



Integrated Energy Resources

A New Regulatory Framework to Support Behavioral Programs

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ACEEE Behavior Energy and Climate Conference

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Should Behavioral Programs be viewed as DSM or as Basic Consumer Services?

- ▶ Evidence is strong that at least some behavioral approaches are:
 - Cost-effective
 - Relatively easy to deliver
 - Look like and can be effectively integrated into utilities core services
- ▶ But, these programs have cannibalized some hardware-related DSM efforts
- ▶ What is the 21st Century solution and why?

The Problem

Hypothetical Program Administrator Options	
Annual DSM target (% of load)	0.80%
Residential Load	40%
Home Energy Report Savings	2.00%
Savings from RES HER	0.800%
Savings necessary from other programs	ZILCH
Annual Typical portfolio budget \$/annual kWh	\$ 0.30
RES HER \$/annual kWh	\$ 0.03
Utility cost "savings"	90%
Real societal lifetime cost savings	-30%
Persistence	???????
Lifetime Net benefits	???????

BILLING DATE: OCT 15, 2012 ACCOUNT NUMBER: 000010303816 PAY THIS AMOUNT: Check this box for address change. See reverse side. CV-05 REV 5/12

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Brattleboro VT 05302

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT—PLEASE MAKE CHECKS PAYABLE TO "GMP".

BILLING PERIOD SEPT 12, 2012 TO OCT 09, 2012... 027 DAYS

PREVIOUS BILL BALANCE	\$53.24
PAYMENTS FOR THIS PERIOD..	\$53.24CR
BALANCE FORWARD	\$0.00

RATE	PREVIOUS READING	NEW READING	CONSTANT	UNITS	UNIT COST	AMOUNT
RESIDENTIAL	28193	28239	1	46	TOD PEAK	
0011 GMP ENERGY				46 X	\$.20086 /KWH	\$9.24
SERVICE CHARGE DAYS				27 X	\$.58700 /DAY	\$15.85
RESIDENTIAL	75353	75471	1	118	TOD OFF PEAK	
0011 GMP ENERGY				118 X	\$.10687 /KWH	\$12.61
ENERGY EFFICIENCY CHARGE					\$.0093100 /KWH	\$1.53
POWER COST ADJUSTMENT MECHANISM					(\$.00639) /KWH	\$1.04CR
CURRENT MONTH CHARGES BILLED (OCT 15, 2012)						\$38.19

THE VT PUBLIC SERVICE BOARD APPROVED OUR REQUEST TO LOWER CUSTOMER RATES BY 0.4 % BEGINNING OCTOBER 1. THE GUARANTEED SAVINGS OF \$2.5 MILLION IN YEAR ONE OF THE NEWLY MERGED COMPANY MADE THE RATE DECREASE POSSIBLE.

PLEASE DO NOT PAY. YOU ARE A GMP ELECTRIPAY CUSTOMER
BANK WITHDRAWAL WILL OCCUR APPROXIMATELY NOV 05

SERVICE ADDRESS: RUSSELL YOUNG STARKSBORO VT RD	PLEASE PAY
SERVICE TELEPHONE NO: 802 453 6678	
SERVICE AT:	
APPROXIMATE NEXT METER READ DATE IS: NOV 8	PLEASE USE YOUR ACCOUNT NUMBER
CUSTOMER INFORMATION (MON-FRI, 7-7): 800 649 2877	WHEN CALLING OR WRITING: 000 01030381 6
TO REPORT A POWER OUTAGE: 800 451 2877	

KWH PER MONTH ON PRIMARY RATE

13 MONTH COMPARISON

O N D J F M A M J J A S O

USAGE COMPARISON

BILLING PERIOD	KWH USED	BILLING DAYS	AVERAGE TEMP
OCT 12	164	27	54
OCT 11	258	29	57

ADDITIONAL INFORMATION ON REVERSE SIDE

▶ New things since Carter Administration

– Electronic payment

– Graph of past usage

- ▶ Bills not user friendly, little education, few advances since computer era began.
- ▶ Compare level of education and information with other consumer products that consume much smaller share of household income and are much less complex.

The Solution

- ▶ Utilities should provide a basic level of customer service and education to use their product smartly, recovered through rates as core expenses.
- ▶ Utilities already have similar obligations to provide PSA-type information to consumers (e.g., call before you dig).
- ▶ No other consumer product of this economic magnitude comes with so little consumer information (think smartphones, consumer electronics, cars....)
- ▶ IF cost-effective, should be a basic obligation of utilities to provide more sophisticated mailings (integrated into bills reduces costs and perhaps improves effectiveness).
- ▶ Information programs should be treated like other supply-side retail obligations like bill stuffers. They are a basic service tied to ensuring safe and efficient use of the product.
- ▶ No need for lost revenue recovery or shareholder incentives.
- ▶ Eliminates competition for scarce DSM resources.
- ▶ Transforms society into educated and informed energy consumers over time. Locks in market transformation.

The Electric Bill of the 21st Century?

UtilityCo

Home Electricity Report
 Account number:
 Report period: 12/07/10 - 02/07/11

We are pleased to provide this personalized report to you as part of a pilot program. The purpose of the report is to:

- Provide information:** This report is an educational tool to help you understand your home's energy use in the context of other homes.
- Track progress:** We will help you learn about how your home's usage changes over time and where you likely have opportunities to save.
- Share energy efficiency tips:** On the back of the report, we provide ideas for saving energy and money.

Last 2 Months Neighbor Comparison | You used **27% MORE** electricity than your neighbors.

How you're doing:
 You used more than average
 Turn over for ways to save

* kWh: A 100-Watt bulb burning for 10 hours uses 1 kilowatt-hour.

Who are your Neighbors?

- All Neighbors:** Approximately 100 occupied, nearby homes that are similar in size to yours (avg. 1,827 sq ft)
- Efficient Neighbors:** The most efficient 20 percent from the "All Neighbors" group

Last 12 Months Neighbor Comparison | You used **18% MORE** electricity than your neighbors. This costs you about **\$238 EXTRA**.

Key:
 YOU
 All Neighbors
 Efficient Neighbors

Track your progress and find ways to save at

Neighbor Efficiency Rank

Your energy efficiency rank out of 100 neighbors:

Your Rank Last Month
#67 out of 100 neighbors
 #1 is the most efficient
 Your rank is declining. Looking for ways to improve?
www.glenelawaterandpower.com/

Your rank is calculated each bill period. See the Neighbor Comparison section for details about your neighbors.

Action Steps | Personalized tips chosen for you based on your energy use and housing profile

Quick Fix
 Something you can do right now

Reduce water heater temperature
 Lowering your water heater temperature from 140° to 120° can result in a 10% savings in hot water costs. This temperature will also help prevent scalding.

Check the owner's manual for safety instructions before making any changes to your water heater's settings.

After lowering the temperature on the water heater, use a thermometer to check the temperature of water flowing from your faucets.

SAVE UP TO \$65 PER YEAR

Smart Purchase
 Save a lot by spending a little

Install efficient showerheads
 Showering accounts for up to about 40% of your hot water usage, but you can cut costs without sacrificing comfort.

If your shower fills a gallon bucket in less than 20 seconds, you could save with an efficient showerhead. These showerheads (flow rate no greater than 2.5 gallons/minute) help conserve hot water while maintaining water pressure.

You can realize significant savings with efficient showerheads, especially if you have a large household.

SAVE UP TO \$130 PER YEAR

Smart Purchase
 Save a lot by spending a little

Keep your water heater warm
 A typical water heater creates and keeps hot water in a storage tank. When the tank loses heat over time, additional energy is expended to keep the water hot.

If you have an older water heater, additional insulation can cut heat losses by 25-45%, saving energy and money. Specially designed water heater "jackets" can pay for themselves in a year or less.

Check your water heater owner's manual before adding the jacket.

SAVE UP TO \$60 PER YEAR

© Based on 2006 peak-consumer-registered paper.

► Oh... and by the way... you owe us \$XXX.



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Thank you

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