

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6958

Petition and tariff filing of Green Mountain)
Power Corporation re: proposed rate design)
changes to take effect January 1, 2005)

PREFILED SURREBUTTAL TESTIMONY OF
WILLIAM STEINHURST
ON BEHALF OF AARP

November 4, 2004

Summary: Dr. Steinhurst's surrebuttal testimony responds to the direct testimony of the Department of Public Service and the rebuttal testimony of the Company on the subject of residential class customer charges. He discusses why the Department's recommendation does not go far enough and reiterates the recommendation he made in his direct testimony. He also addresses other issues in Green Mountain Power's rebuttal testimony, responding to the Company's arguments and making one clarification based on those arguments.

1 Prefiled Surrebuttal Testimony
2 of
3 William Steinhurst
4
5

6 Q. Please state your name, business address, and occupation.

7 A. My name is William Steinhurst, and I am Senior Consultant with Synapse Energy
8 Economics (Synapse). My business address is 45 State Street, #394, Montpelier,
9 Vermont 05602

10
11 Q. Are you the same William Steinhurst who previously filed testimony in this proceeding?

12 A. Yes, I am.
13

14 Q. On whose behalf did you prepare this prefiled rebuttal testimony?

15 A: I prepared this prefiled rebuttal testimony on behalf of AARP. Please note that I
16 filed direct testimony in this proceeding separately on behalf of both the Conservation
17 Law Foundation and AARP, but this rebuttal testimony is on behalf of AARP only.
18

19 Q: Does the Department of Public Service or the Company address the issue of GMP's
20 residential customer charge in their prefiled testimony in this proceeding?

21 A: Yes. DPS Witness Berry does so at page 10, lines 3-11 of his prefiled direct
22 testimony. Mr. Brown does so on pages 8 and 9 of his rebuttal testimony.
23

24 Q. What position did Dr. Berry take on GMP's residential customer charge?

25 A. He observes that GMP's current residential customer charge is "higher than most
26 that [he is] aware of," but also observes that "it is also below GMP's customer-related
27 cost for this rate class." He recommends that "this charge remain unchanged or at least
28 not be increased any higher than what it already is." Berry pf. at 10, ll. 6-11.
29

1 Q. What is your concern with that position?

2 A. I agree with Dr. Berry that the residential customer should not be increased, but
3 believe he does not go far enough. There is good cause to reduce the residential customer
4 charge. Dr. Berry seems to be trying to balance two facts—first, that GMP's charge is
5 higher than "most he is aware of" and, second, that the charge is less than "GMP's
6 customer related costs for this rate class." He appears to resolve that balancing by siding
7 with the status quo. I believe that there are two important reasons that ought to tip the
8 Board's balancing in favor of a significant reduction in the residential customer charge.

9

10 Q. What is the first of those reasons?

11 A. A large customer charge, indeed any customer charge, sends a message to
12 consumers that usage is not important or, at the very least, diminishes the perceived
13 importance of usage. Despite appeals to rational economic behavior models in rate
14 design, I believe that a large fixed charge creates an impression that diminishes the
15 consumer's interest in controlling usage: "No matter how hard I try to reduce usage, I will
16 still have to pay that large fixed charge." Even if a large customer charge were
17 economically efficient, it would not be good policy to dilute the customer's interest in
18 controlling usage.

19

20 Q. What is the second reason?

21 A. As I mentioned in my prefiled direct testimony, "[t]he proposed (and current)
22 tariffs send an anti-conservation signal, producing what is, in effect, a declining block
23 rate." For example, suppose that a two-part tariff has a \$10 per month customer charge
24 and a 10 cent/kWh energy charge. Then a customer consuming 100 kWh will pay an
25 average cost of 20 cents/kWh, while one using 200 kWh would have an average cost of
26 only 15 cents/kWh. A customer using 300 kWh would face an average cost of just 13
27 cents/kWh. In my opinion, many consumers would view this as a form of quantity
28 discount and believe that it is in their interest to purchase more.

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Q. Aren't these two arguments contradicted by the economic efficiency of setting the tail block rate at the marginal cost of power?

A. No, they are not. Even if energy rates in tariffs were set at the long-run marginal cost of power including externalities, these perceptions of how the tariff "works" would still dilute incentives to conserve.

Q. Do you have any other response to Dr. Berry's testimony and Mr. Brown's rebuttal?

A. Yes. At this point, I would suggest we take a look at the big picture. It is well known that Vermont has a strong public policy of encouraging energy efficiency. A large customer charge is one of the most effective ways to stifle consumer interest in energy efficiency actions. Of course, it is a question of degree. Some Vermont customers have responded well to the existing and past DSM programs, but the larger the fixed charge, the less incentive customers have to conserve.

On this subject, the Board should consider the public policy advantages from a smaller customer charge. A smaller customer charge would increase willingness to participate and could actually save money by lowering the required incentives for participation, making fixed DSM program budgets go farther. I recommend that the Board should find that this public policy benefit should take priority over precision in setting one component of a tariff.

Q. Given Dr. Berry's direct testimony and Mr. Brown's rebuttal testimony, would you alter your recommendation on the residential customer charge?

A. No, I would not. I believe that leaving the customer charge alone, as they both recommend, overlooks the above arguments. The Board should act to assist smaller customers and to promote energy efficiency by directing GMP to set a monthly residential customer charge of no more than \$9.00, and preferably \$6.00.

1 Q. How does Mr. Brown characterize your position on promoting energy efficiency through
2 rate design?

3 A. He claims that my testimony "implies that efficiency and conservation are
4 indistinguishable" by quoting from my CLF prefiled direct testimony. Brown pf. at 2. I
5 made no such implication. The quotation, while accurate, is out of context, and the
6 Company's rebuttal mischaracterizes my position. Efficiency in rate making means
7 encouraging customers to use as much energy as they should and no more; price signals
8 do matter. The quote from my direct prefiled testimony was part of an argument showing
9 that the Company's efficiency block is not an appropriate way to encourage efficiency,
10 but rather promotes on peak consumption by establishing a declining block rate. It is
11 incorrect to take that hypothetical statement and use it to ascribe to me a general view of
12 efficiency that I have not offered in my testimony.

13
14 Q. On page 4 of his prefiled rebuttal testimony, Mr. Brown opposes your recommendation
15 for how to allocate A&G costs in certain accounts by stating that "[t]he majority of A&G
16 costs relates to customer service and accounting function, including meter reading and
17 billing, and includes information technology, accounting and finance expense." Does this
18 argument make sense?

19 A. No, it does not. I did not recommend changing the Company's proposed allocation
20 method for meter reading and billing. A&G costs, by definition, do not include meter
21 reading and billing costs. For example, the FERC USOA definition for Account 920
22 specifically states that it shall include only expenses "not chargeable directly to a
23 particular operating function." Meter reading and billing are chargeable directly to
24 Accounts 901 through 905.

25 It is entirely appropriate to allocate A&G costs (which by definition cannot be
26 charged directly to a particular operating function) in a manner that reflects the core
27 function of the utility—the provision of electric energy.

1 Q. Does Mr. Brown raise any other arguments against your recommendation to re-allocate
2 A&G expenses?

3 A. Yes. He appears to object on the grounds that my recommendation would result in
4 a large change to the current allocation, calling it a "radically different result." Brown pf.
5 reb. at 4, l. 21. I would distinguish between two steps in carrying out a modification of
6 cost allocation methodology. First, the regulator must identify the correct allocation
7 method. Second, the regulator must determine how to make a change from the current
8 allocation to the one that is, in principle, more appropriate. If changing to an appropriate
9 allocation method would result in a substantial change, the change may be phased in.

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11 Q. On page 5 of his prefiled rebuttal testimony, Mr. Brown opposes your recommendation
12 for allocating the costs of secondary lines and line transformers. What are his objections
13 to your recommendation?

14 A. First, he argues against my recommendation by asserting that the Company's
15 proposed allocators "have been widely accepted for some time." Brown pf. surreb. at 5,
16 lines 11-12. Second, he uses survey data from a 1965 reference book for support of the
17 proposition that diversity ratios for GMP's number of customers per line transformer are
18 smaller than those that would follow from my recommended allocator. Brown pf. surreb.
19 at 6, line 5 ff., and Exh. JWB-5. Third, he points out that the change I recommend would
20 be substantial, asserts that it is unwarranted, and observes that the recommended change
21 would allocate some line transformer costs to the transmission class. Brown pf. surreb. at
22 7, lines 5-13. Fourth, while he does not enumerate this objection, Mr. Brown criticizes
23 using an energy allocator on theoretical grounds and because he objects to the outcome.
24 Brown pf. surreb. at 6, line 20, to 7, line 4.

25
26 Q. Please respond to these objections.

27 A. First, with regard to Mr. Brown's first objection, widespread acceptance of one
28 method does not mean that other accepted methods should not be considered on their

1 merits. I would point out that using energy allocators for transmission and distribution
2 costs is an accepted method. See, for example, the NARUC *Electric Utility Cost*
3 *Allocation Manual*, 1992, at 81-2, for a description of a methodology relying in part on
4 average use. The NARUC *Manual*, is intended "include all currently used methods."
5 *Manual* at ii. In addition, utilities in Rhode Island and New Jersey (Pascoag Utility
6 District and JCPL) now use such allocators, and they have been proposed for use in
7 another New Jersey utility (Atlantic City Electric) and for Georgia Power. The allocator I
8 propose falls within a class that has recognized and growing acceptance.

9 Second, with regard to Mr. Brown's objection concerning diversity factors and his
10 additional point that energy allocators should not be used, I agree that measured diversity
11 factors are of some relevance, but do not believe his arguments should prevail.

12 I would begin with a few technical points. Mr. Brown's diversity factor of 1.2 is
13 based on only the Lighting and Miscellaneous Appliances category. While reading data
14 off the graph gives only approximate values, by my visual interpolation the
15 corresponding factor for Ranges is 1.36 and for Refrigerators it is 1.44. In addition, these
16 data apply only to the appliances named, not to the entire household loads, and the data
17 are nearly forty years old. More importantly, the 2.6 customers per transformer figure
18 does not apply to secondary lines, where the likely average number of customers is
19 considerably greater.

20 A more fundamental issue is the unexamined assumption that distribution costs
21 are pure capacity costs that should be allocated purely on some measure of peak load,
22 with the only debate being about how much diversity to factor in. Few would argue that
23 all fixed costs of generation should be allocated to customer classes based on their peak
24 load. Yes, utilities must build an amount of fixed generation that meets peak loads, but
25 regulators understand and take into account the fact that there are multiple causes
26 affecting generation capital costs, so they allocate some of those costs based peak load
27 and some based on energy. The same reasoning may be applied to transmission which

1 must be built for peak loads, but is also built to accommodate energy needs and, in
2 particular, economy transactions.

3 As mentioned above, there is now an evolving concept that multiple causation is
4 relevant to distribution costs as well. If the only load to be served during the year were
5 the peak hour load, it would be hard to economically justify building any distribution
6 lines. It is only as the energy served becomes substantial that the investment in
7 distribution facilities becomes justifiable. Likewise, if only the peak hour load were being
8 served, much of the expense for more efficient conductor sizes and transformers would
9 be absent. (This point may be seen as analogous to the peaker offset method for
10 allocating fixed costs of generation and supports an allocation based on energy, total
11 revenue, or a similar factor.) Energy delivered is one of multiple causes for the
12 distribution costs that utilities incur and allocation of those costs using an energy factor is
13 reasonable.

14
15 Q. Do you agree with any part of Mr. Brown's criticism of your proposed allocation for
16 secondaries and line transformers?

17 A. As a clarification, I would point out that at page 7, lines 12-13, of Mr. Brown's
18 prefiled surrebuttal, he argues that my recommendation could have been read to include
19 allocating line transformer costs to the transmission class, which has no such equipment.
20 I did not intend such an outcome.

21
22 Q. Mr. Brown objects to your recommendations regarding special charges and points out
23 that after hours labor costs are fixed by contract. Brown reb. pf. at 9. How do you
24 respond?

25 A. While it may be that the labor rates are set by contract, that is a contract
26 negotiated by GMP management at its discretion. But more important is the fact that
27 customers who are in need of being connected or reconnected must sit in the dark until
28 office hours or pay a very large extra fee. Utility rate setting averages out many costs. For

1 example, all aerial service drops are free up to 200 feet, regardless of the actual length or
2 cost. Choosing this particular item to "de-average" at the expense of often vulnerable
3 consumers is not good policy.

4

5 Q. Please summarize your surrebuttal testimony.

6 A. The Company's arguments should not override the recommendations I made in
7 my direct prefiled. However, I would clarify that I did not intend to allocate line
8 transformer costs to the transmission class.

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10 Q. Does that complete your testimony at this time?

11 A. Yes.