shall only include customers located in the same municipality*
19 *and served by the same electric distribution utility.*

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24 metering tariff shall be identical, with respect to rates, rate structure, and charges, to the tariff
25 under which a customer-generator would otherwise take default generation supply service from the
26 distribution utility. Such tariffs shall be available on a first-come, first-served basis within each
27 electric utility service area under the jurisdiction of the commission until such time as the total rated
28 generating capacity owned or operated by eligible customer-generators, *or customer-generator*
29 *groups*, totals a number equal to 50 megawatts multiplied by each such utility's percentage share of
30 the total 2010 annual coincident peak energy demand distributed by all such utilities as determined
31 by the commission. No more than 2 megawatts of such total rated generating capacity shall be from



Amendment to SB 258

- Page 2 -

1 a combined heat and power system as defined in RSA 362-A:1-a, I-d.

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6 generating capacity of not more than 100 kilowatts. A bi-directional metering system that records
7 the total amount of electricity that flows in each direction from the customer premises, either
8 instantaneously or over intervals of an hour or less, shall be required at facilities with a total peak
9 generating capacity of more than 100 kilowatts. Customer-generators *or customer-generator*
10 *groups* shall not be required to pay for the installation of net meters, but shall pay for the
11 installation of all bi-directional metering systems as outlined in utility interconnection tariffs or
12 rules.

13 IV.(a) For facilities with a total peak generating capacity of not more than 100 kilowatts,
14 when billing a customer-generator *or customer-generator group* under a net energy metering
15 tariff that is not time-based, the utility shall apply the customer's net energy usage when calculating
16 all charges that are based on kilowatt hour usage. Customer net energy usage shall equal the
17 kilowatt hours supplied to the customer over the electric distribution system minus the kilowatt
18 hours generated by the customer-generator and fed into the electric distribution system over a
19 billing period.

20 (b) For facilities with a total peak generating capacity of more than 100 kilowatts, the
21 customer-generator shall pay all applicable charges on all kilowatt hours supplied to the customer
22 over the electric distribution system, less a credit on default service charges equal to the metered
23 energy generated by the customer-generator and fed into the electric distribution system over a
24 billing period.

25 V. When a customer-generator's *or customer-generator group's* net energy usage is
26 negative (more electricity is fed into the distribution system than is received) over a billing period,
27 such surplus shall either:

28 (a) Be credited to the customer-generator's *or customer-generator group's* account on
29 an equivalent basis for use in subsequent billing cycles as a credit against the customer's net energy
30 usage or bill in a manner consistent with either subparagraph IV(a) or IV(b), as applicable; or

31 (b) Except as provided in paragraph VI, the customer-generator may elect to be paid or
32 credited by the electric distribution utility for its excess generation at rates that are equal to the
33 utility's avoided costs for energy and capacity to provide default service as determined by the
34 commission consistent with the requirements of the Public Utilities Regulatory Policy Act of 1978
35 (PURPA). The commission shall determine reasonable conditions for such an election, including the
36 frequency of payment and how often a customer-generator may choose this option versus the option
37 in subparagraph (a).



Amendment to SB 258

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1 VI. Instead of the option in subparagraph V(b), an electric distribution utility providing
2 default service to customer-generators may voluntarily elect, annually, on a generic basis, by
3 notification to the commission, to purchase or credit such excess generation from customer-
4 generators at a rate that is equal to the generation supply component of the applicable default
5 service rate, provided that payment is issued at least as often as whenever the value of such credit,
6 in excess of amounts owed by the customer-generator, is greater than \$50.

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10 utility acquires renewable energy credits from a customer-generator in conjunction with purchasing
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10 ~~generating capacity of 100 kilowatts or more]~~ up to one megawatt, that is located behind a retail
11 meter on the customer's premises ~~[is]~~ *or, in the case of a customer-generator group, on the*
12 *premises of a customer who is a member of the group, are* interconnected and ~~[operates]~~
13 *operate* in parallel with the electric grid, and ~~[is]~~ *are* used in the first instance to offset the
14 customer's own electricity requirements. *A customer generator may be incremental generation*
15 *added to an existing generation facility, that does not itself qualify for net metering, as*
16 *long as such incremental generation meets the qualifications of this paragraph and is*
17 *metered separately from the nonqualifying facility. An eligible customer-generator group*
18 *shall only include customers located in the same municipality and served by the same*
19 *electric distribution utility.*

20 2 Net Energy Metering. Amend RSA 362-A:9, I to read as follows:

21 I. Standard tariffs providing for net energy metering shall be made available to eligible
22 customer-generators, *or customer-generator groups*, by each electric distribution utility in
23 conformance with net metering rules adopted and orders issued by the commission. Each net energy
24 metering tariff shall be identical, with respect to rates, rate structure, and charges, to the tariff
25 under which a customer-generator would otherwise take default generation supply service from the
26 distribution utility. Such tariffs shall be available on a first-come, first-served basis within each
27 electric utility service area under the jurisdiction of the commission until such time as the total rated
28 generating capacity owned or operated by eligible customer-generators, *or customer-generator*
29 *groups*, totals a number equal to 50 megawatts multiplied by each such utility's percentage share of
30 the total 2010 annual coincident peak energy demand distributed by all such utilities as determined
31 by the commission. No more than 2 megawatts of such total rated generating capacity shall be from

1 a combined heat and power system as defined in RSA 362-A:1-a, I-d.

2 3 Net Energy Metering. Amend RSA 362-A:9, III through VI(a) to read as follows:

3 III. Metering shall be done in accordance with normal metering practices. A single net
4 meter that shows the customer's net energy usage by measuring both the inflow and outflow of
5 electricity internally shall be the extent of metering that is required at facilities with a total peak
6 generating capacity of not more than 100 kilowatts. A bi-directional metering system that records
7 the total amount of electricity that flows in each direction from the customer premises, either
8 instantaneously or over intervals of an hour or less, shall be required at facilities with a total peak
9 generating capacity of more than 100 kilowatts. Customer-generators *or customer-generator*
10 *groups* shall not be required to pay for the installation of net meters, but shall pay for the
11 installation of all bi-directional metering systems as outlined in utility interconnection tariffs or
12 rules.

13 IV.(a) For facilities with a total peak generating capacity of not more than 100 kilowatts,
14 when billing a customer-generator *or customer-generator group* under a net energy metering
15 tariff that is not time-based, the utility shall apply the customer's net energy usage when calculating
16 all charges that are based on kilowatt hour usage. Customer net energy usage shall equal the
17 kilowatt hours supplied to the customer over the electric distribution system minus the kilowatt
18 hours generated by the customer-generator and fed into the electric distribution system over a
19 billing period.

20 (b) For facilities with a total peak generating capacity of more than 100 kilowatts, the
21 customer-generator shall pay all applicable charges on all kilowatt hours supplied to the customer
22 over the electric distribution system, less a credit on default service charges equal to the metered
23 energy generated by the customer-generator and fed into the electric distribution system over a
24 billing period.

25 V. When a customer-generator's *or customer-generator group's* net energy usage is
26 negative (more electricity is fed into the distribution system than is received) over a billing period,
27 such surplus shall either:

28 (a) Be credited to the customer-generator's *or customer-generator group's* account on
29 an equivalent basis for use in subsequent billing cycles as a credit against the customer's net energy
30 usage or bill in a manner consistent with either subparagraph IV(a) or IV(b), as applicable; or

31 (b) Except as provided in paragraph VI, the customer-generator may elect to be paid or
32 credited by the electric distribution utility for its excess generation at rates that are equal to the
33 utility's avoided costs for energy and capacity to provide default service as determined by the
34 commission consistent with the requirements of the Public Utilities Regulatory Policy Act of 1978
35 (PURPA). The commission shall determine reasonable conditions for such an election, including the
36 frequency of payment and how often a customer-generator may choose this option versus the option
37 in subparagraph (a).

Amendment to SB 258

- Page 3 -

1 VI. Instead of the option in subparagraph V(b), an electric distribution utility providing
2 default service to customer-generators may voluntarily elect, annually, on a generic basis, by
3 notification to the commission, to purchase or credit such excess generation from customer-
4 generators at a rate that is equal to the generation supply component of the applicable default
5 service rate, provided that payment is issued at least as often as whenever the value of such credit,
6 in excess of amounts owed by the customer-generator, is greater than \$50.

7 4 Net Energy Metering. Amend RSA 362-A:9, IX to read as follows:

8 IX. Renewable energy credits shall remain the property of the customer-generator *or*
9 *customer-generator groups* until such credits are sold or transferred. If an electric distribution
10 utility acquires renewable energy credits from a customer-generator in conjunction with purchasing
11 excess generation, it may apply such generation and credits to its renewable energy source default
12 service option under RSA 374-F:3, V(f).

13 5 Effective Date. This act shall take effect July 1, 2012.

Committee Minutes

**SENATE CALENDAR NOTICE
ENERGY AND NATURAL RESOURCES**

- ✓ Senator Bob Odell Chairman
- ✓ Senator John Gallus V Chairman
- ✓ Senator Jeb Bradley
- ✓ Senator Gary Lambert
- ✓ Senator Amanda Merrill

For Use by Senate Clerk's Office ONLY	
<input type="checkbox"/>	Bill Status
<input type="checkbox"/>	Docket
<input type="checkbox"/>	Calendar
Proof: <input type="checkbox"/>	Calendar <input type="checkbox"/> Bill Status

Date: February 21, 2012

HEARINGS

Thursday

3/8/2012

ENERGY AND NATURAL RESOURCES

LOB 102

9:00 AM

(Name of Committee)

(Place)

(Time)

EXECUTIVE SESSION MAY FOLLOW

- | | | |
|---------|----------|---|
| 9:00 AM | SB258 | authorizing group net metering for limited electrical energy producers. |
| 9:15 AM | SB392-FN | relative to road salt applicators. |
| 9:30 AM | SB399-FN | relative to the maximum permit application for certain municipal dredging projects. |

Sponsors:

SB258

Sen. Molly Kelly
Sen. Matthew Houde

Sen. Amanda Merrill
Rep. Samuel Hawkes

Sen. Sylvia Larsen

Sen. Lou D'Allesandro

SB392-FN

Sen. Chuck Morse
Rep. Gene Chandler

Sen. Sharon Carson
Rep. Gary Azarian

Sen. Jim Rausch
Rep. Robert Elliott

Rep. David Bettencourt

SB399-FN

Sen. Peter Bragdon

Rep. William Belvin

Rep. Robert Willette

Rep. Peter Hansen

START: 9:03AM

END: 11:06AM

Energy and Natural Resources Committee

Hearing Report

FROM: Richard Parsons, Legislative Aide

SB 258 – authorizing group net metering for limited electrical energy producers.

HEARING DATE: March 8, 2012

MEMBERS PRESENT: Senators Odell, Gallus, Bradley, Lambert, Merrill

MEMBERS ABSENT: No one.

Sponsor(s): Sen. Kelly, Dist 10; Sen. Merrill, Dist 21; Sen. Larsen, Dist 15; Sen. D'Allesandro, Dist 20; Sen. Houde, Dist 5; Rep. Hawkes, Ches 3

What the bill does: This bill adds and modifies certain definitions related to net energy planning.

Who supports the bill: Sen. Kelly, Dist 10; Rep. Hawkes, Ches 3; Andy Cay, Integrated Solar; Peter Hansel, Filtrine Management Co.; Abigail Abrash Walton, Antioch University of New England; Dennis Calcutt, Wediko Children's Services; Michael Krinsky, The Mountain Corp.; Michael Gallen, The Mountain Corp.; Toby Clarke, Goss International; Linda Willett, Historic Harrisville; John Colony, Harrisville Design; Bob King; Rhett Lamb, City of Keene; Garrett Kopczynski, City of Keene; Robert Johnson, II, Farm Bureau; Heidi Kroll, Granite State Hydropower Association; Bryan Granger, CNS Wholesale; Jack Dugan, MEDC; Mark Weissflog, KW Management;

Who opposes the bill: Deb Hale, National Grid; Mark Dean, NH Electric Co-Op; Rick Labrecque, PSNH; Donna Gamache, PSNH;

Neutral position: Eric Steltzer, OEP;

Summary of testimony received:
Hearing opened 9:03 am

Senator Kelly, District 10 – Prime Sponsor

Bringing the bill forward, as amended, by amendment 1066s.

The intent of the bill, as amended, is to reduce the energy costs for businesses and municipalities. This bill was initiated because businesses and

municipalities need to lower their energy costs. The BIA did a survey that said 58% of businesses consider the cost of energy as a major concern. If we have group net metering they can lower their energy costs. Businesses have considered moving to a state like Vermont that allows net metering. All the stakeholders have been involved in this legislation.

This bill provides net metering for groups because today we have net metering for costumer generators but not customer generator groups. Customer generated groups are interconnected and work in parallel with the grid and they allow more than one building to be grouped on only one meter instead of each building having their own meeting.

Under current law, the payments to businesses for surplus energy that goes back to the grid does not provide economic feasibility to those businesses. This bill will help keeps businesses in our state and also help them lower costs. New businesses can be brought in if New Hampshire is more business friendly with group net metering. Economic developers will have a good story to tell.

If municipalities can lower their energy costs to the taxpayers in those communities that is a definite benefit.

Group net metering is not a new subject and some arguments you may hear are that systems are not in place for group net metering but it is an obstacle that can be overcome. We do not know what the increase cost to ratepayers would be when you also consider the positive economic impacts that this would have on the businesses and our economy. This bill is moving NH in the right direction.

Rep. Hawkes, Cheshire 3

Co-sponsor of this legislation.

This bill increases the generating capacity from 100 kW to 1mW which is a ten times increase in the capacity that a customer generator could have. It changes the maximum amount of the installed customer generator base in the state from 1% to 50mW, and with the generating capacity in the state around 4,500 mW so that represents close to 1%.

The bill allows people with groups of 10 meters to form a group and run everything through one account and the virtual effect is one meter. Once that is approved there will be one invoice for the group. Requires the utility to buy excess power and asked the utility to pay for that excess power at not only the electric rate but also the rate for transmission distribution, stranded costs and all the other costs associated with the bill. There are several rates that the utilities have and the "g" rate will be recalculated in terms of a kW hour rate or a demand rate.

The general benefits are that it allows businesses and municipalities who may have the ability to generate power on their sites the opportunity to put their energy back on the grid. There are estimated \$250 million investment for the state that will come from private investors and not ratepayers. This is a jobs bill. Your energy costs would become predictable and that is very important. Predictable costs would help municipalities keep taxes down.

Looking at solar power alone it shows that most of the solar power is generated at the same time that the grid is at peak power.

Andy Cay, Integrated Solar

In support of this bill. Business is located in Vermont. Have met many prospective customers in the state but there are prohibitions. The Mountain Corporation in Keene is one example of a business that would like to take advantage. The City of Keene Waste Water Treatment facility is another example of a business that uses a lot of power that could take advantage of this. All the power those facilities would produce would go to their neighbors if group net metering was allowed.

Another area to look at is full reimbursement of electric costs. This bill would reimburse based on the net energy usage and apply it by the usage rate. By installing a system that produces 97% of their usage they would be reimbursed 75% in current law. In the new law, they would be reimbursed 96% of the total.

Investing in solar is good for businesses because energy costs have gone up over 5%. There is also going to be a 24% increase in demand.

For municipalities and businesses to add energy would increase that amount of construction jobs extensively. It comes down to a fairness question of fully reimbursing businesses that improves the grid.

Peter Hansel, Filtrine Management

In support of this bill. Company made the decision to move business to New Hampshire 40 years ago. Reinstalled water power to business at the time and had a deal for net metering, 40 years ago, that did not bring in much in return for what went back into the grid. Current facility in Keene is ideal for solar power and the economics have held us back. Company wants to invest in the local community and this bill will help to invest into other energy enterprises in the community.

Abigail Abrash Walton, Antioch University

In support because this is a very important energy policy change that would benefit a range of institutions. This bill would affect Antioch as the costs of energy is rapidly rising and this bill could help contain costs. Additionally, this would help keep tuition lower by not passing new energy increases on to students. The regulatory environment in the state does not make it conducive to add energy to our facilities.

Dennis Calcutt, Wediko Children's Services

In support of this bill. Treatment facility, school and summer program and this bill is important because Wediko is a non-profit that is trying to contain costs. Have gone through water quality certification in NH and have a power source on campus that could help give the campus the ability to group all our meters to be able to control costs.

Michael Krinsky, Mountain Corporation

In support of this bill. Employ 200 people in Marlboro and Keene. As the years have gone on New Hampshire has not been as friendly for businesses. A year ago thought it would be good to power facility by a photovoltaic system, but the current laws in NH were preventing us from doing what we wanted to do. Our current laws are negative business incentives and this bill would help make NH have a better business climate.

Michael Gallen, Mountain Corporation

In support of this bill. From a business aspect, companies from other states often can get an advantage on NH businesses because when it comes to energy it allows other companies to quote .5 cents better automatically than we can at Mountain Corporation.

Toby Clarke, Goss International

In support of this bill. To really make a difference with renewable energy it is necessary to generate it locally supported by being able to: 1. have a reliable and predictable net energy metering law; 2. Ensure there is sufficient headroom in the law so that the net metering does not cap out too soon; 3. Group individual sight power demands together achieve significant enough size to all for the group to invest the capital required to install an efficiently sized renewable power source.

Senator Bradley asked if a change in the rate reimbursement that other speakers have discussed is also a priority. Mr. Clarke stated that rates have to be in a fair program and people need to be compensated appropriately. The projects have to be justified based on the financial stability and the rates will change so that will be an ongoing business discussion.

Linda Willet, Historic Harrisville

In support of this bill. Non-profit organization that has assumed the stewardship of the historic site in Harrisville and have rehabilitated mills to make them usable for businesses to provide jobs for people in town. A lot of buildings go along the mill so have looked into reactivating the turbine and have applied for a federal permit to help reduce energy costs.

John Colony, Harrisville Designs

In support of this bill. Water power helped power New Hampshire through the industrial revolution and it will help us in the future if we provide incentives.

Bob King, Small Hydro Company Owner

In 30 years, have never seen small power producers pay so little for their costs. The wholesale rates that little guys are getting paid are going down while at the same time the retail rates are slowly going up and it is that spread that is driving this bill.

Senator Odell asked if an argument against this would be other people's electricity rates would go up to the benefit of the companies. Mr. King stated

that the costs would be very de minimis especially when considering positive impacts to job creation and economic benefits.

Senator Bradley asked why that justifies getting the full retail rate as opposed to the generator rate. Mr. King answered that it would never really be the full retail rate anyway but it is closer to retail than we are now. It is justified because it is necessary if you want to see renewables expand, and there are all kinds of external benefits of the renewables.

Rhett Lamb, Planning Director for City of Keene

In support of this bill. When a municipality budgets you try to predict the costs of running the town. The city currently has 3 small renewable projects. It would have a significant benefit to taxpayers because they reduce the costs for operating the town and thus reduce the costs on ratepayers by also creating predictable rates.

Garret Kopczynski, City of Keene

In 2008 and 2009 looked into water resources and if those resources could be used to reduce energy costs. The cost benefit analysis was not very favorable but it could be if group net metering was introduced because it would offset costs at another site.

Waste Water Treatment Plant is next to the airport which has a separate meter and if there was a solar facility built there the treatment facility wouldn't be able to take advantage of that. Group net metering would allow the airport land, which is perfect for solar, to have renewable energy and accommodate any needs of the WWTP.

The City of Keene is hoping that in the future will be able to meter a lot of facilities and have a more predictable understanding of the energy costs.

Bryan Granger, CNS Wholesale Grocers

In support of this bill. CNS has been a long-time supporter of the local communities our businesses are located in. In 2010, decided to get involved in renewables within the company. Still looking for new initiatives that would help our company become more sustainable and lower costs and this bill would help make solar power or other renewable sources much more feasible.

Senator Odell asked if energy costs are a major part of business. Mr. Granger replied that those costs are absolutely a big part of the business. CNS implements energy savings when it is possible and the largest cost is fuel transportation. To be able to cut down money anywhere would be very helpful to areas like fuel costs that are constantly going up.

Rick Labrecque and Donna Gamache, PSNH

PSNH has long supported increasing renewables within the state but would like to try and do it in a way to prevent increases in costs. Net metering helps companies lower the cost of getting the renewable energy and it is the subsidy needed to reduce the higher costs that are often associated with renewables.

We would need to find a way to subsidize this and if the state decides it is a good idea it would need a subsidy that companies can count on. It can be done through a REC or a separate piece. The problem with net metering is the direct correlation with the revenue that is required for the poles and wires.

Rick Labrecque stated the state just went over an overhaul of the PUC 900 rules. HB1353 took effect to raise the cap limit to 1,000 kW. Are beginning to see larger projects and these are all appropriate sized facilities to handle the load at their facilities. With the expansion to 1,000 kW caps a lot of companies can take advantage of the program.

Another expansion is for facilities that generate over the course of a full year and have a significant surplus of kW hours. They are now able to get paid for those kW hours. They are paid the avoided costs for energy and capacity because these systems create energy.

This bill would allow a 1,000 kW system to be installed on a facility that only uses, for example, 50 kW. They are therefore creating a significant amount of surplus that they would then share with other members of their group. To PSNH, that looks like it is creating a wholesale generator. They are gaining a reduction in the energy portion of their utility bill. Don't see why a distribution and transmission portion of their bill should be used as an incentive for these facilities. Using the transmission component of the bill is not appropriate. Could bring about a loss of \$4-\$5 million in lost transmission and delivery revenues that would have to raise rates for non-participating customers. To the extent that these suppliers are utilizing the poles and wires and transmission equipment and sending these electrons to customers that are also hooked up to the poles and wires they should be paying their fair share of transmission and delivery costs.

Senator Bradley asked that PSNH isn't necessarily opposed to the group net metering general portion of the bill. Rick Labrecque stated they are not opposed to the concept per se.

Senator Bradley asked in terms of the T&D being a \$4-5 million cost to all of NH and asked if that is correct. Rick Labrecque stated it would be 5 hundredths of a cent spread across all customers not just PSNH.

Senator Odell asked if PSNH sees a difference between a close connected group net metering to one that is spread out. Rick Labrecque state they are similar and it is the same issue. Rick Labrecque also stated that if you also jump on to transmission equipment you are closer to having a FERC challenge to the rules.

Senator Odell stated there should be a cost associated with using the poles and wires. Donna Gamache stated that yes there should be and there is no geographic restriction in this bill which also raises concerns.

Senator Merrill asked about the geographic restriction and that it is a concern, but previously thought it was said it doesn't make a difference how far away they are. Donna Gamache stated the further away the more equipment that is needed and the higher cost.

Senator Bradley asked if it raises FERC issues if there are different corporate entities participating in one group. Rick Labrecque was not sure.

Mark Weissflog, KW Management

In support of the bill. This is a positive move forward but there are several issues. There are different classes of net metered customers. The first is a net meter customer that has a system on their building who never generates more than their base load. The second, the most common, is someone that rarely uses more than their monthly base load and sometimes sends some back into the grid and they use the distribution system.

What the City of Keene would be trying to do may be virtual net metering and that is not included in this law. The utilities all abide by these laws in Massachusetts currently.

Believe the number should be closer to 25 than 10 participants in the group. There are some utility costs for poles and wires at the benefits of someone else and over longer distances those costs start to take effect.

Eric Steltzer, Office of Energy Planning

Office of Energy Planning is neutral position because of the possible impact on rates.

To clarify earlier testimony, the state currently has a tiered structure. It is set at whether you are under 100 kW or over. You receive "credit" for those systems under 100kW because that's a value that must be used at that meter. That's at a full 1-1 value and you get the full retail rate. For a residential customer that could mean \$.15 per kW hour and for a business around \$.10/kW hour. Another key distinction is that it is just reimburses on kW hours and current law does not allow for reimbursement for demand charges on a kW basis. As far as the systems that are over 100kw, they receive a payment for excess electricity that they generate and that payment is just what it cost to generate and not the full retail value.

As Donna Gamache mentioned, NH has a hybrid version of group net metering where a payment is given to the individual who owns a system and to the extent that they would like to enter into other agreements as they see fit or use that to savings to offset costs at another meter.

There are two areas that this bill is really trying to change: Process and the value.

The process side, the bill allows for group net metering where a single entity would be formed and it is limited to 10 participants for the private sector and for a municipality it would be limited to just one utility provider and there is no limit on number of participating meters.

There are three important parts of the value side:

1. Tier structure would be removed by this amendment and the references to over or under 100 kW. This bill would allow, for example, a 500 kW facility would receive a 1-1 value credit for any electricity generated and they could use that credit at that facility.

2. There are changes to the payment portion. If excess electricity is generated and they would prefer to receive a payment on that what is

the value of that payment because instead of just generation the amendment proposed the inclusion of distribution and transmission. The reason that it doesn't say full retail rate is because of FERC regulations. FERC says that you can only be reimbursed for the avoided costs. So, items such as the systems benefits charge and stranded costs are not able to be reimbursed through a payment structure. But the proposed language would allow that to occur.

3. Currently it is only a reimbursement on kW hours and not on kW on a demand charge but the bill does have a methodology for how to receive a reimbursement for that demand charge which would be an additional value to make these projects more feasible.

In response to Mr. Weisflogg comments about virtual net metering and whether a new hydro facility that came online could be group net metered, and Mr. Steltzer believes that it could because the way the language currently reads it says the meter must first be used for electric usage at that meter, but it doesn't necessarily specify how much electric usage at that meter so it could be possible that electricity could be utilized at another net meter at another location.

In regards to impacts on rates, it does have the potential to increase the rates but it could actually reduce rates for the distribution side because if the system is located within a circuit in the distribution network that has a constraint on the capacity they can offer, (specifically with solar because of the correlation between when solar energy is at its peak output and the peak for demand within a distribution network being about the same time) the utility may be able to avoid additional capacity upgrades to the infrastructure. There are methods in law that already would allow that to happen, specifically 274:g.

In conclusion, Mr. Steltzer stated that one area that needs additional attention is the methodology on the demand charge and how to calculate that reimbursement.

Senator Odell asked him to work with the committee to see if this bill is feasible and to provide the committee the Massachusetts and Vermont laws and how they have worked or not work.

Senator Bradley asked how close we are to the cap. Mr. Steltzer stated there is plenty of room under the cap.

Hearing closed at 11:06 AM

Funding: *Not applicable.*

Future Action: *Pending.*

RMP

[file: SB 0258 report]

Date: 3/13/12

Speakers

Senate Energy and Natural Resources Committee: Sign-In Sheet

Date: 3/8/2012

Time: 9:00 AM

Public Hearing on SB 258

SB 258

authorizing group net metering for limited electrical energy producers.

Name	Representing	Support	Oppose	Speaking?	Yes	No
JACK DUGAN	MEDC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Speaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rick Labrecque Donna Gamache	PSNH	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Speaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mark Weissfogel	KW Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Speaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Testimony

City of Keene, NH – Group Net Metering Summary

Historical Summary

Since the early 2000's the City of Keene began analyzing its available resources for 'renewable energy' options as part of an effort by the City to address concerns from its citizens about energy security, energy cost and carbon footprint. In 2008-2009 the Public Works Department examined the water resources available, examining two potential sites for hydro energy. One, the Water Treatment Facility, is now a successful power producer as the financials were good enough with an ARRA (American Recovery and Reinvestment Act) grant to be put in place. The other, the Ashuelot River Dam, would not likely generate enough power to be able to pay back its investment, and was put aside. In the recommendations for the Ashuelot River Dam site however, the concept of 'group net metering' was proposed as a means in which the site could be a viable renewable energy project in the future.

The challenge of the Ashuelot River Dam site is that there is no power using facility located there. Though maintained by the City of Keene, this site is a park. With the reimbursement rate being around .06-.08 cents in NH per kilowatt hours, the project would take a very long time to pay off, even if it had managed to acquire a grant. With group net metering at least the energy produced could be used to offset a meter at another location owned by the City. With energy costs coming in from the grid at around .12-.13 cents and expected to rise at an average annual rate over time, it makes far more sense for group net metering to be used as a mechanism to control energy and support renewable energy than to introduce rate changes and subsidies.

With the support of then Representative Suzanne Harvey the first bill was drafted in 2009 and brought to session. The group part of the bill was discussed and its benefits weighed, but it was not included in the final version of House Bill 1353. Instead, net metering in general, a concept that was in the State law since the 90's, was improved. Though this helped expand upon existing language it did not provide the group net metering option that would assist with projects such as the Ashuelot River Dam. Since that time the City moved forward with its hydro turbine at its Water Treatment Facility, and also added a demonstration level photovoltaic system on its City Hall as part of an energy efficiency retrofit.

Present Value

The City of Keene owns and operates a Wastewater Treatment Plant, located next to its municipal airport. This facility is a significant user of energy, and has seen costs of energy rise from .08 cents back in the 90's to its current rate which is closer to .12-.13 cents. As a user of around 2,400,000 kilowatts, the WWTP hasn't fluctuated much over the years in this usage. A power bill in the 90's at that much usage would have been closer to \$12,000 a month, whereas now that cost is much higher, hovering around \$24,000. The yearly total would have been around \$154,000 and is now closer to \$291,000 on average, a cost that is not likely to decrease over time except with potential energy efficiency adjustments. As there is only so much that can be done with energy efficiency, this means that renewable energy is the most viable way to cut and control costs at a time when government is expected to do so, while maintaining a vital service.

Group net metering would benefit any potential project occurring around the WWTP. The reasons for this are among the following:

- As the municipality owns and operates the WWTP and the Airport it would be possible to use the land available owned by the Airport in order to accommodate any needs of the WWTP. The WWTP would see little to no benefit from any smaller scale photovoltaic system, but does not have enough land itself to host a site large enough to benefit from. The Airport may not use enough energy to find itself viable on the other side of things. One is too large, and the other too small. With group net metering both meters, or more meters within the City, could be linked together and resources aligned to maximum efficiency so that there is no waste associated with any project. The best configuration possible would utilize land owned by the Airport, with the Airport receiving some energy benefit potentially, and having a user of energy as large as the WWTP providing a customer.
- The Airport, as the owner of much of the land around its buildings and operations sites, is examining ways to economically improve the area. Rather than having empty lots unused, the Airport is examining the potential to invite businesses to develop lands around the Airport. These would likely be of a commercial or technology industry use, and would have a strong need for energy. As energy costs are not a concern for government only, these businesses might benefit from a supply of cheaper energy available on site. This would be attractive to a developer, providing jobs to the area and improving the overall financial health of the community.

Without the existence of group net metering it is much harder to justify the potential of a photovoltaic system. The barriers to this project are many. As NH does not provide SREC's (Solar Renewable Energy Certificates) or other renewable energy subsidies that are ample enough, many solar oriented companies would not consider the site for development. The cost-benefit analysis would put the payback period into a term much longer than most would consider acceptable without some buy down in the form of a bond issued or a grant acquired. With energy costs expected to rise on an average annual rate, but the rate at which energy is sold to the grid still being low, there is little opportunity to install a renewable energy project without a lot of pieces falling into place perfectly.

Were group net metering to become a State practice, it would be utilized by municipalities to engage in projects that cut and control energy costs. The opportunity to pass those savings onto the taxpayer is significant. This is one of the few ways in which a substantial cost can be reduced with direct impact on the New Hampshire community, improving its financial health as a whole system. As energy based groups could be defined larger than just municipalities or business alone, it also offers partnership opportunities that will bring money into the State as businesses would be able to work with government on efficient siting for renewable energy projects that benefit all. It is an ideal alignment of values.

March 8, 2012

Public Hearing SB 258
New Hampshire Energy and Natural Resources Committee
Concord, NH
Testimony of Toby Clarke

Good morning. Thank you for having this hearing discussing this important legislation and providing me the opportunity to share my thoughts regarding how it will best help the people of New Hampshire and the environment we all share. My name is Toby Clarke and I live in Durham. After graduating from UNH electrical engineering and working around the world I am currently Vice President of Goss International also located in Durham. For those of you not familiar with Goss, we have been manufacturing in New Hampshire for over 120 years and we design, sell, manufacture, and install precision electro mechanical rotating capital equipment at customer sites worldwide for the printing industry. Most recently we are also using this expertise to manufacture nacelles for mid scale wind turbines.

We currently produce 225kw and 750kw wind turbines in cooperation with Aeronautica Windpower based in Plymouth, MA. These models have been proven for over 15 years and we are excited to manufacture and make them available in the United States from New Hampshire based manufacturing. These size units are perfectly suited for renewable distributed power production over an existing electrical grid and net metering. Exactly the intention of the group net metering legislation we are here to discuss today.

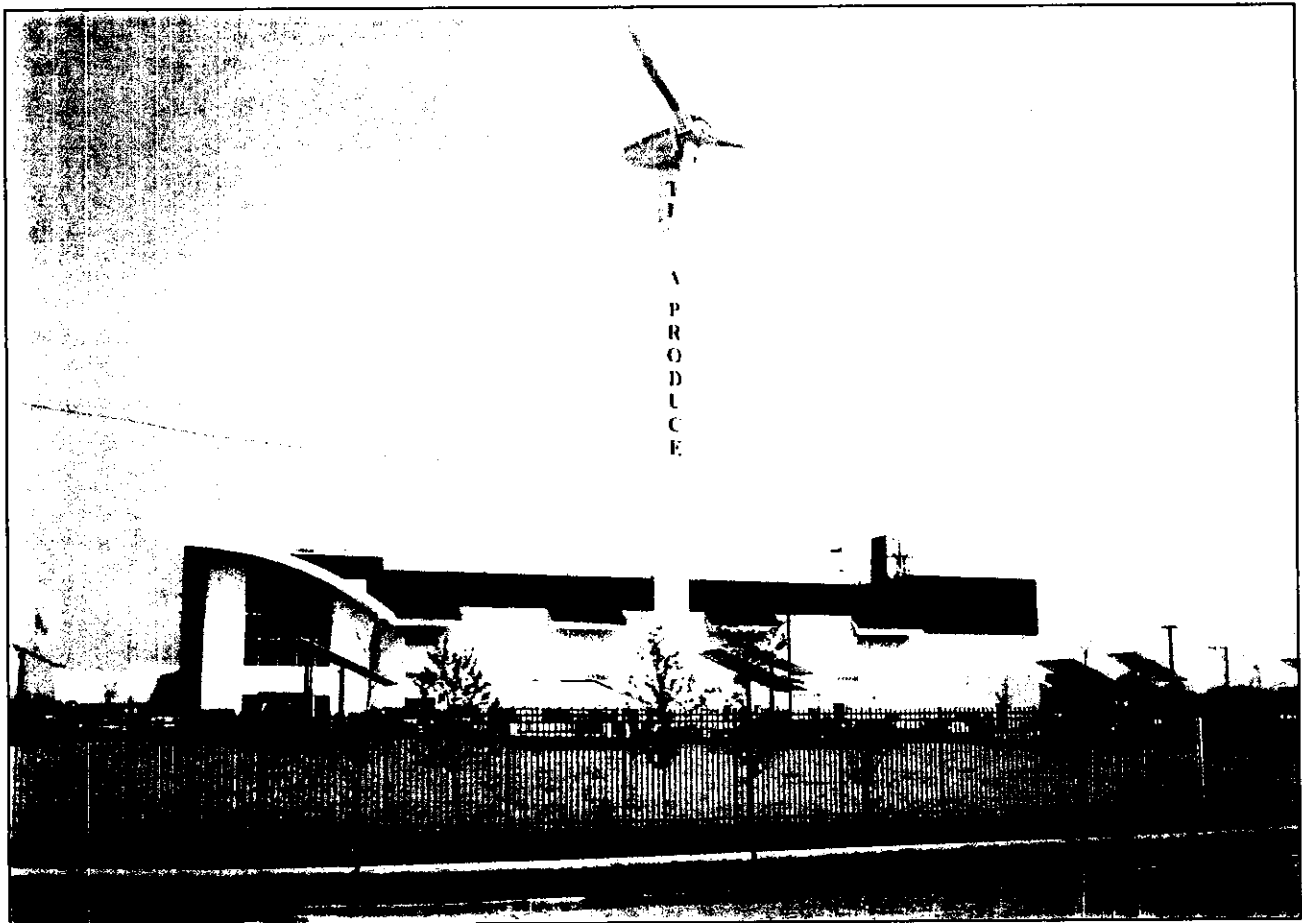
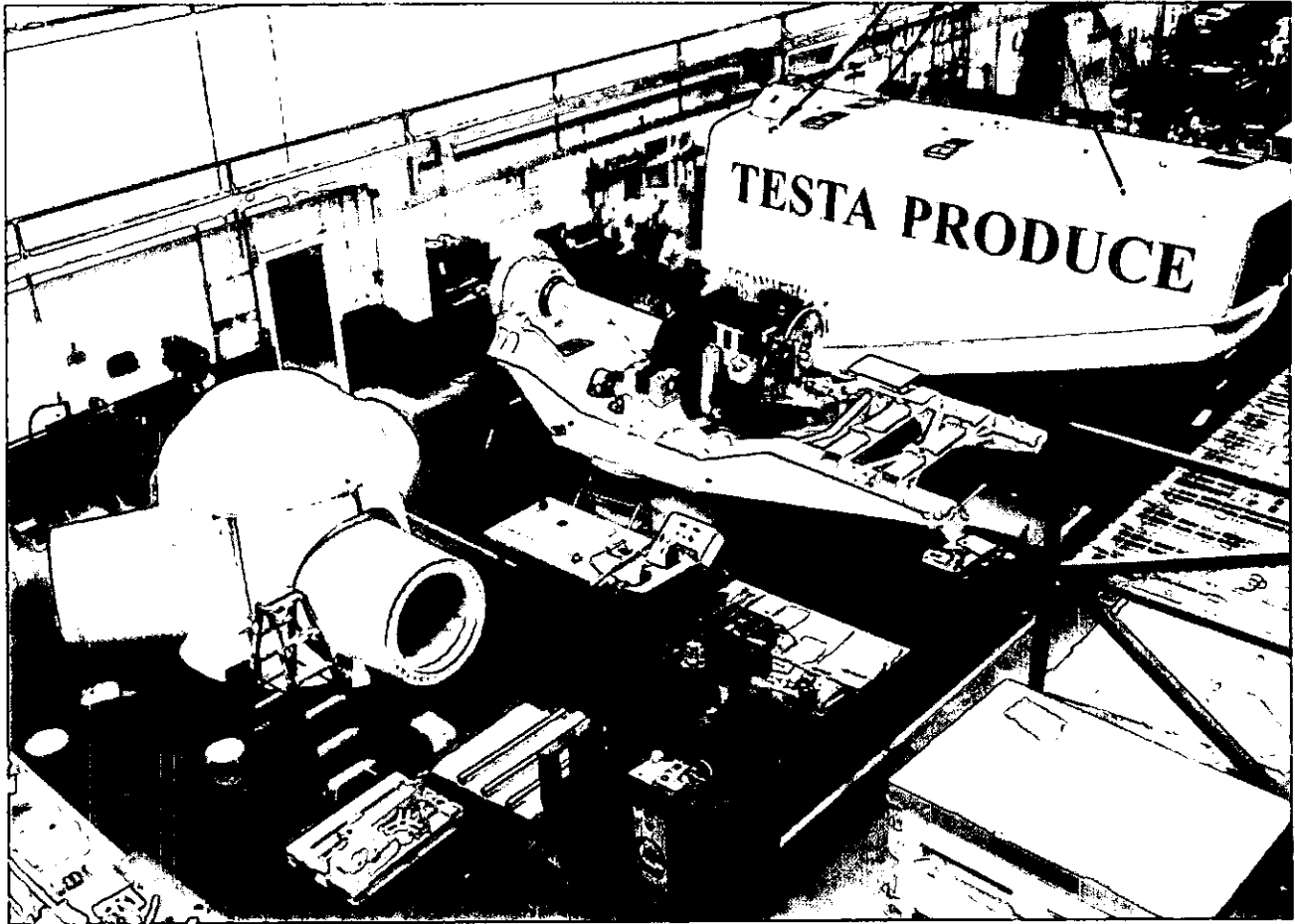
To really make a difference with renewable energy it is necessary to generate it locally supported by being able to:

1. have a reliable and predictable net energy metering law to allow for the necessary project financial planning.
2. ensure there is sufficient headroom in the law so that the net metering does not cap out too soon. Projects take varying amounts of time to plan, permit, budget and bring on line and it would become a real deterrent to initiating appropriate projects if some got successfully through most of the process and then stopped because of a low cap. There appears to be sufficient room under the existing cap for many productive projects.
3. group individual sight power demands together to achieve significant enough size to allow for the group to invest the capital required to install an efficiently sized renewable power source in an optimum location whether this be wind, photovoltaic, or another source still being invented.

With all of this in mind we support this legislation.

Thank you for your time and attention. I look forward to welcoming you to our facility in Durham to see New Hampshire manufacturing actively involved in leading the way in renewable energy production.

Goss International produced wind turbine in Durham



Turbine flying in Chicago

Warwick Mills
301 Turnpike Rd.
New Ipswich NH 03071

RE: Group Net Metering

To: Senator Bob Odell
Chairman, Senate Energy and Natural Resources
Statehouse, Room 302
107 North Main Street
Concord, NH 03301

Senator Odell

At Warwick we operate a small industrial facility in NH. As we work to improve our energy posture at our plant we have struggled with many administrative issues. We are currently working on a Biomass conversion from #6 fuel. Small energy projects are already hard enough to Justify, Fund and Permit. The Group Net Metering represents a significant opportunity to move one of the administrative issues from small power generation from a detriment to a major plus from a cost justification perspective.

There are not many opportunities from the State perspective to make these projects more attractive. I urge the legislature to adopt this measure.

Charlie Howland

President Warwick Mills

Honorable Bob Odell

Chairman, Senate Energy & Natural resources Committee

State House, Room 302

107 North main Street

Concord, NH 03301

Dear Sir:

I am writing today in favor Senate Bill 258 as amended by Amendment 2012-1066s. I am a lifelong resident of New Hampshire and a strong proponent of renewable energy. If "customer –generator groups " had previously been allowed in our state, I would currently be operating a 550 panel, ground-mounted photo-voltaic solar system in Swanzey right now. But, because I would have had to be "behind one meter", it did not make financial sense to proceed, even though there are three commercial properties on the same site that could have benefited from the generation of the power. Instead, I am now installing a much smaller roof-top system on one of the building's roofs. This change is essential for large scale projects to be viable in our state and this is a huge roadblock for such projects. As one solar developer told me when discussing my project, New Hampshire is the state we drive through to get to Vermont, Massachusetts, etc. because of net metering, among other things. Thank you for your consideration.

Bob Furlone

33 Woods Road

Spofford, NH 03462

603-363-8260



For a thriving New England

CLF New Hampshire 27 North Main Street
Concord, NH 03301
P: 603.225.3060
F: 603.225.3059
www.clf.org

March 7, 2012

Senator Bob Odell, Chairman
Senate Energy and Natural Resources Committee
N.H. State House, Room 302
107 North Main Street
Concord, NH 03301

Re: SB 258, authorizing group net metering for limited electrical energy producers

Dear Chairman Odell and Honorable Committee Members:

I write to express the Conservation Law Foundation's (CLF) strong support for SB 258, authorizing group net metering for limited electrical energy producers. CLF is a non-profit, member-supported environmental organization with offices in Concord, New Hampshire and across New England. We view the development of local renewable energy as an essential element of New Hampshire's and the region's energy future.

Net metering is a critically important incentive to promote the home-grown generation of renewable energy and, in turn, to enhance New Hampshire's energy security and economic resiliency. Importantly, SB 258 expands the availability of net metering to a group of electric utility customers who own or operate qualifying electrical generating facilities, enabling a number of meters to be grouped with a renewable energy generator. By extending the availability of net metering in this way and providing economic incentives, the enactment of SB 258 will encourage the development of local renewable energy and the economic and environmental benefits associated therewith.

We appreciate your consideration of this important legislation and urge you to vote that SB 258 OUGHT TO PASS.

Very truly yours,

Thomas F. Irwin
Vice President & CLF-New Hampshire Director

GRANITE STATE HYDROPOWER ASSOCIATION, INC.

TWO COMMERCIAL STREET
BOSCAWEN, NEW HAMPSHIRE 03303

TELEPHONE: 603-753-4577
EMAIL: gsha@essexhydro.com
WEBSITE: www.granitestatehydro.org

March 7, 2012

Hon. Bob Odell
Chairman, Senate Energy & Natural Resources Committee
State House
107 North Main Street
Concord, NH 03301

RE: Senate Bill 258, Authorizing Group Net Metering for Limited Electrical Energy Producers

Dear Chairman Odell and Members of the Committee:

On behalf of the Granite State Hydropower Association (GSHA), thank you for the opportunity to testify on Senate Bill 258. For the reasons explained below, GSHA supports the Bill As Amended by Amendment 2012-1066s sponsored by Senator Kelly.

GSHA is a voluntary, non-profit trade association for the small-scale, independent hydropower industry in New Hampshire. Members of GSHA own, operate and manage more than 50 hydroelectric facilities located in 18 towns and cities throughout the state, totaling more than 40 megawatts (MWs) of distributed generating capacity. GSHA members are part of New Hampshire's small business community, with facilities that are 5 MWs or less and typically below 1 MW in size. Hydroelectricity is an emissions-free, renewable, reliable and locally distributed source of electricity that provides important economic, recreational, and environmental benefits to New Hampshire.

Senate Bill 258 As Amended will allow group net metering under New Hampshire's net metering law by permitting up to ten meters to be grouped with a renewable energy generator meter and essentially treated as one customer. GSHA believes that this aspect of the bill will provide a small yet important step in promoting locally distributed renewable generation and, in turn, economic development. It is a small step in that, under the Bill as Amended, group net metering will be limited to projects below 100 kilowatts regardless of their on-line date and projects of 100-1,000 kilowatts that come on-line after July 2010. Yet it is an important step in that group net metering will remove a regulatory barrier that currently exists between small-scale renewable projects and potential consumers of renewable power, thus providing a win-win for projects and consumers. We would respectfully suggest a minor change to the bill by increasing the 100 kilowatts threshold to 200 kilowatts. This will help some of New Hampshire's smallest existing projects to stay on-line in this time of very low wholesale electric prices. Currently, there are nine GSHA member facilities below 100 kilowatts and another five between 100 kilowatts and 200 kilowatts that could potentially benefit from this provision in the bill. New Hampshire hydro facilities below 200 kilowatts that are not GSHA members would potentially benefit as well.

Testimony of the Granite State Hydropower Association
RE: Senate Bill 258, Authorizing Group Net Metering for Limited Electrical Energy Producers
March 7, 2012, page 2

SB 258 As Amended also makes important changes to the way net metered accounts will be compensated. Under the current law, if net metered accounts generate a surplus of electricity, they are paid for the surplus based on either an avoided energy cost rate or an alternative rate negotiated by the utility and the Public Utilities Commission. Under the Bill As Amended, net metered accounts would be paid for the surplus based on rates for energy, transmission and distribution. In GSHA's opinion, this change will make a significant positive difference for many of New Hampshire's small-scale hydro facilities that are currently struggling to sustain their operations and avoid shutting down. The risk of shutting down is very real in today's environment in light of the large drop in wholesale electricity prices driven by historically low natural gas prices. New Hampshire's small-scale hydro facilities are currently paid hourly rates that often do not exceed 3-4 ¢/kWh.

In addition, the Bill As Amended allows new incremental generation to qualify for net metering even if the original generation does not qualify. The net metering revenues could help finance investments and upgrades that would boost the production of renewable power from existing small-scale hydro projects as well as other renewable projects.

Finally, the Bill As Amended is technology-neutral, and will therefore promote all types of renewable power throughout the state and help maximize the benefits to New Hampshire. Many of these small renewable energy projects, when undertaken by businesses in particular, can help to stabilize long-term energy costs for businesses and thereby help them remain and/or expand in New Hampshire.

GSCHA appreciates your time and consideration of this testimony and is happy to answer any questions or provide further information if needed. Thank you very much.

Sincerely,

GRANITE STATE
HYDROPOWER ASSOCIATION

Richard A. Norman
(HLK)
Richard A. Norman
President

Copies:
Members of the Senate Energy & Natural Resources Committee
Sponsors of Senate Bill 258

Kelly, Molly

From: Steltzer, Eric [Eric.Steltzer@nh.gov]
Sent: Wednesday, March 21, 2012 1:15 PM
To: Kelly, Molly
Cc: Morin, Joanne
Subject: SB258 and SB218...

Sen. Kelly,

Good to talk to you just now about SB258 and group net metering. As I understood it, the small scale hydro industry was seeking to modify language in RSA 362-A:1-a II-b, referring to the eligibility for renewable energy systems for net metering. Currently systems above 100kw are only allowed to net meter if they begin operation after July 1, 2010. If this language were to be struck, it would be additional support to small scale existing renewable energy systems. Currently many of these small scale hydro systems above 100kw sell their electricity at spot market prices, which during the evening hours might be zero cents/kwh. If the date of operation were to be removed, it would certainly support existing small scale hydro facility by allowing them to recoup a payment of approximately 3-5.cents/kwh based on avoided cost of generation. I'll also note that SB218 made similar improvements for financing small scale hydro by making it easier for these systems to be eligible for renewable energy credits. It's a policy decision whether both, or either, incentive is needed for this industry.

Let me know if you have further questions.

Thanks,

Eric

Eric Steltzer
Energy Policy Analyst

NH Office of Energy and Planning
107 Pleasant St.
Johnson Hall, 3rd Floor
Concord, NH 03301
eric.steltzer@nh.gov
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3/21/2012

Committee Report

STATE OF NEW HAMPSHIRE
SENATE
REPORT OF THE COMMITTEE

Date: 3/22/12

THE COMMITTEE ON Energy and Natural Resources
to which was referred Senate Bill 258

AN ACT authorizing group net metering for limited electrical
energy producers.

Having considered the same, the committee recommends that the Bill:

OUGHT TO PASS WITH AMENDMENT

BY A VOTE OF: 5-0.

AMENDMENT # 1401s

Senator Jeb E. Bradley
For the Committee

Richard Parsons 271-3076

New Hampshire General Court - Bill Status System

Docket of SB258

Docket Abbreviations

Bill Title: authorizing group net metering for limited electrical energy producers.*Official Docket of SB258:*

Date	Body	Description
1/1/2012	S	Introduced 1/4/2012 and Referred to Energy and Natural Resources; SJ 1 , Pg.6
2/22/2012	S	Hearing: 3/8/12, Room 102, LOB, 9:00 a.m.; SC9
3/22/2012	S	Committee Report: Ought to Pass with Amendment # 2012-1401s , 3/28/12; SC12
3/28/2012	S	Committee Amendment 1401s; AA, VV
3/28/2012	S	Ought to Pass with Amendment 1401s, RC 24Y-0N , MA: OT3rdg
3/29/2012	H	Introduced and Referred to Science, Technology and Energy; HJ 32 , PG. 1913
4/4/2012	H	Public Hearing: 4/17/2012 10:00 AM LOB 304
4/18/2012	H	Full Committee Work Session: 5/3/2012 9:30 AM LOB 304 ==Executive Session May Follow==
4/18/2012	H	Executive Session: 5/8/2012 10:00 AM LOB 304
5/9/2012	H	Committee Report: Inexpedient to Legislate for May 15 (Vote 13-4; RC); HC 37 , PG.2047
5/17/2012	H	Inexpedient to Legislate: MA DIV 224-50; HJ 46 , PG.2452

NH House

NH Senate

Other Referrals

COMMITTEE REPORT FILE INVENTORY

SB 258 ORIGINAL REFERRAL

_____ RE-REFERRAL

1. THIS INVENTORY IS TO BE SIGNED AND DATED BY THE COMMITTEE AIDE AND PLACED INSIDE THE FOLDER AS THE FIRST ITEM IN THE COMMITTEE FILE.
2. PLACE ALL DOCUMENTS IN THE FOLDER FOLLOWING THE INVENTORY IN THE ORDER LISTED.
3. THE DOCUMENTS WHICH HAVE AN "X" BESIDE THEM ARE CONFIRMED AS BEING IN THE FOLDER.
4. THE COMPLETED FILE IS THEN DELIVERED TO THE CALENDAR CLERK.

DOCKET (Submit only the latest docket found in Bill Status)

COMMITTEE REPORT

CALENDAR NOTICE

HEARING REPORT

HANDOUTS FROM THE PUBLIC HEARING

PREPARED TESTIMONY AND OTHER SUBMISSIONS

SIGN-UP SHEET(S)

ALL AMENDMENTS (passed or not) CONSIDERED BY COMMITTEE:

- AMENDMENT # 10665 - AMENDMENT # 14015
 - AMENDMENT # 12853 _____ - AMENDMENT # _____

ALL AVAILABLE VERSIONS OF THE BILL:

AS INTRODUCED AS AMENDED BY THE HOUSE
_____ FINAL VERSION AS AMENDED BY THE SENATE

_____ OTHER (Anything else deemed important but not listed above, such as amended fiscal notes): _____

DATE DELIVERED TO SENATE CLERK

6/21/12


BY COMMITTEE AIDE