Appendices

Appendix A: Survey Instruments





APPENDIX B - MARKET RESPONSE SURVEY TEMPLATE

The Market Response Survey is to be used when initially enrolling customers OR before treatment begins.

The following question set was incorporated in the SmartCurrents Pilot Program on-line web qualifications site, and was a requirement for program qualification.

Source: U.S. Department of Energy Smart Grid Investment Grant – Technical Advisory Group Guidance Document #9 -- Preferences for DOE Required Data Collection via Survey Instruments, April 25, 2011, Pages: 14-18.

MA1. Do you own or rent your home?

- 1. Own
- 2.Rent
- 3.(Other)
- 98.(Don't Know)
- 99.(Refused)

MA2. What type of residence do you live in? Do you live in a...(READ CATEGORIES)

- 1. Single-family
- 2. Duplex or two-family
- 3. Apartment/condo in a 2-4 unit building
- 4. Apartment/condo in a >4 unit building
- 5. Townhouse or row house (adjacent walls to another house)
- 6. Mobile home, house trailer
- 7. (Other)
- 98. (Don't Know)
- 99. (Refused)

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1. Yes
       2. No.
       98.(Don't Know)
       99.(Refused)
MA4. Do you have any room air conditioners?
(If asked of the telephone interviewer: A room air conditioner is a small unit that sits in your
window to cool one or more rooms.)
       1. Yes
       2. No (GO TO MA6)
       98. (Don't Know) (GO TO MA6)
       99. (Refused) (GO TO MA6
MA5. How many room air conditioners do you have?
           _____ (Numeric open end from 1 to 20, set to 98 if don't know and 99 if refused.)
MA6. Do you have a programmable thermostat?
       1. Yes
       2. No (GO TO MA8)
       98. (Don't Know) (GO TO MA8)
        99. (Refused) (GO TO MA8)
MA7. Is the programmable thermostat currently set to automatically change temperature during
the day when no one is home?
       1. Yes
       2. No
       98.(Don't Know)
       99.(Refused)
MA8. Do you have an electric clothes dryer?
       1. Yes
       2. No
        98.(Don't Know)
        99.(Refused)
```

MA3. Does your home have central air conditioning?

MA9. Including yourself, how many adults, 18 or older, currently live in your household?
(Numeric open end from 1 to 20, set to 99 if refused.)
MA10. And how many of these adults are over 65?
(Numeric open end from 0 to 20, set to 99 if refused.)
(Put logic in place to make sure that MA10 cannot be larger than MA9)
MA11. How many children under the age of 18 live in your household at least part of the week?
(Numeric open end from 0 to 20, set to 99 if refused.)
MA12. Do you or does anyone in your household have a chronic illness or disability that requires regular o occasional in-home medical treatment?
1. Yes
2. No
98.(Don't Know)
99.(Refused)
MA13. Is there someone home on Monday to Friday sometime between 1 PM and 5 PM at least one day a week?
(If asked of the telephone interviewer: If your schedule varies, please think about your typical week or what is most common when answering this question.)
1. Yes
2. No
98.(Don't Know)
99.(Refused)
MA14. Is there anyone in your household working full time for pay?
1. Yes
2. No (GO TO MA16)
98.(Don't Know) (GO TO MA16)
99.(Refused) (GO TO MA16)
MA15. Do you or anyone in your household have a job where you work at home at least one weekday a week rather than go into an office or some other location?
(If asked of the telephone interviewer: If your schedule varies, please think about your typical week or what is most common when answering this question.)
1. Yes
2. No

A-5

DTE Interim Report January 13, 2014

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98.(Don't Know)
99.(Refused)
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MA16. Do you remember receiving information from your electric utility asking you to participate in a utility pilot program?

- 1. Yes
- 2. No (GO TO MA18)
- 98. (Don't Know) (GO TO MA18)
- 99. (Refused) (GO TO MA18)

MA17. Was the information useful in helping you decide whether or not to participate in the pilot?

- 1. Yes
- 2. No
- 98.(Don't Know)
- 99.(Refused)

MA18. What is the primary language spoken in your home?

[NOTE TO UTILITY: The choices here should be kept, but if you have additional languages that are relevant to your service territory, add them between options 6 and 7.]

- 1. English
- 2. Spanish
- 3. Chinese
- 4. Korean
- 5. Vietnamese
- 6. Russian
- 7. Other
 - 99. (Refused)

MA19. Last year -- that is, in 2010 -- what was your total household income from all sources, before taxes? Just stop me when I get to the right category. (READ)

1. Less than \$10,000

- 2. \$10,000 to less than \$20,000
- 3. \$20,000 to less than \$30,000
- 4. \$30,000 to less than \$40,000
- 5. \$40,000 to less than \$75,000
- 6. \$75,000 to less than \$90,000
- 7. \$90,000 to less than \$100,000
- 8. \$100,000 to less than \$150,000
- 9. \$150,000 or more
- 98. (Don't Know)
- 99. (Refused)

MA20. What is the LAST grade or class that you COMPLETED in school? (DO NOT READ)

- 1. (None, or grade 1-8)
- 2. (High School incomplete (grade 9-11))
- 3. (High School graduate (grade 12 or GED certificate))
- 4. (Technical, trade or vocational school AFTER high school)
- 5. (Some college, no four-year degree (includes associate degree))
- 6. (College graduate (B.S., B.A., or other four-year degree))
- 7. (Post-graduate or professional schooling after college (e.g., towards a Master's degree or

Ph.D; law or medical school))

98.(Don't know)

99.(Refused)

DONE WITH DOE QUESTIONS

CONSUMER Insights inc.

ONSUMER DTE Energy SmartCurrents Pilot Experience

inc. Focus Group Topic Guide

(October 19, 2012 Version)

- 1. Introduction (5 minutes / 0:05 cumulative)
 - 1.1. Introduce moderator, microphones, videotaping.
 - 1.2. Explain no right or wrong answers, speak up even if you feel differently than everyone else at the table, feel free to respond to each other in addition to me.
 - 1.3. Purpose of group:

This is one of several potential opportunities you will have as a SmartCurrents Pilot customer to talk about your experiences with the program so far.

- 2. Introduce respondents (10 minutes / 0:15 cumulative):
 - 2.1. Name, city, personal sketch.
 - 2.2. Typical monthly bill (electric & gas).
 - 2.3. How you initially found out about the SmartCurrents program.
- 3. Pilot Motivations (10 minutes / 25 minutes cumulative)
 - 3.1. What made you decide to sign up for the SmartCurrents pilot program?
 - 3.2. If answer is "to save money"...
 - 3.2.1. What steps have you taken in the past, if any, to reduce your utility costs?
 - 3.2.2. Have you had success? If so, how?
 - 3.2.3. What was it about the SmartCurrents program that left you thinking it might be a viable way of getting those costs down even more?
 - 3.3. If answer is "to reduce usage" or "to reduce environmental impact"...
 - 3.3.1. What steps have you taken in the past, if any, to reduce your consumption or carbon footprint?
 - 3.3.2. Have you had success? If so, how—and how did you measure that success?
 - 3.3.3. What was it about the SmartCurrents program that left you thinking it might be a viable way of making a positive environmental impact?
 - 3.4. If answer is something else, explore rationale further.

- 4. Initial Program Experiences (15 minutes / 0:40 cumulative)
 - 4.1. Tell me about your initial experiences with the program, starting from the point of acceptance.
 - 4.2. What aspects have been very clear to you?
 - 4.3. Have there been any aspects that were not, at least initially?
 - 4.4. For equipment, how did the installation and set-up go for you? Is there anything that you would have liked DTE Energy or GE to have done differently?
- 5. Behavior within the Program (40 minutes / 1:20 cumulative)
 - 5.1. Has your behavior changed at all since joining SmartCurrents?
 - 5.1.1. Describe any shifts—have they been easy?
 - 5.1.2. How did you decide what to change?
 - 5.2. Tell me about the new equipment installed in your home (if applicable).
 - 5.2.1. How is it different than what you had before?
 - 5.2.2. How do you use it?
 - 5.2.3. Has your understanding of it changed over time? And are you using it more, less, or at about the same level as you did at the beginning of the program?
 - 5.2.4. Is there anything else that DTE Energy or GE could have done to help you take full advantage of the equipment they installed?
 - 5.2.5. How would you rate the Nucleus Energy Management software in terms of function, clarity, and usability? Does it help you manage?
 - 5.2.6. Have you used either the iPhone or iPad app? If so, how has that worked for you?
 - 5.3. Specific probes for equipment:
 - 5.3.1. Nucleus (T2-T4, S1-S3)
 - What information is used most/least and why?
 - What's missing?
 - Who uses the software/data? For what? How does it impact decisions and behaviors, if at all?
 - Any problems with the software?
 - 5.3.2. Thermostat (T3, T4, S1-S3)
 - How have the energy savings features impacted how you cooled your house over the summer?
 - What do you like most/ least about it? Why?

- 5.3.3. In Home Display (T2, T4, S1-S3)
 - How has the energy savings information impacted how you use energy, if at all?
 - What do you like most/ least about having the display? Why?
- 5.3.4. Refrigerator/Dishwasher (S1, S3)
 - How have the energy savings features impacted your dishwashing activities or refrigerator usage, if at all?
 - What do you like most/ least about the appliances? Why?
- 5.3.5. Washer/Dryer (S2, S3)
 - How have the energy savings features impacted how/when you wash and dry clothes?
 - What do you like most/ least about the appliances? Why?
- 5.4. Have you used any of the web-based tools at DTEenergy.com?
 - 5.4.1. Which ones and how?
 - 5.4.2. Probe for usage of energy usage charts, rate comparison tool, pages with equipment information, FAQ pages, energy saving tips pages.
 - 5.4.3. Is there any web tool you wish you had but haven't found yet?
 - 5.4.4. DTE Energy is considering offering customers an online simulation that would allow you to "use" your equipment and alter behaviors to see how different actions could impact your energy consumption. If that was offered, would you be likely to log on and use it? If so, why, if not, why not?
- 5.5. What kind of support have you received from DTE Energy or GE since the start of the program?
 - 5.5.1. How would you rate the quality of that support?
 - 5.5.2. What would you change, if anything, to improve it for future SmartCurrents customers?
 - 5.5.3. Do you know who to call if you have problems?
- 5.6. Ultimately, have you been successful at reducing your energy consumption under the program?
 - 5.6.1. How can you tell?
 - 5.6.2. Which of your actions have had the greatest impact in terms of consumption?
 - 5.6.3. Have you been as successful as you had anticipated when you joined the program—or have your savings been higher or lower than your original expectations?

- 6. Billing (15 minutes / 1:35 cumulative)
 - 6.1. Tell me about your new bill.
 - 6.2. How is it different from your pre-pilot bill?
 - 6.3. Can you figure out how you are being charged for your energy consumption? Are there any points of confusion for you?
 - 6.4. What is Dynamic Peak Pricing? Critical Peak Event?
 - 6.5. Is there anything DTE Energy could do to make the bill easier to understand?
- 7. Wrap-Up (5 minutes / 1:40 cumulative))
 - 7.1. Is there anything you'd like me to take back to DTE Energy or GE about the SmartCurrents pilot program that we haven't discussed already?
 - 7.2. Check in back room for unanswered questions.
 - 7.3. Clean up loose ends with group, thank and dismiss.

What items would you like to see within this tool? Rate how important these items are using a 1 to 5 point scale where 1 is very important and 5 is not at all important.

Energy Management Tracking & Evaluation	RATING
Create plan to become more energy efficient	
Modify plan to save energy	
Track plan to save energy	
Create several plans to save energy	
Select items to be included in plan to save energy	
Select low cost actions I can take to save energy	
Select long term actions I can take to save energy	
Compare energy consumption against my historical use	
Compare energy consumption against my neighbors	
Compare energy consumption against similar businesses	
Track usage over time against plan	
View how far I am to completion of my plan	
Summary report	
Detailed report	
Carbon footprint	
Functionality	
Ease of use	
Convenience of saved reports/input	
Selections by industry	
Selections by energy usage levels	
Selections by other attributes	
Length of survey/questions to develop plan	
Whole building evaluation	
Ability to evaluate single measure	
Energy Education Library:	
View industry case studies	
Importance of implementing measures	
Calculations/Tools:	
View historical energy usage	
View projected energy usage	
Calculate ROI	
Calculate payback	
Calculate cost of implementing plan	
Life cycle assessments (cost/benefit)	
Taking Action/Advisor:	
Suggested contractors	
Incentives/Rebates that I can take advantage of	
Contact info for DTE Energy representative who can help implement plan	
Alert/notifications of actions to be taken	



5455 Corporate Drive, Suite 120

Troy, MI 48098

Web Survey—Residential Customers

Project Number: DT3112
Project Name: DTE Energy

SmartCurrents Participants I

Project Staff: Karl Schmidt

Kristopher Gauthier

Version Date: 11/27/2012

CAPTURE CUSTOMER ID FROM SAMPLE

Thank you for participating in DTE Energy's SmartCurrents program and taking the time to provide your feedback on the program through this survey. If you have any questions about this survey please contact Consumer Insights, Inc. directly at 866-952-1600 x17. As we indicated in the email invitation, we've got a lot to ask you, so plan on taking approximately 10 to 15 minutes to complete this survey (the length depends on what equipment you have installed as part of the program).

Note: your \$25 thank-you check will be sent directly from Consumer Insights within two weeks of receiving your completed survey.

SCREENING QUESTIONS

First we need to ask a few questions for statistical purposes.

- 1. What has been your involvement with the SmartCurrents program to date? Would you say you are...? (Check one.)
 - 1...... The person in your household most responsible for tracking electricity usage in your household and making changes to reduce your electric costs
 - 2..... Probably not the person most responsible, but still actively tracking and making changes
 - 3...... Not very involved with tracking and reducing electric usage

(IF "3" CHECKED, TERMINATE.)

10..... Other (Specify)

2.	In what county is your SmartCurrents-enrolled home located? Choose one 1
	2 Wayne County (but not Detroit)
	3Oakland County
	4 Macomb County
	5Livingston / Ingham / Washtenaw / Monroe counties
	6 Thumb Area (Huron / Sanilac / Tuscola / Lapeer / St. Clair counties)
	7 Central Lower Peninsula (Grand Rapids / Muskegon area)
	8 Northern Lower Peninsula (Traverse City / Charlevoix / Alpena / Oscoda area)
	9 Upper Peninsula

3.	, ,	
	1Under 18 TERMINATE	
	218 to 34	
	335 to 54	
	455 to 64	
	5 65 or older	
4.	Into which of the following categories did your total family income fall in 2011 before including Social Security or other payments)? 1	taxes (and
	2\$10,000-\$19,999	
	3\$20,000-\$29,999	
	4\$30,000-\$39,999	
	5\$40,000-\$49,999	
	6\$50,000-\$59,999	
	7\$60,000-\$69,999	
	8\$70,000-\$79,999	
	9\$80,000-\$89,999	
	10\$90,000-\$99,999	
	11\$100,000-\$149,999	
	12\$150,000-\$199,999	
	13\$200,000-\$249,999	
	14\$250,000-\$299,999	
	15\$300,000 or more	
	16 Refused	
5.		
	1 Grade School Graduate	
	2 High School Graduate	
	3Trade/Vocational School Graduate	
	4Some College	
	5 Associates Degree	
	6 Bachelor Degree	
	7Postgraduate Degree	
6.	. What is your gender?	
	2 Female	

7.	apply t	to you.		g best c	lescribes	your eth	nnic bad	ckgroun	d? You r	many ind	dicate any t	hat
	2	Africar	n American									
	3	Hispan	ic/Latino									
	4	Asian A	American									
	5	Native	American									
	6	Other	(SPECIFY):									
	7	Prefer	not to answ	er								
8.	Includi		ırself, ho	w many	people	have live	ed in yo	ur house	ehold sir	ice joini	ng SmartCu	rrents?
	2	2										
	3	3										
	4	4										
	5	5										
	6	6										
	7	7										
	8	8 or m	ore									
CUST	OMER SA	ATISFA	CTION CI	HECK								
	compa	ny on	a 0 to 10	scale, v	where a (" and a 5	0 means	you are	e "extrer	nely diss	atisfied	ou rate the " and a 10 r or dissatisfie Extremely Satisfied	
	0	1	2	3	Д 4	issatisfied 5	6	7	8	9	10	
	U	1	2	3	4	3	U	,	0	Э	10	
мот	IVATIONS	5 то JC	DIN									
10.	installe	ed in th	neir hom	e. To ve	erify our		which	of the fo			ent and apposeribes the o	
	1	AMI m	eter only									

	3 AMI meter, GE Nucleus, programmable thermostat, computer software
	4AMI meter, GE Nucleus, In-Home Display, programmable thermostat, computer software
	5AMI meter, GE Nucleus, In-Home Display, programmable thermostat, computer software, GE dishwasher, GE refrigerator
	6AMI meter, GE Nucleus, In-Home Display, programmable thermostat, computer software, GE washer and GE dryer
	7AMI meter, GE Nucleus, In-Home Display, programmable thermostat, computer software, GE dishwasher, GE refrigerator, GE washer and GE dryer
	NOTE: 1=T1, 2=T2, 3=T3, 4=T4, 5=S1, 6=S2, and 7=S3.
11.	Think back to when you first found out about SmartCurrents and decided to join the SmartCurrents pilot program. Which of the following probably describe your most critical reasons for joining SmartCurrents? Check any that apply to you personally.
	1I could make changes that could reduce my electric bill
	2 When I looked at when I tend to use the most power already, I figured it might be cheaper under the SmartCurrents rate structure
	3 I was excited about the free appliances
	4 I needed new appliances anyway
	5 I wanted a way to connect "what I do" with "what I pay" when it comes to electricity
	6 I was excited about getting some hi-tech new "toys" to play with
	7 I thought this could be a way to lower my environmental impact/carbon footprint
	8 A DTE Energy employee suggested I join to reduce my unusually high bills
	9 None of these reasons (ANCHOR POINT) SKIP TO Q13
12.	ASK IF MORE THAN ONE RESPONSE IN Q11: Of all of your reasons for joining SmartCurrents, what ONE reason was probably most important for you personally? Choose one. (PIPE ANY ANSWERS CHECKED IN Q11)
	1I could make changes that could reduce my electric bill
	2 When I looked at when I tend to use the most power already, I figured it might be cheaper under the SmartCurrents rate structure
	3 I was excited about the free appliances
	4 I needed new appliances anyway
	5 I wanted a way to connect "what I do" with "what I pay" when it comes to electricity
	6 I was excited about getting some hi-tech new "toys" to play with
	7 I thought this could be a way to lower my environmental impact/carbon footprint
	8 A DTE Energy employee suggested I join to reduce my unusually high bills
	9 None of these reasons

2..... AMI meter, GE Nucleus, In-Home Display, computer software

13.	From your perspective, what does DTE Energy gain by encouraging its customers to use LESS electricity or to shift their usage from mid-day to later in the evening? Check any that you think apply.
	1 It will even out demand for electricity across the day
	2 It will reduce strain on DTE Energy electric generation plants and infrastructure
	3 It will allow DTE Energy to service more customers without adding extra electric generation plants
	4 It will improve customer satisfaction by lowering customer bills
	5None of these (ANCHOR POINT)

BEHAVIOR CHANGES

Before we get into any equipment associated with SmartCurrents, we'd like to focus on your behavior as a user of electricity since you joined the SmartCurrent program.

<u>Since joining SmartCurrents</u> , have you <u>changed</u> any of your behavior when it comes to the electricity consumption in your household? Read over the list below and check any steps that you have taken.					
1 Minimize all electricity usage between 3 pm and 7 pm					
2Run dishwasher between 7 am and 3 pm OR between 7 pm and 11pm					
3 Run dishwasher between 11 pm and 7 am					
2Run washer and dryer between 7 am and 3 pm OR between 7 pm and 11pm					
3Run washer and dryer between 11 pm and 7 am					
4Run washer and dryer on the weekends, avoiding weekdays					
5Put appliances such as dehumidifiers and pool filter pumps on timers set to turn them off between 3 pm and 7 pm					
6 Set thermostat to raise air conditioning temperature between 3 pm and 7 pm					
7 Set thermostat to lower air conditioning temperature before 3 pm to "pre-cool" the house so temperature can be set higher between 3 pm and 7 pm					
8Switched from traditional to CFL and LED bulbs (since joining the program)					
9 Better management of "vampire" sources of electric consumption, such as putting computer equipment on power strips and shutting off the strip when the equipment is not in use, unplugging mobile device chargers when not charging the device, etc.					
10 Other steps not mentioned here					
11None of these					
IF Q14=10, ASK: What other changes to your electrical consumption behavior have you made because of joining the SmartCurrents pilot program?					
Think about the number of times you run your dishwasher in a typical week. How many times is the dishwasher typically running during the following times of day? (Total should add up to the total number of dishwasher loads you run in a typical week.)					
Monday-Friday 7 am to 3 pm					
Monday-Friday 3 pm to 7 pm					
Monday-Friday 7 pm to 11 pm					
Monday-Thursday 11 pm to 7 am					
Friday 7pm to Monday 7am					

TOTAL WEEKLY LOADS. (SUM)

17.		y loads you do in a typical week. How many times are the guring the following times of day? (Total should add up to you run in a typical week.)
	Monday-Friday 7 am to 3 pm	
	Monday-Friday 3 pm to 7 pm	
	Monday-Friday 7 pm to 11 pm	
	Monday-Thursday 11 pm to 7 am	
	Friday 7pm to Monday 7am	
	TOTAL WEEKLY LOADS. (SUM)	
18.	Have you taken any steps to encouthe SmartCurrents pilot by changing	urage other members of your household to participate fully in ng or shifting behavior?
	1Yes	
	2No	
19.	IF Q18=1, ASK: Describe some of t participating households in the Sm	hose steps below—we might be able to suggest them to other partCurrents program.
20.		of your behavior changes that you've made to take advantage e. Which one of the following statements best describes how nges? (Choose one.)
	1I made minor changes within the first	at month after joining the SmartCurrents program
	2I made major changes within the first	t month after joining the SmartCurrents program
	3 I have gradually made minor change months	s to my behavior since joining SmartCurrents over the course of many multiple
	4 I have gradually made major change months	s to my behavior since joining SmartCurrents over the course of many multiple
	5 Honestly, I have made very few char	nges as a result of joining the SmartCurrents program

21.	As of today, which of the following best describes your behavior regarding SmartCurrents?
	1I have successfully maintained all or most of the changes I made after I joined SmartCurrents
	2I have maintained some of my changes but slipped back to old habits in some areas
	3I have mostly slipped back to my old habits
	4 I have not yet taken any concrete steps to change my behavior to better match the SmartCurrents rate structure

PROGRAM EXPERIENCES

22.	How did you <u>first</u> learn what you will times of the day (e.g., Peak, Near Pea						nt	
	1In your SmartCurrents invitation letter							
	2In your SmartCurrents Welcome Kit							
	3 By calling DTE Energy after the start of the program							
	4On the DTE Energy website							
	5I'm still not sure what rate I pay at each	time						
	. ,							
IF Q1	L0=1, SKIP TO Q27.							
23.	Think back to when you had your init How did DTE Energy and General Elec					at your ho	ome.	
		Excellent	Very Good	Good	Fair	Poor	D/K	
1	Helpfulness of DTE Energy staff associated with SmartCurrents	5	4	3	2	1	0	
2	Helpfulness of GE staff associated with SmartCurrents	5	4	3	2	1	0	
3	Your SmartCurrents "Welcome Packet"	5	4	3	2	1	0	
4	Ease of installing Nucleus software on your home computer	5	4	3	2	1	0	
5	Follow-up from DTE Energy staff	5	4	3	2	1	0	
6	Follow-up from GE staff	5	4	3	2	1	0	
7	Ease of installing software updates	5	4	3	2	1	0	
24.	Have you had any "connectivity" probappliances—that is, equipment that s 1Yes 2No	tops talking to				ipment or		
25.	IF Q24=1, ASK: What connections have you at some point during the program 1AMI Meter to Nucleus				-	it have ap	plied to	

2Nucleus to thermostat
3 Nucleus to In-Home Monitor
4 Nucleus to computer software
5 Nucleus to washer
6 Nucleus to dryer
7 Nucleus to refrigerator
8Nucleus to dishwasher

26. PIPE ALL ITEMS CHECKED IN Q25: All of the connectivity problems you noted are shown in the table below. Tell us a little more about each issue by answering the three questions to the right.

		Did you attempt to fix this problem?		Did you contact DTE Energy or GE about this problem?		Has the problem been fixed?	
		Yes	No	Yes	No	Yes	No
1	AMI Meter to Nucleus	1	2	1	2	1	2
2	Nucleus to thermostat	1	2	1	2	1	2
3	Nucleus to In-Home Monitor	1	2	1	2	1	2
4	Nucleus to computer software	1	2	1	2	1	2
5	Nucleus to washer	1	2	1	2	1	2
6	Nucleus to dryer	1	2	1	2	1	2
7	Nucleus to refrigerator	1	2	1	2	1	2
8	Nucleus to dishwasher	1	2	1	2	1	2

27. SmartCurrents program participants are subject to something called a Critical Peak Event, which is a time when there is significant pressure on the DTE Energy power grid during the Peak hours of 3 pm to 7 pm. In those circumstances, the SmartCurrent rate goes up to \$1 per kwH. 24 hours before the event, SmartCurrents customers are notified via email, phone, or text (whichever methods they choose) so they are aware of the Critical Peak Event and can plan for it.

We have a few questions relating to Critical Peak Events.

First, were you aware of Critical Peak Events and their associated cost before taking this survey today?

1..... Yes, I knew what they were and their rate

	2Yes and No: I knew what they were, but was not aware of their rate						
	3 No, I was unaware that Crit	al Peak Events were part of being a SmartCurrents customer					
28.	Secondly, are you aware of a SmartCurrents program?	ny Critical Peak Events that have occurred since you joined the					
	1Yes						
	2No	SKIP TO Q31					
29.	email, phone call, or text me	you aware of the Critical Peak Event prior to it occurring via a ssage?					
	1 Yes						
	2 No	SKIP TOQ31					

	Peak Event?						
	1Turned off air conditioning						
	2Turned temperature up on air condition	ning					
	3Unplugged appliances						
	4Turned off lights						
	5 Left the house completely during the ev	vent					
	6 Other steps not listed here						
	7I didn't change my behavior during the	Critical Peak Event	(ANCHOR)				
SOF	TWARE USAGE						
31.	ASK IF Q10 <> 1: Have you used any of computer?	of the Nucleus	tools tha	t you load	ed on yo	ur home	
	1Yes						
	2No						
32.	IF Q31=1:, ASK: How would you rate measures?	the Nucleus to	ools on yo	ur home c	omputer	on the fo	lowing
		Excellent	Very Good	Good	Fair	Poor	D/K
1	Ease of use	5	4	3	2	1	0
2	Ability to help you reduce your electricity usage	5	4	3	2	1	0
3	Ability to accurately track your electric usage over time	5	4	3	2	1	0
4	Readability	5	4	3	2	1	0
33.	Have you logged onto DTEEnergy.cor you as a SmartCurrents participant? 1Yes 2No, I wasn't aware there were online to 3No—I was aware of the online tools but	ools associated with	SmartCurren	ts	tools tha	t are avail	able to
	A No. I was aware of the online tools but	havan't gattan ara	und to traina	thom			

Which of the following steps did you take, if any, to reduce your electric usage during the Critical

30.

34. IF Q33=1, ASK: How would you rate DTEEnergy.com's web-based tools on the following measures?

		Excellent	Very Good	Good	Fair	Poor	D/K
1	Ease of use	5	4	3	2	1	0
2	Ability to help you reduce your electricity usage	5	4	3	2	1	0
3	Ability to accurately track your electric usage over time	5	4	3	2	1	0
4	Readability	5	4	3	2	1	0
5	Ease of finding on the website	5	4	3	2	1	0

IN-HOME DISPLAY

ASK THIS BLOCK IF Q10=2, 4, 5, 6, OR 7.

35. Let's talk about your In-Home Display, the small countertop display that communicates with your Nucleus and provides real time electric usage data as well as historical trend information on your household.

36. What functions do you use regularly on your in-home display? Choose any that apply to you.

1......Current electricity usage in kwH

2...... Current electricity usage in dollars

3...... Current rate in force (e.g., PEAK, NEAR PEAK, etc.)

4..... Historical trends for the household

37. Which of the following questions has the In-Home Display helped you answer for your household, if any? Check any that apply to you.

1...... What does our "normal" household electricity usage look like?

2...... When a spike in electricity usage occurs, what is causing it?

3...... How do changes in behavior and equipment impact our "normal" electricity usage?

5...... How can we lower our "base" electricity usage?

	6To neighbors, friends, and family: what does this cool new piece of equipment do?
	6None of these (ANCHOR)
38.	Do all functions and screens currently work on your In-Home Display?
	1Yes
	2 Sort of—the current usage screen works but I can't see our history screens
	3No

PROGRAMMABLE THERMOSTAT

ASK THIS BLOCK IF Q10=3, 4, 5, 6, OR 7.

39. Let's talk about your programmable thermostat. How would you rate it on the following measures?

		Excellent	Very Good	Good	Fair	Poor	D/K
1	Overall ease of use	5	4	3	2	1	0
2	Ease of programming using the thermostat screen	5	4	3	2	1	0
3	Ease of programming using the Nucleus software on your home computer	5	4	3	2	1	0
4	Ease of programming using the Apple iPad/iPod app	5	4	3	2	1	0
5	Clarity/completeness of documentation provided by GE	5	4	3	2	1	0

40.	How was yo	our thermostat	programmed	over the	summer	during air	conditioning	season?

- 1...... Set at "defaults" for each rate time period as provided by GE/DTE Energy
- 2...... Set to use less energy during PEAK time than other parts of the day, but less than the "defaults"
- 3......Set to use less energy during PEAK time than other parts of the day—actually, more than the "defaults"
- 4......Set to ignore rates based on time of day to keep the temperature constant and comfortable
- 5..... Not left to any program—we adjust it manually

41. How is your thermostat programmed right now during the furnace season?

- 1.....Set at "defaults" for each rate time period as provided by GE/DTE Energy
- 2......Set to use less energy during PEAK time than other parts of the day, but less than the "defaults"
- 3...... Set to use less energy during PEAK time than other parts of the day—actually, more than the "defaults"
- 4...... Set to ignore rates based on time of day to keep the temperature constant and comfortable
- 5..... Not left to any program—we adjust it manually

KITCHEN APPLIANCES

ASK THIS BLOCK IF Q10=5 OR 7.

42. Now let's talk about your kitchen appliances. First, tell us about your dishwasher. How would you rate it on the following measures?

		Excellent	Very Good	Good	Fair	Poor	D/K
1	Overall ease of use	5	4	3	2	1	0
2	Ease of programming it for delayed start	5	4	3	2	1	0
3	Clarity/completeness of GE documentation	5	4	3	2	1	0
4	Overall cleaning performance	5	4	3	2	1	0
5	Quietness of operation	5	4	3	2	1	0

43.	When you set	your dishwasher to ru	n and the display	v reads "FP.	" what do v	ou normally	Ob v
TJ.	vviicii you set	your distivasfict to ru	if and the displa	yicaus Li,	wilat ao	y o a mormany	, uu:

- 1.....Let it delay starting until the rate drops
- 2..... Manually set the delayed start to a later time
- 3..... Override the EP and start the dishwasher
- 4......Don't know—I've never encountered that EP message before

44. Have you had any problems of issues with the dishwasher?

- 1..... Yes
- 2..... No

45. IF Q44=1, ASK: Please describe any problems or issues with your dishwasher. For any problem described, please indicate whether you have contacted GE and if the problem has been resolved to your satisfaction.

46. Now tell us about your refrigerator. How would you rate it on the following measures?

		Excellent	Very Good	Good	Fair	Poor	D/K
1	Overall ease of use	5	4	3	2	1	0
2	Clarity/completeness of GE documentation	5	4	3	2	1	0
3	Overall cooling performance	5	4	3	2	1	0

	1Yes						
	2No						
48.	IF Q47=1, ASK: Please describe any	y problems or iss	ues with y	our refrig	erator. F	or any pro	blem
	described, please indicate whethe	r you have conta	cted GE a	nd if the p	roblem h	ias been r	esolved
	to your satisfaction.						
LAU	NDRY APPLIANCES						
ASK	THIS BLOCK IF Q10=6 OR 7.						
40							
49.	Now let's talk about your laundry rate it on the following measures?		, tell us at	out your	washer.	How woul	d you
	rate it on the following measures:		T	T		1	,
		Excellent	Very	Good	Fair	Poor	D/K
	I		Good				-
1	Overall ease of use	5	4	3	2	1	0
2	Ease of programming it	5	4	3	2	1	0
3	Clarity/completeness of GE	5	4	3	2	1	0
	documentation		4	2			
4	Overall cleaning performance	5	4	3	2	1	0
5	Quietness of operation	5	4	3	2	1	0
50.	Have you had any problems of issu	ies with the was	her?				
50.	1Yes						
	2No						
51.	IF Q50=1, ASK: Please describe any	y problems or iss	ues with y	our wash	er. For ai	ny probler	n

Have you had any problems of issues with the refrigerator?

to your satisfaction.

47.

described, please indicate whether you have contacted GE and if the problem has been resolved

52. Now tell us about your dryer. How would you rate it on the following measures?

		Excellent	Very Good	Good	Fair	Poor	D/K
1	Overall ease of use	5	4	3	2	1	0
2	Clarity/completeness of GE documentation	5	4	3	2	1	0
3	Overall drying performance	5	4	3	2	1	0
4	Quietness of operation	5	4	3	2	1	0

53.	Have you had any problems of issues with the dryer?
	1Yes
	2No
54.	IF Q53=1, ASK: Please describe any problems or issues with your dryer. For any problem described, please indicate whether you have contacted GE and if the problem has been resolved to your satisfaction.
55.	When you set your washer or dryer to run and the display reads "EP," what do you normally do?
	1Let it delay starting until the rate drops
	2Manually set the delayed start to a later time
	3Override the EP and start the dishwasher
	4Don't know—I've never encountered that EP message before
CN // A DT	CURRENTS NEWSLETTER
SIVIAN	CORRENTS NEWSLETTER
56.	Have you received any email SmartCurrents newsletters since joining the program?
	1Yes
	2No
57.	How often do you at least skim through those email SmartCurrents newsletters?
57.	1Every month
	2Every other month
	3Rarely
	4Never
FO	
58.	IF Q57=1, 2, OR 3, ASK: How would you rate the SmartCurrents newsletter on its ability to deliver the following?

Excellent

Very

Good

Fair

D/K

Poor

			Good				
1	Practical "news" you can use	5	4	3	2	1	0
2	Very readable format	5	4	3	2	1	0
3	Attractive layout	5	4	3	2	1	0
4	Interesting content	5	4	3	2	1	0
5	New ideas you've never heard before	5	4	3	2	1	0
6	Information tied directly to the SmartCurrents program and not general information written to any customer	5	4	3	2	1	0

BILLING

2..... No

59.	Since joining SmartCurrents, have your bills been clear? That is, can you easily see how much electricity you have been consuming during each time of day, and how that usage adds up to your total bill for the month?
	1Yes

60. IF Q59=2, ASK: How could DTE Energy make your bills clearer for you as a SmartCurrents customer?

Thank you for your time and input. Those are all the questions we have for today.

Responses to Selected Survey Questions (December 2012) by Treatment Cell

Nucleus Software Tools:

Q31 Have you used any of the Nucleus tools that you loaded on your home computer?

		Frequency	Percent	Valid Percent
Valid	1 Yes	578	69.0	79.4
	2 No	150	17.9	20.6
	Total	728	86.9	100.0
Missing	System	110	13.1	
Total		838	100.0	

Q32 How would you rate the Nucleus tools on your home computer on the following measures?

		Q32_1 Ease of Use						
	0 Don't Know Count	1 Poor Count	2 Fair Count	3 Good Count	4 Very Good Count	5 Excellent Count		
Treatment T2	0	6	13	39	51	51		
Т3	1	6	8	39	81	52		
T4	0	7	12	54	73	51		
Total	1	19	33	132	205	154		

	Q32_	Q32_2 Ability to help you reduce your electricity usage							
	0 Don't Know Count	1 Poor Count	2 Fair Count	3 Good Count	4 Very Good Count	5 Excellent Count			
Treatment T2	3	7	20	48	44	38			
T3	3	6	20	42	68	48			
T4	2	11	20	53	73	38			
Total	8	24	60	143	185	124			

	Q32_3 -Ability to accurately track your electric usage over time								
	0 Don't Know Count	1 Poor Count	2 Fair Count	3 Good Count	4 Very Good Count	5 Excellent Count			
Treatment T2	1	8	16	40	44	51			
Т3	3	5	15	37	63	64			
T4	7	14	24	35	64	53			
Total	11	27	55	112	171	168			

	Q32_4 -Readability							
	0 Don't Know Count	1 Poor Count	2 Fair Count	3 Good Count	4 Very Good Count	5 Excellent Count		
Treatment T2	0	3	11	37	54	55		
T3	1	4	6	38	73	65		
T4	0	6	16	41	71	63		
Total	1	13	33	116	198	183		

Q33 Have you logged onto DTEEnergy.com and used any of the web-based tools that are available to you as a SmartCurrents participant?

		Frequency	Percent	Valid Percent
Valid	1 Yes	293	35.0	35.0
	2 No, I wasn't aware there were online tools associated with SmartCurrents	307	36.6	36.6
	3 No—I was aware of the online tools but didn't think they would be useful	31	3.7	3.7
	4 No—I was aware of the online tools but haven't qotten around to trying them.	<u>207</u>	24.7	<u>24.7</u>
	Total	838	100.0	100.0

Q34 How would you rate DTEEnergy.com's web-based tools on the following measures?

	Q34_1-Ease of use						
	0 Don't Know	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent	
	Count	Count	Count	Count	Count	Count	
Treatment T1	0	3	4	18	21	5	
T2	1	2	8	16	31	29	
T3	0	1	3	24	32	11	
T4	1	2	6	17	28	14	
Total	2	8	21	75	112	59	

	Q3 0 Don't	Q34_2 -Ability to help you reduce your electricity usage						
	Know	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent		
	Count	Count	Count	Count	Count	Count		
Treatment T1	1	0	12	20	14	4		
T2	3	4	9	21	28	22		
T3	1	2	6	33	19	10		
T4	2	5	9	15	24	13		
Total	7	11	36	89	85	49		

	Q34_3 -Ability to accurately track your electric usage over time 0 Don't							
	Know	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent		
	Count	Count	Count	Count	Count	Count		
Treatment T1	0	0	9	14	21	7		
T2	6	2	6	17	32	24		
T3	2	2	2	28	23	14		
T4	2	4	7	16	23	16		
Total	10	8	24	75	99	61		

		Q34_4 -Readability						
		0 Don't Know Count	1 Poor Count	2 Fair Count	3 Good Count	4 Very Good Count	5 Excellent Count	
Treatment 1	T1	0	0	7	16	20	8	
1	T2	3	1	7	12	37	27	
1	T3	1	1	3	29	25	12	
7	T4	1	1	7	18	28	13	
Total		5	3	24	75	110	60	

	Q34_5 -Ease of finding on the website								
0 Don't Know 1 Poor 2 Fair 3 Good 4 Very Good Count Count Count Count Count					5 Excellent Count				
Treatment T1	0	5	7	14	20	5			
T2	1	5	7	20	30	24			
T3	1	3	7	24	25	11			
T4	1	4	8	17	24	14			
Total	3	17	29	75	99	54			

Had Connectivity Problems with SmartCurrents Equipment

Q24 Have you had any "connectivity" problems with any of your SmartCurrents equipment?

		"connectivity" problems with any of					
	1 Yes 2 No Total						
Treatment	T2	142	91	233			
	T3	153	59	212			
	T4	172 68 240					
Total		499	224	723			

Q25 What connections have been a problem for you? Check any that have applied to you at some point during the program.

		Q25_1 -AMI Meter to Nucleus	Q25_2 -Nucleus to thermostat		Q25_4 -Nucleus to computer software
		1	1	1	1
Treatment	T2	78	2	74	56
	T3	65	92	10	75
	T4	73	87	92	78
Total		226	196	191	219

Q26 All of the connectivity problems you notes are shown in the table below. Tell us a little more about each issue by answering the three questions to the right. Did you attempt to fix this problem?

	Q26_1_x1 -AMI Meter to Nucleus		Q26_1_x2 ?-Nucleus to thermostat		Q26_1_x3 -Nucleus to In- Home Monitor		Q26_1_x4 ?-Nucleus to computer software	
	1 Yes Count	2 No Count	1 Yes Count	2 No Count	1 Yes Count	2 No Count	1 Yes Count	2 No Count
Treatment T2	67	11	2	0	66	8	53	3
T3	63	2	87	4	9	1	72	2
T4	66	7	84	3	85	7	77	1
Total	196	20	173	7	160	16	202	6

Q26 All of the connectivity problems you notes are shown in the table below. Tell us a little more about each issue by answering the three questions to the right. Did you contact DTE Energy or GE about this problem?

	Q26_2_x1-AMI Meter to Nucleus			Q26_2_x2 -Nucleus to thermostat		Q26_2_x3 -Nucleus to In- Home Monitor		Q26_2_x4 -Nucleus to computer software	
	1 Yes Count	2 No Count	1 Yes Count	2 No Count	1 Yes Count	2 No Count	1 Yes Count	2 No Count	
Treatment T2	57	21	2	0	40	34	30	26	
T3	54	11	68	23	7	3	50	24	
T4	52	21	53	34	49	43	45	33	
Total	163	53	123	57	96	80	125	83	

Q26 All of the connectivity problems you notes are shown in the table below. Tell us a little more about each issue by answering the three questions to the right. Has the problem been fixed?

	Q26_3_x1 -AMI Meter to Nucleus		Q26_3_x2 -Nucleus to thermostat		Q26_3_x3 -Nucleus to In- Home Monitor		Q26_3_x4 -Nucleus to computer software	
	1 Yes	2 No	1 Yes	2 No	1 Yes	2 No	1 Yes	2 No
	Count	Count	Count	Count	Count	Count	Count	Count
Treatment T2	60	18	1	1	50	24	40	16
T3	48	17	76	15	7	3	61	13
T4	55	18	72	15	72	20	56	22
Total	163	53	149	31	129	47	157	51

Appendix B: Rate Tariffs

M.P.S.C. No. 10 - Electric The Detroit Edison Company (Rehearing Order Case No. U-16472) Fourth Revised Sheet No. D-1.00 Cancels Third Revised Sheet No. D-1.00

RATE SCHEDULE NO. D1

RESIDENTIAL SERVICE RATE

AVAILABILITY OF SERVICE: Available to customers desiring service for all residential purposes through one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected on a permanent basis. Service to appurtenant buildings may be taken on the same meter.

This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER DAY:

Full Service Customers:

Power Supply Charges:

Energy Charges: 6.912¢ per kWh for the first 17 kWh per day

8.257¢ per kWh for excess over 17 kWh per day

Delivery Charges:

Service Charge: \$6.00 per month

Distribution Charge: 5.003¢ per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

Retail Access Service Customers:

Delivery Charges:

Service Charge: \$6.00 per month

Distribution Charge: 5.003¢ per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge.

(Continued on Sheet No. D-2.00)

Issued January 3, 2012 D. G. Brudzynski Vice President Regulatory Affairs

Detroit, Michigan

Michigan Public Service Commission

January 4, 2012

Effective for service rendered on and after December 21, 2011

Issued under authority of the Michigan Public Service Commission dated December 20, 2011 In Case No. U. 16472 (Continued from Sheet No. D-1.00)

RATE SCHEDULE NO. D1 (CONTD)

RESIDENTIAL SERVICE RATE

BILLING FREQUENCY: Based on a nominal 30-day month. See Section C4.5.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

LATE PAYMENT CHARGE: See Section C4.8.

INTERRUPTIBLE SPACE-CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

SUPPLEMENTAL SPACE HEATING PROVISION: Rate D1.5 is available on an optional basis.

WATER HEATING SERVICE: Water heating service is available on an optional basis. See Schedule Designation No. D5.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.

Income Assistance Credit: \$(6.00) per customer per month

AUXILIARY POWER PROVISION: Residential customers desiring electric service as an auxiliary source of power for wind or solar powered generating equipment shall take service under this rate schedule under special agreement with the Company.

Parallel operation of private electric generation is not permitted except by written permission of the Company.

The customer having auxiliary power shall pay all direct costs of controlling and protective equipment necessitated by the presence of a source of power on his premises.

The customer shall pay the charges set forth above. The customer may elect to sell energy back to the Company at the rate of 3.1¢ per kWh delivered.

Customers selling energy to the Company shall pay a service charge of 12.4¢ per day in addition to their standard daily billing.

Issued January 27, 2012 D. G. Brudzynski Vice President Regulatory Affairs

Detroit, Michigan



Effective for service rendered on and after January 27, 2012

Issued under authority of the Michigan Public Service Commission dated October 20, 2011 In Case No. U-16472

RATE SCHEDULE NO. D1.8

EXPERIMENTAL DYNAMIC PEAK PRICING RATE

AVAILABILITY OF SERVICE: Available on an optional basis to full-service residential and secondary commercial and industrial customers seeking to manage their electric costs by either reducing load during high cost pricing periods or shifting load from high cost pricing periods to lower cost pricing periods. Service under this experimental rate is limited to a maximum of 5,000 residential customers and 100 secondary commercial and industrial customers who have Advanced Metering Infrastructure installed. Service under this rate may not be combined with any other tariff, rider, or separately metered service.

The rate features three price tiers for On-Peak, Mid-Peak, and Off-Peak, as well as Critical Peak prices for days where Critical Hours are announced.

Definitions:

On-Peak Hours: All kWh used between 3P.M. and 7P.M. Monday through Friday,

excluding holidays

Mid-Peak Hours: All kWh used between 7A.M. and 3P.M., and between 7P.M. and 11P.M.,

Monday through Friday excluding holidays

Off-Peak Hours: All kWh used between 11 P.M and 7 A.M. Monday through Friday, and all

weekend and holiday hours.

Critical-Peak All kWh used during critical hours, which, when announced, will replace

Hours: the full on-peak time period from 3 P.M. to 7 P.M.

The Company expects to implement Critical Peak pricing for no more than 80 hours per year, for evaluation of the tariff based on several factors including but not limited to economics, system demand or capacity deficiency.

Customers will be notified by 6 P.M. the day before critical hours are expected to occur. Notification will be made by one or more of the following methods: automated telephone message, text message, e-mail, or presentment on an in-premise display unit furnished by the Company. Receipt of such notice is the responsibility of the participating customer.

Customers who qualify and sign up for this rate agree to participate in evaluation surveys and will remain anonymous on all such surveys.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volt, single-phase three-wire; or 208Y/120 volts, three-phase four wire service may be taken.

(Continued on Sheet No. D-14.02)

Issued September 16, 2009 D. G. Brudzynski Vice President Regulatory Affairs

Detroit, Michigan



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RATE SCHEDULE NO. D1.8 (CONTD)

EXPERIMENTAL DYNAMIC PEAK PRICING RATE

CHARGES:

Full Service Residential Customers:

Power Supply Charges:

Energy Charges: 12.0c per kWh for all On-Peak kWh

7.0¢ per kWh for all Mid-Peak kWh 4.0¢ per kWh for all Off-Peak kWh

\$1.00 per kWh for all kWh during Critical Peak Hours

Delivery Charges:

Service Charge: \$6.00 per month

Distribution Charge: 4.195¢ per kWh for all kWh

Full Service Secondary Commercial and Industrial Customers:

Power Supply Charges:

Energy Charges: 12.0¢ per kWh for all On-Peak kWh

7.0¢ per kWh for all Mid-Peak kWh 4.0¢ per kWh for all Off-Peak kWh

\$1.00 per kWh for all kWh during Critical Peak Hours

Delivery Charges:

Service Charge: \$8.78 per month

Distribution Charge: 3.813¢ per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

SCHEDULE OF HOLIDAYS: See Section C11

CONTRACT TERM: Open order, terminable on three days' notice by either party.

LATE PAYMENT CHARGE: See Section C4.8.

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D. G. Brudzynski Vice President Regulatory Affairs

Detroit, Michigan

Michigan Public Service Commission

September 16, 2010

Filed

Effective for service rendered on and after September 15, 2010

Issued under authority of the Michigan Public Service Commission dated September 14, 2010 In Case No. U-16276 **Appendix C: Technology Description**

Nucleus Home Manager

Description:

- Acts as the central nervous system for monitoring in-home electrical usage
- Shows energy use in kWh and in estimated dollars spent
- Accumulates daily/monthly/yearly historical trends up to a span of three years
- Connects the in-home smart energy network directly to a PC

Requirements:

- Utility meter: AMI
- Broadband connection with router required for software updates and for simultaneous access to internet and Nucleus (wireless router recommended 802.11b/g).
- · Computer (MAC or PC)

By tracking energy use and rates in near real time, you can make more informed choices and take smarter steps toward a lower electric bill.







Programmable Thermostat

Key Design Specifications

- ZigBee Smart Energy Profile Thermostat
- Full 7 day program with 4 set point per day
- Programmable energy savings setback
- Screen selection
 - √ \$KWh Usage
 - ✓ Instantaneous KWh
 - √ Instantaneous \$Pricing







GE Title or job number 9/28/2011

Energy Display with Brillion™ technology

Key Design Specifications

- AMI ready display that allows consumers to closely track their energy consumption and receive messages or alerts from their utility provider.
- · Near Real time energy usage in kW or \$'s
- Historical energy usage Month, day, hour kWh or \$'s
- Energy analysis tool Spyglass and Stopwatch
- · Utility messaging
- · Can show Time-of-Use (TOU) rates

Technical Specifications

- Low voltage device using a plug in wall power supply
- 1 Zigbee radio 802.15.4
- SEP1.0 application Price Cluster, Load Control Cluster, Simple Metering Cluster, Messaging





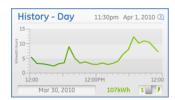


1 / GE Title or job number / 7/17/2013

Energy Display with Brillion™ technology







Home Screen











Appendix D: Education Materials

DTE Energy Company 2000 2nd Ave., Detroit, MI 48226-1279 Tel: 313.235.4000

DTE Energy



Date

DTE Energy Customer Address City, State, ZIP

Regarding:

Dear DTE Energy Customer:

In the next few weeks, DTE Energy will begin installing advanced metering in your area. This will include changing your electric meter at no cost to you.

This upgrade is part of DTE Energy's SmartCurrents^{5M} program to upgrade the electricity delivery system in Southeastern Michigan. Advanced metering is a key component of this program. Changing your meter is a first step in giving you new tools to help you use energy economically, efficiently and effectively.

You do not need to be present for the meter upgrade, unless your meter is inside your home or business, or inaccessible. If we need you to assist us, we will notify you.

If you operate **life-support or other sensitive equipment** in your home that DTE Energy may not be aware of, please call us at **800.477.4747.** We will contact you to coordinate installation.

In most cases, installation of your new electric meter is simple and quick, requiring a brief, five-minute interruption to your electric service. During the initial installation period, a meter reader will continue to read your meter until your neighborhood is fully upgraded. We will compare the meter reader's reading to the advanced meter reading as part of our extensive quality assurance testing to ensure accuracy.

While you may not see a change in service initially, the benefits, as we continue to install the complete advanced metering system, include:

- Remote reading of your electric meter, which will allow us to read your meter without entering your property or interrupting your personal schedule
- · Elimination of the vast majority of estimated bills
- · Automatic detection of outages at your home or business
- 24-hour access to your daily energy use information
- New rates and programs that will help you save money and energy

Our SmartCurrents program and advanced metering are creating the path to your home's energy future. For more information, please visit our SmartCurrents website, **smartcurrents.com**, and also **dteenergy.com/advancedmeter**, our advanced metering website. We look forward to providing you with this new technology.

Sincerely,

The Advanced Metering Team

What is advanced metering?

DTE Energy's advanced metering program involves the installation of highly accurate, state-of-the-art metering technology for residential and commercial electric and natural gas customers. Advanced meters transmit your energy usage information to DTE Energy over a secure communication network.

Advanced electric metering

information that can help them save money replaced older electric meters with newer Over the past few years, DTE Energy has communication. The new meters give digital meters that allow for two-way customers better access to tools and by better managing their energy use.

Advanced natural gas metering

will give us the capability to remotely read the to be replaced. The natural gas meter module some instances, natural gas meters may need are placed on existing natural gas meters. In meter without having to enter your property. modified with remote-reading modules that All DTE Energy natural gas meters will be

llame al número siguiente: 800.477.4747 Si necesita esta información en español,

إذا كنت فتاج لهذه العلومات باللغة العربية. يرجى الاتصال على الرقم الثالي: 4747.474

Benefits of Advanced Metering

- register at **dteenergy.com** to find out how much energy you are using on a daily and even hourly basis. While on our website you can also sign up for ebill or other Access to your energy usage information – just convenient services.
- length of power outages and other problems. If you have automatically receives a signal when the new advanced a power outage, please still call us at 800.477.4747 to makes it easier for us to quickly locate and reduce the get a restoration estimate. Always call us if you see a Automatic power-outage detection – our system meters aren't working or have been removed. This downed wire.
- upgrade that require your electrician to temporarily remove the electric meter, please notify us at least — If you're planning home renovations or a service 30 minutes in advance by calling 800.477.4747.
- advanced meters is above 99 percent. This means you'll Fewer estimated bills – our meter reading rate for be receiving bills each month, based on actual - not estimated use.
- Increased convenience and privacy our meter readers won't need to enter your yard or business to read the meter.
- such as solar power, and plug in electric vehicles, into Better integration of renewable energy sources the electric system.

Learn more

For more on advanced metering, visit dteenergy.com/advancedmeter





Connecting you to cost savings, convenience and more...

ADVANCED METERING



11-0414/xx/xxM/02-13

Installation

DTE Energy employee. The installer will have identification installed by either a contractor working on our behalf or a The new electric meter or natural gas meter module will be that shows he or she is a representative of DTE Energy. You do not need to be hame if the electric and/or gas meter is outside and accessible. If the meter is inside your home, an adult must be present during installation.

- Electric meter installation A brief, approximately five-minute interruption of your power will occur.
- Natural gas module installation No interruption of service is needed for installation of the natural gas

Meter reading

Until installation is complete in your area, a meter reader will continue to read the meter. Your billing cycle will not change.

screen beginning with the code 004. This screen shows your meter communicating to our operating and billing systems kilowatt hour meter reading. The other displays show the over a secure radio network. A video describing how to instead of dials. To read the meter, simply look for the The new advanced electric meter has a digital display read the new advanced electric meter is available on The method for reading the natural gas meter will not change.



How advanced metering works



The Meter

New advanced meters, which can be read remotely, are installed



Communications Network

energy usage information to us via a secure communication network. The meter will transmit your



Our Billing System

technology will virtually eliminate Meter data is sent to our billing system. Advanced metering estimated bills



Your Energy Bill

generated using the information Your monthly utility bill is sent to our billing system.



Energy Usage Manage Your

monitor and manage your energy Once installation in your area is complete, you will be able to usage information online.



Q. Will I have to pay for the new meter or module?

owned equipment, you will be responsible for the cost to A. No, there is no charge for the meter or installation. If any fix the problem before the advanced meter installation electric or gas service issues exist on your customercan take place.

Q. Who is the installer and how can I be certain this person is authorized to do the work?

requests money for the meter, modules and/or installation report to DTE Energy anyone posing as an installer who representative of DTE Energy. You should immediately A. The new electric meter or natural gas meter module will be installed by a contractor working on behalf of DTE Energy or a DTE Energy employee. The installer will have identification that shows he or she is a Call us at 800.477.4747.

Q. Are there any health hazards associated with the new technology?

frequency, comparable to a cordless telephone. All A. No. The equipment operates at a low-power radio equipment operates in compliance with state and federal communication standards.

wireless access to any personal information, such as O. While reading the new meter, will DTE Energy have data stored on my home computer?

to your confidential personal information stored on your home computers. This technology does not invade your A. No, the network being installed will not give us access privacy, which we respect





(ECHNOLOG) DVANCED N

The installation was natural gas meter module was installed at Today, a new advanced electric meter or completed at no charge to you. your home or business.



This new technology was installed as part of DTE Energy's advanced metering program. We're system in Southeastern upgrading the electric Michigan, so we can offer our customers new programs and

Natural Gas meter module Installed

Electric meter Installed

Will be installed at a later date

■ Not applicable

Why is DTE Energy installing the new meters?

use and billing data between your home or business and DTE Energy This new technology allows for two-way communication of energy Your energy use is recorded each day and sent to DTE Energy over business for new tools to use energy efficiently and effectively Upgrading the meter is a first step in preparing your home or a secure communication network. This process enables new capabilities for you.

in your area, you'll enjoy the following benefits: When advanced meter installation is complete

a daily and even hourly basis. This data will help you define the dteenergy.com to find out how much energy you are using on Access to your energy usage information – just register at steps you can take to lower your energy bills.

- outages and other problems. Please continue to report downed Automatic power-outage detection – our system makes it easier for us to quickly locate and reduce the length of power power lines online at dteenergy.com/outage or by calling 800.477.4747
- If you're planning home renovations, or a service upgrade, that requires your electrician to temporarily remove the electric meter, please notify us at least 30 minutes in advance by calling 800.477.4747
- meters is above 99 percent. This means you'll be receiving bills Fewer estimated bills – our meter reading rate for advanced each month, based on actual – not estimated – use.
- Increased convenience and privacy—ourmeter readers won't need to enter your yard or business to read the meter.
- Better integration of renewable energy sources such as solar power, and plug in electric vehicles into the electric system.

Meter reading

- A meter reader will continue to read the meter until installation is complete in your area. Your billing date will not change.
- of dials. To read the meter, simply look for the screen beginning with the code 004. This screen shows your kilowatt hour meter reading. The other displays show the meter communicating to The new advanced electric meter has a digital display instead A video showing how to read the new advanced electric meter our operating and billing systems over a secure radio network. is available on our web site.
- The method for reading the natural gas meter will not change.

Learn more

 If you would like to learn more about the new meter, visit dteenergy.com/advancedmeter



DTE Energy

llame al número siguiente: 800.477.4747 Si necesita esta información en español,

إذا كنت ختاج لهذه الملومات باللغة العربية. يرجى الاتصال على الرقم التالي: 800.477.4747 Having trouble viewing images? Please click here to view as a web page.

To ensure future delivery of e-mails, please add MyDTE Energy (mydteenergy@dteenergy.com) to your safe sender list or address book.



Dear %%Customer name%%:

Through its SmartCurrentsSM initiative, DTE Energy is investing in and developing smart grid technologies. This effort is part of our commitment to building a stronger, smarter, and more efficient electrical infrastructure.

As part of that effort, an advanced meter was recently installed at your home. This new meter allows you better access to tools and information to help you manage your energy use.

Your personalized energy data is now available!

Find out when and how much energy you are using on a daily basis.

It's easy to access your energy data!

Just sign in at <u>dteenergy.com</u> and select the "Bill Analyzer" link on the left side of the MyAccount page. You'll have access to your "My Energy Usage" chart.

Not registered yet? Use the "Register" link in the box at dteenergy.com to create your online account. Have questions about how to register? Go to our Video Help Center.

Get more information on SmartCurrents.

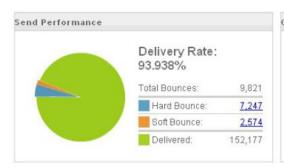
This email was sent to: %%emailaddr%%

This email was sent by: DTE Energy One Energy Plaza Detroit, MI 48226-1279 USA

We respect your right to privacy - <u>view our policy</u>
Update my Account Information | E-mail MyDTE Energy Customer Service

This is an automated message; please do not reply to this e-mail.







wing: Current A	ctivity				
	Total	Unique			
Opens	75,535	48,939	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	32.159%	
Clicks	12,492	10,987	7.22%		
Forwards	0	0	0%		
Conversions	0	0	0%		
Surveys	-	0	0%		
Unsubscribes		96	0.063%		



SmartTrivia

How many homes own more than one fridge?

- More than 23%
- More than 30%
- More than 48%



Celebrating our one year anniversary

In Just a couple weeks, the SmartCurrents program will reach its one-year anniversary, and we want to thank you for your participation! Your experiences and feedback are helping us understand what equipment works (or doesn't work) in real life situations, and how you are applying the Dynamic Peak Pricing rate and oring tools to control your energy bill.

Tell us your SmartCurrents story.

You could receive a \$50 VISA gift card!



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energy use habits when a Critical Peak event occurs?

Important Critical Peak

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charge my phone. We switched to CFL bulbs in the house and do the

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PLAY>LEARN>WIN

"I've really been enjoying playing the new SmartCurrents Play>Learn>Win game. The 'Bring it Out in the Wash' game helped me realize I had a bad laundry habit. Every morning I run my dryer to fluff and warm clothes that are already dry. One of the questions Inspired me to change since a dryer uses so much energy. By eliminating this bad habit I will be saving both energy and \$/* ... Crystal L., W.

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SmartCurrents Help Center for billing and program questions 855.836.6702 Mon. - Frl. 8 AM - 6 PM Sat. 8 AM - 2 PM



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PLAY>LEARN>WIN Learn a little. Save a lot.

powered by @ringoron

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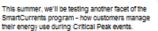
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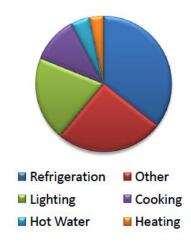
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Save Energy and Money

Visit this page regularly to find energy saving advice, rebate offers and special promotions.

This month's energy tip



Of all the electric appliances and devices in your home, your refrigerator is probably the only one that runs 24/7 – making it a major energy consumer in your home. Check it out for yourself at Analyze my bills. You'll find your household's energy use pie chart in the right column.

According to a study conducted by the National Association of Homebuilders, the average refrigerator lasts up to 13 years. If your refrigerator was purchased on or before 2000, you could **save \$200 to \$1,100** over a five year period by replacing it with a more energy-efficient model.

Use the ENERGYSTAR®
Savings Calculator to estimate how much money you could save by replacing your existing refrigerator.

Refrigerators – when to shop, what to look for

While September and October are often the best months to buy major appliances (new models are unveiled and current models discounted), refrigerators are an exception.

Most manufacturers roll out their new models in the summer. This means that last year's models get discounted right now, during the spring.

More tips for timing your shopping...

- Holiday weekends You'll often find sales during any major holiday weekend.
- End of the month -- As many appliances are sold on commission or subject to quotas, the end of the month can be an excellent time to negotiate serious savings. With that said, always try to negotiate regardless of what time of the

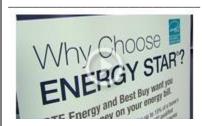


There's a better way to ditch an old fridge

Earn an easy \$40 >



See how your refrigerator is recycled



See how ENERGYSTAR® ratings help you save on major appliances

Do you want a Play Learn Win promo?

- month it is. After all, the worst that can happen is they won't lower the price.
- Weekdays -- The store parking lots are jammed, the sales people are all busy and you may feel rushed into a decision. To get the best deal, make time for your appliance shopping during the week, even if that means adjusting your work schedule or going in the evening. You'll get more attention from the salesperson, and possibly a better deal to boot.

A refrigerator is a major purchase, so take some time to do your research before you buy. Know the features and prices of the current models and the average sales price at several local stores.



Keep these additional shopping tips in mind...

Look for an ENERGYSTAR model.
ENERGYSTAR qualified refrigerators are 15% more efficient than non-qualified models and are 20% more efficient than models that simply meet the federal minimum standard for energy efficiency.



- Check the yellow Energy Guide label. Use this label to determine the model's energy use, compare the energy use of similar models, and estimate annual operating costs. <u>Learn</u> How to Use the Energy Guide Label.
- Purchase an appropriately sized refrigerator.
 Generally, the larger the refrigerator, the greater the energy consumption. The most energy-efficient models are typically 16–20 cubic feet. Also make sure the space you have for an appliance is big enough to fit it, including room to open the door fully and
- Consider buying a refrigerator with a topmounted freezer and/or skipping the icemaker and dispenser.

appropriate clearance for ventilation.

In general, refrigerators with top-mounted freezers use 10–25% less energy than refrigerators with either side-mounted or bottom-mounted freezers. Automatic ice-makers and through-the-door dispensers increase energy use by 14–20%. They also raise the purchase price by \$75–250. However, there is a large degree of variation depending on the size of a given refrigerator/freezer, its defrost type, and whether the model has through-the-door ice. See ENERGYSTAR's comparison chart.

What should I do with my old refrigerator?

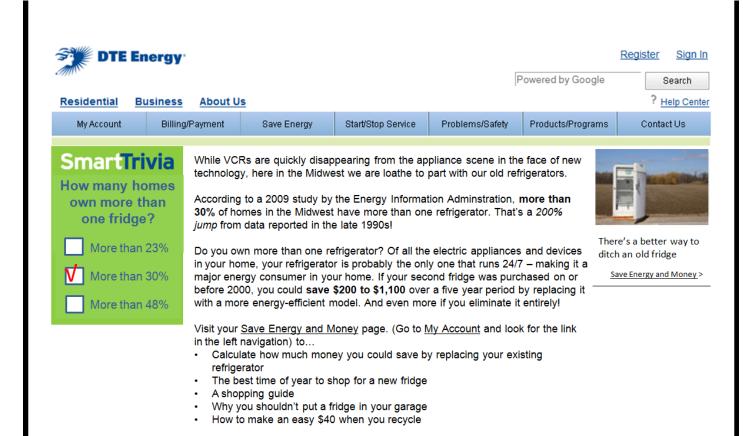


Avoid the temptation to place that old refrigerator in the basement or an uninsulated garage. After all, the point here is to save energy and save money!

A refrigerator in an uninsulated garage will require a lot more energy to run during the hot summer months and may not operate correctly if the temperature gets too cold. A refrigerator in a 90 degree environment will use 45-50% more energy than one in a 70 degree environment.

Instead, recycle it! DTE Energy will pick up your old refrigerator for free AND pay you \$40 for it. Your fridge will be safely recycled. Watch the video to see how.

SmartTrivia page





Date

«CUSTOMER» «MailAddress» «MCity», «MState» «MZip»

Subject: SmartCurrents Pilot: Dynamic Peak Pricing Critical Event - Notification System Test Planned

Dear SmartCurrents Pilot Partidipant:

As summer approaches, we would like to remind you that a key component of our Pilot Program is the Dynamic Peak Priding rate's Critical Peak Price (CPP) Event. Dynamic Peak Pricing Critical Event is a "Demand Response" mechanism to help reduce electricity use during periods of high demand.

As a refresher on the Dynamic Peak Pricing's CPP Event:

- Up to 20 Critical Peak events may be called in a calendar year, with notice by 6pm the day before.
- Critical Peak events may be called Monday through Friday, for the On Peak hours of 3-7pm
- The Power Supply Charge during a Critical Peak Event is \$1.00/kWh.

The Department of Energy (DOE) is very interested in customer response to this experimental time of use rate, especially around Critical Peak Price Events. Only one CPP event was called last August, so we need to plan for additional events this summer to gather sufficient customer behavior information as part of our reporting obligation to the DOE.

We are planning a <u>CPP Event NOTIFICATIONS TEST on Thursday May 9, 2013</u>, before the summer cooling season is upon us. This TEST is important to assure that the notification process—automated voice, text and/or email message—is working properly. This is a test of the notifications processonly; your billing will not be affected.

If you have GE Nucleus, your desktop client and connected devices will display red Critical Peak indicators on Friday, May 10. Again, billing will not be affected.

If you would like to verify or change CPP notification preferences associated with your account, or you have any questions, please contact us at 855.836.6702.

Thankyou for participating in our Pilot Program.

Sincerely,

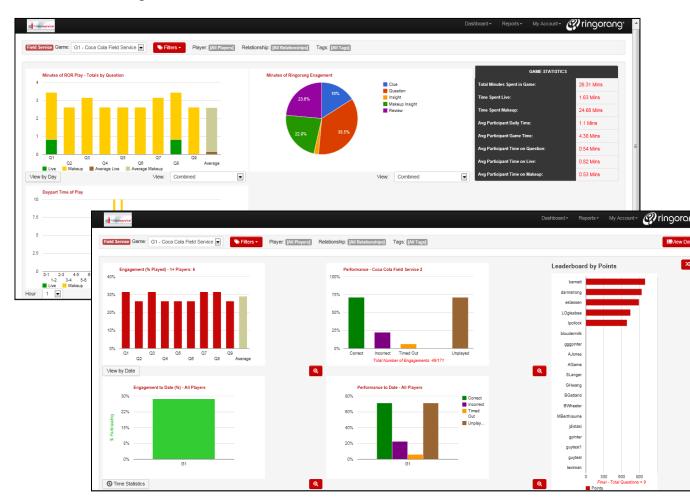
SmartCurrents Pilot Team 855.836.6702 Mon – Fri 8:00 am to 6:00 pm

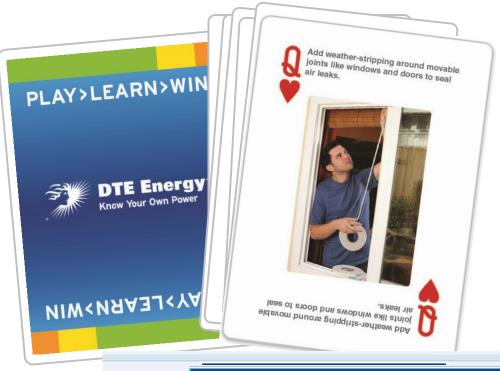




Games Statistics Report

Game	Subscribed	Installed	Played 1+	Played All	Correct	Incorrect	Answered	Unanswered	Live	Makeup
Bring it Out	325	184	59.3%	43.1%	83.0%	17.0%	37.3%	62.7%	9.3%	90.7%
Stop Those Leaks!	326	209	63.7%	38.7%	87.8%	12.2%	36.4%	63.6%	14.1%	85.9%
Steer Clear	326	230	57.7%	39.1%	80.8%	19.2%	34.4%	65.6%	17.6%	82.4%
Connecting: Part 1	326	233	55.6%	41.5%	90.7%	9.3%	35.3%	64.7%	16.4%	83.6%
Some Light	328	241	58.1%	37.5%	71.1%	28.9%	34.8%	65.2%	15.2%	84.8%
Comfort Factors	345	250	57.6%	12.3%	89.4%	10.6%	31.9%	68.1%	13.8%	86.2%
Daily Tools	349	256	48.8%	34.0%	71.8%	28.2%	31.4%	68.6%	17.4%	82.6%
Connecting: Part 2	364	270	52.6%	34.8%	84.1%	15.9%	33.6%	66.4%	14.3%	85.7%









PLAY > LEARN > WIN

Learn a little. Save a lot.



Partic

April

Bring it Out in the Wash

PLAY!

Stop Those Leaks!

Which of these statements is FALSE?

- 1. Heating the water is 90% of the energy used to wash clothes.
- 2. Running heat-generating appliances like your dryer during the day can make your air conditioner work harder.
- **3.** A clothes dryer uses 10 times **less** energy than a washing machine.

Circle the following words in the grid.

DOORS WINDOWS DUCTWORK WASTE SEAL

LEAKY	A	D	U	С	Т	W	0	R	К	Р
DOODC	Т	н	х	М	W	F	D	U	К	G
DOORS	J	Α	S	S	W	0	D	N	1	W
NDOWS	T	Z	В	К	0	U	J	R	А	Q
rwork	L	G	Υ	R	S	Q	Х	z	М	С
WORK	А	К	S	К	Е	Т	К	N	С	F
WASTE	К	М	А	С	Α	U	L	К	D	N
SEAL	W	٧	Т	Z	L	Е	Q	0	N	U
JLAL	٧	L	Q	Е	Q	н	L	٧	Α	W
	Т	К	Е	Т	S	Α	W	J	F	w

Find the 5-character hidden word (an "inexpensive leak sealer") and enter it below.

ANSWER 2:

ANSWER 1:

The Dish on Dishwashers

LEARN! Seal Out Leaks, Seal in Savings

Scrape, don't rinse

Modern dishwashers do a great job even with very dirty dishes. If you must rinse, use cold - not hot - water.

Wash full loads

Dishwashers use the same amount of water no matter how many dishes are in the rack.

Use energy-saving cycles

Skip the "sani-wash." Choose the energy saver cycle and air-dry features.

Air dry dishes

You can save up to 50% of the energy used during a dishwashing cycle by air-drying. If you don't have an air-dry option, just open the door when the rinse cycle completes.

Taking the time to caulk, seal, and weatherstrip inside your home can significantly reduce energy waste - and your energy bills.

- Sealing air leaks is the most cost-efficient way to reduce energy waste.
- Leaky ductwork can result in the loss of 10% of conditioned air flowing into your home.
- Door sweeps are an inexpensive way to stop air leaks around doors.
- Small air leaks can be the cause of significant energy waste - seal them with caulk.



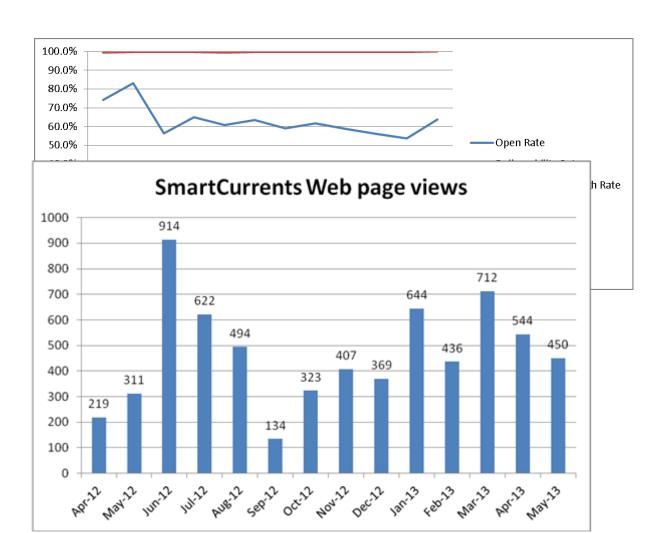








					Delivera	Unique	
			Emails	Open	bility	Through	All click
Month	Subject Line	Date/Time Sent	Sent	Rate	Rate	Rate	thrus
Jun-12	About Your SmartCurrents Program	6/15/2012 11:45AM	852	74.3%	99.4%	27.7%	335
	SmartCurrents Energy Tip - Fans OR						
	SmartCurrents Critical Peak - What you						
Jul-12	should know	7/26/2012 3:46 PM	1281	83.1%	99.6%	25.8%	442
Aug-12	A Peek into Energy's Future	8/22/2012 3:16 PM	1342	56.4%	99.8%	6.0%	105
Sep-12	SmartCurrents - Fall Savings	9/19/2012 8:04 PM	1419	64.9%	99.6%	9.5%	162
Oct-12	SmartCurrents - Vanquish Energy Vampires	10/18/2012 3:15 PM	1460	60.7%	99.3%	15.8%	329
Nov-12	SmartCurrents-The Heat is On	11/15/2012 11:13 PM	1445	63.4%	99.8%	20.6%	388
	SmartCurrents Energy Tip - Santa Bay, a						
	new TV, for me OR SmartCurrents - Handy						
Dec-12	tool measures savings	12/12/2012 7:01 AM	1440	59.0%	99.8%	18.4%	337
Jan-13	SmartCurrents-Share a Story, Get a gift card	1/18/2013 2:30 PM	1433	61.8%	99.8%	12.1%	254
	SmartCurrents – Get connected to save						
	energy and money OR SmartCurrents – It						
Feb-13	takes a family to save	2/12/2013 7:21 AM	1435	58.8%	99.8%	11.4%	163
Mar-13	SmartCurrents - Awareness is half the battle	3/19/2013 4:01 PM	1433	56.0%	99.8%	13.0%	186
	SmartCurrents - Making Savings a habit (T1,						
	P2, T3) OR He's Saving up to 10% a month						
Apr-13	(T2, T4, S1-3)	4/16/2013 1:01 PM	1429	53.6%	99.7%	9.1%	167
	SmartCurrents - Important Critical Peak						
May-13	News	5/14/2013 11:09 AM	1423	63.7%	100.0%	10.0%	179
AVERAGE:				63.0%	99.7%	15.0%	254





Statistic	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
Rate Comparison				2012				2013					
Total Number of Sessions	23	25	16	6	17	12	81	19	3	4	5	5	216
Total Number of Users	16	25	14	5	16	11	76	17	3	3	5	5	196
Total New Users	12	19	11	3	13	5	70	13	0	1	2	2	151
Total Return Users	7	6	5	2	4	7	11	6	3	2	3	3	59
Total Page Views	27	29	17	6	18	13	105	23	3	4	5	7	257
Average Session Time(min)	3	3	2	4	2	3	2	4	4	4	4	3	38

Note: DTE web platform changeover in summer of 2013 has posed a challenge to producing web statistics for the SmartCurrents portal, as the portal pages are "hidden" on dteenergy.com and were not detected in the pre-change-over website "sweep."

Appendix E: Marketing Materials



Month DD, YYYY

Your Survey ID:

296784321

Ms. FName LNameSample 123 Pilot Street Anytown, MI 48000-T

Dear Ms. Sample:

DTE Energy is pleased to invite you to be part of a landmark study of the future of electricity in the U.S. We are one of a select group of electric utility companies in the nation working with the U.S. Department of Energy on this 2-year effort.

Under the SmartCurrents Pilot Program, DTE Energy will give participating customers new tools for managing their power usage, along with options for saving money by choosing to use electricity during lower-cost periods.

The first of these new tools is already working for you. We recently equipped your home with an advanced meter, which allows you to track your daily usage information via the Internet so you can better manage your energy costs.

In the next phase of the SmartCurrents Pilot Program – beginning just a few weeks from now – those DTE Energy customers who are selected and choose to enroll will be among the first to benefit from a new electricity rate called Dynamic Peak Pricing. This tiered rate gives you the opportunity to save money by using electricity when costs are lower. To help you take advantage of this new rate, you will have exclusive access to online tools that show you exactly how much energy you're using and how much it's costing.

You may also be selected to receive at no charge either or both of these devices:

- A General Electric Programmable Communicating Thermostat with Brillion™ technology, which you can set up to make automatic adjustments to help minimize your bill as electricity rates change throughout the day.
- A portable In-Home Display that shows you how much electricity you're using and how much it's costing.

Again, if you're selected to receive them, these devices are yours free, in exchange for your commitment to complete the initial survey and four brief follow-up surveys you'll receive throughout the program.

Space is limited to just 1,000 customers, so please take a moment now to respond. The choice is yours: there's no obligation to participate, but we hope you're as interested in this opportunity as we are. As a special bonus, all customers who enroll in the pilot will receive an Entertainment® card worth up to \$100 in savings on shopping, dining and more.

It's easy to get started today. Simply visit www.msisurvey.com/SmartCurrents on the Web and enter the Survey ID printed above. If you have questions, call toll-free 855-836-6702.

Sincerely.

Shaun E. Summerville SmartCurrents Manager

P.S. Remember: <u>all customers who enroll receive an Entertainment® card worth up to \$100 in savings</u>, but you must reply before May 20, 2012 by visiting www.msisurvey.com/SmartCurrents on the Web today (you'll need the Survey ID printed above). This invitation is intended only for your household and may not be transferred to any other address. Questions? Call toll-free 855-836-6702.



Frequently Asked Questions

Q. What is SmartCurrentssM?

A. SmartCurrents is DTE Energy's smart grid solution for our customers across Southeastern Michigan. We are developing a high-tech electrical infrastructure that will include upgrades to meters and electrical circuitry and will open the door to new smart home technologies. The goal is simple: giving you easy-to-use tools that help you control how much electricity you consume as we work to make sure our region has all the energy it needs for the future.

Q. Why am I being asked to participate in the SmartCurrents Pilot Program?

A. DTE Energy is working to better understand how residential customers like you can take an active role in controlling their energy use while keeping their energy bills as low as possible. We need your help to determine which tools and programs are most beneficial.

Q. Do I have to participate?

A. No. The program is voluntary. You are under no obligation to participate if selected.

Q. If I am selected for the program and receive equipment, will I have to install and setup my own equipment?

A. If you are selected to participate in the program, you will make an appointment to have your equipment installed by General Electric at your convenience. After your equipment is in place, you will have to install Energy Management software on your computer and use the software to setup communication between your advanced meter and any "smart" devices you receive, such as a Programmable Communicating Thermostat (the In-Home Display requires no installation – if you receive one, simply plug it in and register it using the software). You will receive step-by-step instructions and will be able to call Technical Support for help.

Q. How does Dynamic Peak Pricing work?

A. New advanced meters, which can measure and report usage on an hourly basis, allow DTE Energy to offer a rate that better reflects the cost of generating and supplying electricity throughout the day. That means you will be charged different amounts for the electricity based on the time of day you use it. This gives you the opportunity to save money by choosing to use electricity when the rates are more economical.

f Q . How do the rates for the DTE Energy Dynamic Peak Pricing Plan compare to current rates?

A. Current Residential Rates': First 17 kWh per day 6.912¢ per kWh; additional kWh 8.257¢ per kWh

Dynamic Peak Pricin	g Rates"			
7 am - 3 pm	3 pm – 7 pm	7 pm – 11 pm	11 pm - 7 am	Saturday, Sunday and
Mid-peak	Peak	Mid-peak	Off-peak	designated Holidays*
7¢ / kWh	12¢ / kWh	7¢ / kWh	4¢ / kWh	Off-peak all day
	(\$1.00 per kWh if Critical Peaks)			4¢ / kWh

Plus \$6.00 per month service charge, 5.003¢ per kWh distribution charge.

Q. How much does it cost?

A. Nothing. Your participation is totally free, and when the program is completed, you may keep the energy-tracking devices we provided or installed.

Q. Is it true that advanced meters allow the electric company to control how much energy I use throughout the day?

A. No. Advanced meters and the smart grid in general are designed to give you, the energy consumer, a better understanding of how you're using electricity, how much the electricity is costing, and how you can save money by making small changes when you use power throughout the day. Tools like GE Brillion equipped thermostats can make this process easier by allowing you to control when you consume energy based on when it's most economical. This gives you one less thing to think about – and you'll always have the option of overriding the automatic adjustments based on your personal preference.

Q. How do I get involved?

A. It's easy: visit www.msisurvey.com/SmartCurrents on the Web and enter your Survey ID from the front of this letter. You'll complete a brief questionnaire, and then – if you qualify – a short survey. If selected for the program, you will be asked to participate in a small number of follow-up surveys over the next 2 years. Remember: space is limited, so it's important to respond as soon as possible, and no later than May 20, 2012.

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T-43K-512

^{**} Plus \$8.78 per month service charge, 3.813¢ per kWh distribution charge.

Weekends are off-peak, from 11 pm Friday until 7 am Monday. Holidays are off-peak, from 11 pm the night before to 7 am the following day. For this rate, recognized holidays are: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. "Monday" holidays, where logally recognized, will be recognized in place of the "traditional" holidays.

Critical Peak Days will be announced 1 day in advance and will occur for a preset period within the 3-7 pm window.

These events will occur no more than 20 times per year for no more than 4 hours at a time, or less than 1 percent of the total hours per year.





DTE Energy SmartCurrents™ Pilot Program

A Message From Steve Kurmas, President & COO Join US in Shaping the Future of Energy Use

A Personal Invitation to Help Shape the Future

As a result, we are consuming more power all the time.



What's the best way to ensure we'll have an ample supply to take advantage of all the opportunities the future holds? Closer to home, what simple actions can you take to keep your own energy bill as low as possible?

DTE Energy is one of a select few electric utility companies working with the U.S. Department of Energy to answer these questions.

Now, we're inviting you to help.

umes

Steve Kurmas President & COO **SmartCurrents**

An Exclusive Package of Benefits for You

You may be selected at random to receive at no charge:

- A portable in-Home Display that shows you how much electricity you're using and how much it's costing.
- A General Electric Programmable Communicating Thermostat with BrillionTM technology, which makes automatic adjustments to keep you comfortable and minimize your bill as electricity rates change throughout the day.

The deadline is May 20, 2012 ... So get involved today!

 Visit www.msisurvey.com/SmartCurrents on the Web and enter the Survey ID on the enclosed letter to get started.





T1K-4-12

Smart Moves: New Ways to Minimize Your Energy Bill

The SmartCurrents**Pilot Program is a cooperative venture between DTE Energy and a group of randomly selected residential customers, exploring new ways to conserve energy and control costs.

Your part is simple, yet critical. If you are accepted into the program and choose to participate, over the next 2 years you'll use innovative energy rate plans, online | tools and smart energy technology to learn how to cut your electricity use and minimize costs – with almost no effort at all. New technologies are making it possible for your thermostat to adjust automatically and consume power when the cost is lowest. Having new tools makes it easier to track your daily usage and take actions that may save both energy and money.

Be Among the First ... Make a Lasting Difference

DTE Energy







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SmartCurrents Pilot Agreement

This SmartCurrents Pilot Agreement (the "Agreement") is entered into by and between The Detroit Edison Company (the "Company") and the Customer that provided his/her respective information on DTE's SmartCurrents Pilot Agreement eForm (the "Customer"). The effective date of this Agreement is the date the Customer clicked the Submit button on the SmartCurrents eForm.

The Customer desires to enter into this Agreement with the Company for the purpose of participating in the SmartCurrents Pilot Program, which includes enrolling in the Dynamic Peak Pricing Rate ("DPP"), installation of the IN HOME DISPLAY ("IHD"), PROGRAMMABLE COMMUNICATING THERMOSTAT ("PCT"), Nucleus, or Nucleus Software. Company shall select and supply equipment. As consideration for the use and installation of the equipment, the parties agree as follows:

- Qualifications: The Customer must meet the following conditions to participate in the program:
 - Customer certifies that it is the owner of the Property where the PCT, IHD and NUCLEUS will be installed.
 - Customer agrees to participate in Company's Dynamic Peak Pricing Rate (DPP) and remain on the rate from the date on enrollment in the program until December 2013 (Pilot Period).
 - Customer agrees to have a working broadband internet connection and router throughout the Pilot Period.
 - Neither Customer nor any person residing in the Customer's house may be an employee of one of the following General Electric (GE) competitors: AB Electrolux, Belkin International, Inc., Control4 Corporation, EnergyHub, Inc., LG Corporation, Samsung Group, Tendril Networks, Inc., and Whirlpool Corporation.
 - Customer agrees to schedule and accept delivery of in home devices. Company will pay for delivery
 of the equipment.
 - Customer agrees to accept and install the Nucleus and Nucleus software that will be mailed to
 Customer by GE. The Nucleus software is used to register the PCT and IHD and can be used to
 monitor energy used by registered devices on the Customer's personal computer. Each Customer
 installation of the Nucleus software requires Customer acknowledgment and agreement of GE's
 Privacy Policy for Customer's personal information and GE Energy Usage Privacy Policy. Information
 on these policies will be displayed on the Customer's personal computer, when installing the Nucleus
 software.
 - Customer agrees not to tamper with or reverse engineer the PCT, IHD or Nucleus.
 - Customer agrees not to provide the PCT, IHD or Nucleus to a third party except in connections with a lease, sale or other transfer of the Customer's residence.
 - Customer agrees to share with GE and Detroit Edison its whole home energy usage data ("Pilot Data")
 during the Pilot Period. Pilot data will be securely transmitted via the Nucleus to the GE server for
 storage and internal analysis only.
 - Customer agrees to participate in consumer research including but not limited to periodic surveys (in 3 interim surveys and one final survey), focus groups, in-person interviews or online panels.
- Term: The term of this Agreement shall begin as of the date that the PCT, IHD and Nucleus is delivered to the Customer and continue through the Pilot Period, unless sooner terminated by Company upon seven (7) days prior notice of same.
- Customer Relocation: If Customer moves, he/she will be removed from the SmartCurrents Pilot Program.
- 4. End of Program: At the end of Pilot Period Customer can either terminate or remain on DPP rate.
- DISCLAIMER OF WARRANTY: CUSTOMER UNDERSTANDS AND AGREES THAT COMPANY DOES NOT WARRANT IN ANY WAY THE PCT, IHD OR NUCLEUS INSTALLATION OR THE PCT, IHD OR NUCLUES OR THE

SERVICES PROVIDED IN CONNECTION WITH THE EQUIPMENT INSTALLATION AND THAT ALL SUCH EQUIPMENT AND SERVICES SHALL BE ACCEPTED "AS IS" WITH RESPECT TO COMPANY AND THAT COMPANY IN NO WAY WARRANTS THE PERFORMANCE OF THE EQUIPMENT. CUSTOMER UNDERSTANDS AND ACKNOWLEDGES THAT ANY AND ALL OBLIGATIONS WITH RESPECT TO WARRANTY OF THE EQUIPMENT SHALL COME FROM THE PRODUCT MANUFACTURER.

- 6. LIMIT OF LIABILITY AND RELEASE: CUSTOMER AGREES AND ACKNOWLEDGES THAT IN NO EVENT SHALL DTE ENERGY COMPANY, OR COMPANY BE LIABLE, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, WARRANTY OR OTHERWISE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, CONNECTED WITH OR RESULTING FROM THE PCT, IHD OR NUCLUES INSTALLATION OR THE PCT, IHD OR NUCLUES. ACCORDINGLY, CUSTOMER HEREBY RELEASES, HOLDS HARMLESS AND DISCHARGES DTE ENERGY COMPANY, COMPANY, AND THEIR SUBSIDIARIES, AFFILIATES, AGENTS, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES, CONTRACTORS, AFFILIATES, SUCCESSORS IN INTEREST AND ASSIGNS FROM AND AGAINST ANY AND ALL CLAIMS OF WHATEVER NATURE ARISING IN CONNECTION WITH OR ASSOCIATED WITH THE PCT, IHD OR NUCLUES. SOME STATES DO NOT PERMIT THE EXCLUSION OR LIMITAIONS OF IMPLIED WARRANTIES AND/OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS THAT VARY FROM STATE TO STATE.
- 7. <u>Miscellaneous:</u> In the event that any term or provision of this Agreement shall be held to be invalid, void or unenforceable, then the remainder of this Agreement shall not be affected, impaired or invalidated, and each such term and provision of this Agreement shall be valid and enforceable to the fullest extent of the law. This Agreement is entered into and shall be governed by and construed in accord with the laws of the State of Michigan, without regard to the conflict of laws provisions thereof. Customer shall not assign this Agreement or any of the rights and duties contained herein to any third party without the prior written consent of Company.
- THIS AGREEMENT CONTAINS THE ENTIRE AGREEMENT OF ALL THE PARTIES AND SUPERCEDES ANY PRIOR
 AGREEMENTS OR UNDERSTANDINGS AND MAY BE CHANGED ONLY IN WRITING, SIGNED BY BOTH
 PARTIES THAT SPECIFICALLY STATES THAT IS A CHANGE TO THIS AGREEMENT.

DTE Energy



Month DD, YYYYY

Thank you! Your \$100 savings card is enclosed...

Ms. Firstname Lastname 123 Any St. City, MI 48000

Dear Ms. Lastname:

You recently joined the DTE Energy SmartCurrents[™] Pilot Program, a landmark effort to explore the future of energy in the U.S.

As our way of saying "Thank you," we're pleased to pass along this Entertainment® card worth up to \$100 in savings on shopping, dining and more.

How It Works

Be sure to activate your card within 180 days of receipt!

- To begin, go to the Website listed on the front of the card and enter the account and passcode exactly as shown. (You will be asked to change the password.) Once you complete registration, your account will be activated.
- 2. Use the Website to search for participating merchants and locations by ZIP code.
- Click "Redeem Now" next to any offer you choose and follow the instructions to redeem.

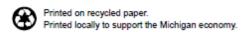
It's simple! You'll find savings up to 50% off along with 2-for-1 discount options at over 70,000 restaurants plus shopping and entertainment venues across North America.

Again, we appreciate your interest in helping us learn new ways to deliver a powerful future for Southeast Michigan!

Regards,

Shaun E. Summerville SmartCurrents Manager





Program Details

- ACTIVATION. THIS CARD MUST BE ACTIVATED WITHIN 30 DAYS OF RECEIPT. Once activated, you
 have one (1) year to redeem the value of this award ("Rward").
- 2. USE OF ANNARD. The necipient of this Award may use the value solely to obtain discount offices ("Others") on waww.discountidiringdellars.com ("Website"), subject to the terms and conditions found on the Website. After activating the Award on the Website, the value of the Award may be re-deemed for Offices that must be printed and redeemed at manchants and locations stated on the Office. The Award or Offices may not be used to pay remaining balances or changes at participating merchants after necessarptice of the Office. Four may also use your Discount Dising Delians to save on Dising Gift Cards (typically 10% off the face value of the gift card); the balance for Dining Gift Cards must be paid with a major credit card. Dining Gift Cards one purchase from the Website with the shipped to you offer your purchase and are subject to all terms and conditions noted in the product description for the applicable gift card located on the Website.
- 3. TERMS OF AWARD. He refunds will be provided for any unused parties of the Award. The value of this Award is not relocable. The Award is elif is not a gift cand or credit or debit card and it has no cash value. This Award, once activated, is ner-transferable. There are no fees associated with the redemption of this Award.
- 4. USE OF OFFERS. The Award may be used to obtain Offers found on the Website. You may not combine Award or any Offers found on the Website with any other award programs, certificates, promotions, coupons, special offers, special rate programs are any other discount programs whatseever. You must print Offers) found on the Website for redemption at participating merchants, Offers may only be printed once and are valid for 16 days from the date of printing, unless otherwise strated on the Offer, Offers are subject to availability, may be limited in scope, and may change without notice ("Rules of Use"). In some cases, merchant participation will vary by location. Check back frequently as participating merchants and changes.
- REDEIRPTION. When redeeming an Offer obtained from the Website, present your printed Offer before plotting your restaurant order or making your purchase. Discounts exclude tax, tip, alcohol and sale items, where applicable. Each Offer may be subject to different or additional terms and conditions which are identified on the Website and listed on each printed Offer.
- prince units.

 TERMS AND CONDITIONS. By activating this Award, the recipient consents to be bound by all terms and conditions set forth at the Website, and the Offer Rules of Use. The recipient signifies further agreement to those trems and conditions by printing Offers or purchasing Dining GRI Cards from the Website. Please see the Website for complete terms and conditions relating to this Award.
- PROMOTION/LOVALTY ANUARD. This product is for promotional/loyalty award use only; any aftermarket sale without the expressed written consent of Destination Rewards, Inc. and Entertainment Publications LLC shall vaid the Award and Offeris) completely.
- 8. VALIDITY. THIS AWARD IS NOT VALID WHERE PROHIBITED BY LAW

How to use:

- Go to the Website listed on the front of this card and enter the account and password exactly
 as shown. (Please note: You will be asked to change the password).
- 2. Complete registration and your account will be activated.
- 3. Enter a zip code to swarch for participating merchants and locations. Each dirring Offer available for that zip code and the amount of Discount Diring Dollars necessary to obtain such Offer will be displayed. To obtain an Offer, select "Redeem Now" and the print command window will appear for you to print your Offer to be redeemed occording to the Rules of Use. The amount of Discount Diring Dollars used for each Offer printed will be debited from your account belance. For Diring Qift Cards, you will need to pay the balance owed with a major credit card. The value of this Award may not be redeemed for cash.





discountdiningdollars.com

search, print, save.

- Over 70,000 restaurants nationwide
- · Savings up to 50%
- 2-for-1 discount coupons
- BONUS! Includes shopping and entertainment offers

Log on to start saving!



Delicious discounts \$100 Dining Dollars

discountdiningdollars.com

search, print, save.

This award will expire one year from activation.

Account:

8998-0218-8038

Passcode: 4ACO

@ entertrinment

DTE Energy Company One Energy Plaza, 1274 WCB, Detroit, MI 48226-1221

DTE Energy

Month DD, YYYYY



Ms. Firstname Lastname 123 Any St. City MI 48000

Dear Ms. Lastname:

Thank you for your interest in the DTE Energy SmartCurrents® Pilot Program.

Unfortunately, you were not among the residential customers randomly selected for this program, we very much appreciate that you took the time to apply. The enclosed \$100 Discount Dining Dollars card is our way of saying "thank you."

This exclusive card is your key to savings of up to 50% and 2-for-1 discounts at popular restaurants everywhere (more than 70,000 in North America and hundreds here in Michigan). You'll also find discounts at many of your favorite stores and entertainment destinations such as theme parks and concert venues. You simply register your card online, find the discount of your choice, then print the coupon and go.

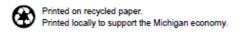
Your Discount Dining Dollars card makes it easy to save money on things you do every day. And making it easy to manage your energy usage and spending is the spirit behind the DTE Energy SmartCurrents Pilot Program. We've installed an advanced meter at your home as a first step. As we learn more about how to make today's newest energy-saving tools work for you, we'll keep you up to date.

In the meantime, we want you to know we appreciate having you as a customer. We will continue working hard to meet your energy needs and keep your costs as low as possible.

Regards,

Shaun E. Summerville SmartCurrents Manager









First Class Mail

Reminder from DTE Energy:

Time is running out on your exclusive invitation...

OPEN IMMEDIATELY |

-----FOLD LINE-------

DTE Energy

Deadline: June 20, 2012

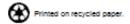


If you complete the qualifying survey by June 20th, and you are selected,

- You will benefit from the new DTE Energy "Dynamic Peak Pricing" rate plan, which rewards you with lower electricity rates for shifting usage to non-peak hours each day.
- You may also receive FREE "smart" devices including a Programmable Communicating Thermostat and/or a digital In-Home Display.

See details inside...





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Deadline to apply: June 20, 2012

Go to www.msisurvey.com/SmartCurrents
and complete
your brief survey
today!

Your Survey ID:

REMINDER: Your exclusive opportunity to help define the future of energy — only available to a limited number of customers

We recently invited you to participate in the exclusive DTE Energy SmartCurrents^{±M} Pilot Program but have not received your completed survey. There's still time for you to apply, but space is filling up fast. For your chance to join, you must apply by June 20.

If you complete the qualifying survey and are selected,

- You will be among the first DTE Energy customers to benefit from a new rate plan called "Dynamic Peak Pricing," which rewards you with lower electricity rates for shifting usage to non-peak hours (evenings, nights, weekends, holidays).
- You may also receive FREE "smart" devices such as a Programmable Communicating Thermostat and/or an In-Home Display to make it easier to see how much energy you're using and save even more.

Get started now.... It's easy

To apply, visit www.msisurvey.com/SmartCurrents on the Web to take the brief qualification survey. Be ready to enter the Survey ID printed above.

It's easy – but the deadline is almost here, and participation is strictly limited. Be sure to log in and complete the survey by June 20, 2012, for your chance to be selected.

Questions? Please call toll-free 855-836-6707.

Deadline to apply: June 20, 2012

Go to www.msisurvey.com/SmartCurrents and complete your brief survey today!

" Your participation in this study is voluntary; you are not required to participate, but we hope you'll join us. This invitation is intended only for your

household and may not be transferred to any other address.© 2012 DTG Energy. 48C_T-0 A_53225.Indd 2

6/6/12 1:39 PM

Getting Started: Tools and Tips





If you haven't already set up your account online at dteenergy.com, follow these steps:

- Register or sign in at dteenergy.com.
- Select Analyze My Bills on the left.

You'll be taken directly to the MyEnergy Analyzer, which shows hourly breakdowns of your energy usage throughout the day, helping you spot peaks and valleys and pinpoint opportunities to save. You can also compare energy usage by week or month.





To make the most of your pilot program experience, follow these recommendations:

When you first enter the MyEnergy Analyzer tool, complete a Home Profile under the My Energy tab. This will take about 15 minutes and will allow the Bill Analyzer to make detailed recommendations for saving energy.

At your earliest convenience, take a moment to visit dteenergy.com/saveenergy for energy-savings tips, and helpful energy efficiency calculators and videos.

SmartCurrents[™] Pilot Program Questions

Web: dteenergy.com (log in to your account)

Phone: Toll-free 855.836.6702 Mon-Fri 8:00 am to 6:00 pm Sat 8:00 am to 2:00 pm

Meter Binding: 313.235.6611 Mon-Fri 8:00 am to 7:00 pm

General Electric

Scheduling Deliveries: 866.401.8058 Mon-Fri 9:00 am to 8:00 pm

Sat 9:00 am to 6:00 pm GETechnical Support Center: 800,220,6899

Mon-Fri 9:00 am to 8:00 pm Sat 9:00 am to 6:00 pm

Web: www.gebrillion.com

Pilot Program Surveys

Web: msisurvey.com/SmartCurrents

Program Calendar

Tentative Survey Dates: September 2012

March 2013 September 2013 March 2014



Getting Started: Tools and Tips







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Web: www.gebrillion.com

Pilot Program Surveys

Web: msisurvey.com/SmartCurrents

Program Calendar

Tentative Survey Dates: September 2012 March 2013 September 2013 March 2014



Getting Connected





In the mail, you will receive:

- An In-Home Display (IHD) shows your energy usage in near real time along with costs.
- A Nucleus Energy Manager serves as the gateway for your Home Area Network. It allows DTE Energy to send prices and events to the home and allows for whole-home energy usage to be displayed on your personal computer.



Continued on Back



Getting Connected

To connect your devices, please follow these steps carefully:

- Install the software on the Getting Connected CD provided with the Nucleus.
 Or download the software at www.gebrillion.com/software.
- During the software installation, you will need to register your Nucleus with GE and you will be asked to share your data with GE. This is simply the energy usage information that you agreed to share in the Customer Agreement when you signed up for this pilot program. Please check "yes." You will only be sharing usage information directly related to this program.
- When the software prompts you to call your utility, call DTE Energy at 313.235.6611 (Monday-Friday, from 8:00 am to 7:00 pm) to "bind" your Nucleus to your meter. Binding allows your meter to communicate how much energy you are using with your Nucleus. NOTE: You will need the serial number for your Nucleus. It can be found on the back of the Nucleus box and printed on the label that came with the Nucleus. During the binding process, you may have to reset your router, so please make sure that you know any administrative password you have set for your router.
- With binding completed, go back to the Nucleus software and follow the directions to get the display talking to the Nucleus. Click the settings icon in the upper right-hand corner and select the product you want to connect.

For additional setup help, check the manuals that come with your devices.



Now you're ready!

Your smart devices will be working in the background, saving you energy whenever possible. And you'll have greater power and insight than ever to control your electricity usage.



Getting Started: Tools and Tips







If you haven't already set up your account online at dteenergy.com, follow these steps:

- Register or sign in at dteenergy.com.
- Select Analyze My Bills on the left.

You'll be taken directly to the MyEnergy Analyzer, which shows hourly breakdowns of your energy usage throughout the day, helping you spot peaks and valleys and pinpoint opportunities to save. You can also compare energy usage by week or month.





To make the most of your pilot program experience, follow these recommendations:

When you first enter the MyEnergy Analyzer tool, complete a Home Profile under the My Energy tab. This will take about 15 minutes and will allow the Bill Analyzer to make detailed recommendations for saving energy.

At your earliest convenience, take a moment to visit dteenergy.com/saveenergy for energy-savings tips, and helpful energy efficiency calculators and videos.

SmartCurrents™ Pilot Program Questions

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Web: www.gebrillion.com

Pilot Program Surveys

Web: msisurvey.com/SmartCurrents

Program Calendar

Tentative Survey Dates: September 2012 March 2013 September 2013 March 2014







In the mail, you will receive:

- A Programmable Communicating Thermostat (PCT) automatically adjusts temperature based on rates to save you energy and minimize your bill (with a manual override option).
- A Nucleus Energy Manager serves as the gateway for your Home Area Network. It allows DTE Energy to send prices and events to the home and allows for whole-home energy usage to be displayed on your personal computer.

Important Note:

The PCT will be installed by a GETechnician.



If you have not already scheduled equipment installation with GE, call:



866.401.8058

Mon-Fri 9:00 am to 8:00 pm Sat 9:00 am to 6:00 pm



Getting Connected

To connect your devices, please follow these steps carefully:

- Install the software on the Getting Connected CD provided with the Nucleus.
 Or download the software at www.gebrillion.com/software.
- During the software installation, you will need to register your Nucleus with GE and you will be asked to share your data with GE. This is simply the energy usage information that you agreed to share in the Customer Agreement when you signed up for this pilot program. Please check "yes." You will only be sharing usage information directly related to this program.
- When the software prompts you to call your utility, call DTE Energy at 313.235.6611
 (Monday-Friday, from 8:00 am to 7:00 pm) to "bind" your Nucleus to your meter.
 Binding allows your meter to communicate how much energy you are using with your Nucleus. NOTE: You will need the serial number for your Nucleus. It can be found on the back of the Nucleus box and printed on the label that came with the Nucleus. During the binding process, you may have to reset your router, so please make sure that you know any administrative password you have set for your router.
- With binding completed, go back to the Nucleus software and follow the directions to get the thermostat talking to the Nucleus. Click the settings icon in the upper right-hand comer and select the product you want to connect.

For additional setup help, check the manuals that come with your devices.



Now you're ready!

Your smart devices will be working in the background, saving you energy whenever possible. And you'll have greater power and insight than ever to control your electricity usage.







Your new Programmable Communicating Thermostat (PCT) is a "smart" device designed to help reduce energy consumption and minimize your energy bill. As the price level from DTE Energy changes, the PCT adjusts the temperature to the following settings automatically:

	Heating	Cooling
Mid-peak	70	80
On-peak	69	81
Critical Peak	68	82

These settings will help you save energy, so they're your best option. But if needed, you can adjust them using the PCT's PRICE/TEMP SETUP menu. Note that the PCT will not override your scheduled settings if they are lower (for heating) or higher (for cooling) than the default settings. However, in order to get the optimal savings, you should always set your thermostat to "Accept Events" from DTE Energy.

Example: Automatic Temperature Adjustment

If the current programmed temperature for air conditioning is 74°F, and the current price level from DTE Energy is mid-peak, the temperature is adjusted to 80°F. If the current programmed temperature for air conditioning is 74°F, and the current price level from DTE Energy is on-peak, the temperature is adjusted to 81°F.





Heating, Ventilating, and Air Conditioning (HVAC) light

Off: Working normally

On: System error/warning

Flashing: Working normally and communicating with DTE Energy

Current Price Level light

Green: Off-peak

Orange: Mid- and on-peak

Red: Critical Peak

Flashing: New message



Dynamic Peak Pricing



Dynamic Peak Pricing: Understanding Your New Electricity Rate

DTE Energy's new Dynamic Peak Pricing rate is a key part of the SmartCurrents™ Pilot Program and a key benefit for you as a pilot program participant.

It's simple. You're charged different rates for electricity based on the time of day and day of the week you use it. This allows you to save money by shifting energy usage to less expensive or "off-peak" times.

To better understand your energy use, log in to your account at dteenergy.com and select Analyze My Bills on the left. Use your online tools like When Does My Home Use Energy? to view your daily and hourly energy use. Look at your usage during the weekday 3 pm to 7 pm Peak period, and then consider what tasks (if any) you can shift to Mid- or Off-peak periods. Shifting usage from the Peak period to Mid-peak or Off-peak will help you save money.

Dynamic Peak Pricing offers you savings every day



* This chart reflects only the power supply charges for the Dynamic Peak Pricing rate. Service charge is \$8.00 per month and distribution charge is 4.195¢ per kWh.
NOTE: If a Critical Peak event is forecast, it will be announced 1 day in advance and will occur for a preset period within the 3-7 pm window. You will be notified of Critical Peak events by 6 pm the day before the event. The notification will occur by automated telephone message, text message, and/or email, based on the notification preferences you provided at the time of actions.

VER SUPPLY COST PER kWh

If critical events occur, they will be limited to no more than 20 times per year for no more than 4 hours at a time



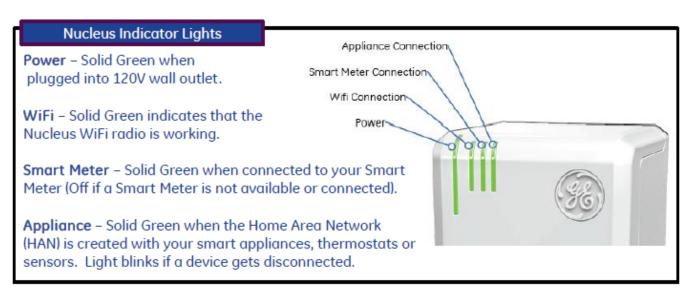
Before You Begin | Installation Tips for GE Nucleus™

Installation Tips

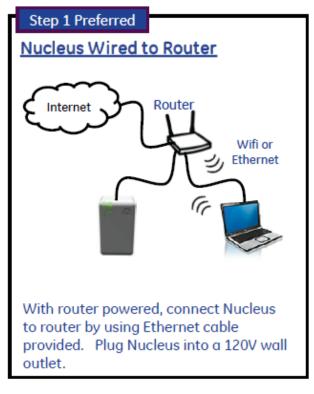
When installing and setting up your GE Nucleus, be sure to follow the steps outlined in the product literature. A licensed installer may be required for some Brillion™ products.

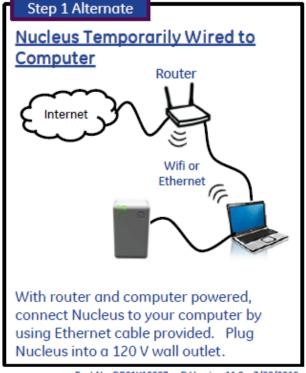
Your Nucleus requires a broadband Internet connection through your home router to obtain the current time and to communicate with your home network. If the Nucleus does not have a connection to a router that provides Internet service, it will not work.

Initial installation will use the Ethernet cable provided. Your Nucleus can be added to your Home's WiFi network later in the installation.



Or





Part No. DR01X10007 D Version 11.0 - 3/29/2012

Step 2

Software Installation

Insert the "Getting Connected" CD included with your Nucleus into your PC and follow the steps.

• If your CD is missing, or you do not have a CD drive on your computer, you can download the "Getting Connected" program at GEBrillion.com/software.

<u>Windows</u>: Double click "Set up Nucleus energy manager." (If the installer does not automatically start, access your CD-ROM drive and double click on the GENucleusInstaller.exe program to begin the setup.)

<u>Mac:</u> The installer will <u>not</u> automatically start. Access your CD-ROM, open the folder labeled GE Nucleus. Double click the file labeled GE Nucleus, and follow installation wizard.

Set Nucleus Password following the Installation Instructions. Be sure to retain your password for future reference.

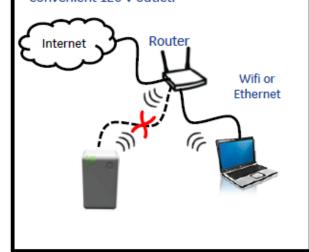
<u>Or</u>

Step 3 Preferred

Nucleus Wired to Router

If you want to leave your Nucleus wired to your router, skip this step.

If you would like to have your Nucleus use your WiFi system, then follow the onscreen instructions to set up your Wi-Fi communications between the Nucleus and your router. Once connected, remove the Ethernet cable and move the Nucleus to any convenient 120 V outlet.



Step 3 Alternate

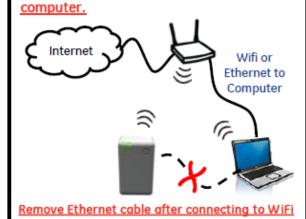
vour router.

Nucleus Temporarily Wired to Computer

If you initially connected your Nucleus to your computer with an Ethernet cable, follow the onscreen instructions to set up your WiFi

Disconnect the Nucleus from the Ethernet Cable after WiFi communications have been established. <u>Nucleus will not function</u> <u>properly if it remains wired to your</u>

communications between the Nucleus and



Part No. DR01X10007 D Version 11.0 - 3/29/2012

Step 4

<u>Data Access and Product Registration</u>

As stated in the Customer Agreement with DTE Energy, you must agree to store your data on GE's servers.

Product registration is required for the DTE Energy SmartCurrents^{5M} program. Registration ensures that you will receive software updates and notifications. Your Nucleus system will not work properly if it is not registered..

Step 5

Connecting to your Smart Meter

DTE Energy has installed a Smart Meter on your house. Connecting your Nucleus to your meter will allow you to see your home's energy usage data on your Nucleus software. Contact DTE Energy on the SmartCurrentsSM hotline at 313-235-6611 to begin the process. You will need to provide DTE Energy with the serial number included with your Nucleus. Hours of operation are Monday- Friday 8 am- 7 pm.

Once DTE Energy has opened your meter for communication then follow the Nucleus on-screen instructions to allow your Nucleus to communicate with your Smart Meter.

SmartCurrents[™] and the SmartCurrents mark are the property of DTE Energy.

Step 6

Connecting to your Smart Devices and final set up.

GE makes a full line of Brillion enabled smart products: energy sensors, appliances and thermostats. Please visit GEBrillion.com for more information about these products.

Please follow the on-screen instructions to add your smart devices to your Home Area Network (HAN). Smart devices and appliances can always be added later by using the tools contained under the General Settings tab.

Your display screen can be modified. Screen sections called 'Widgets" can be added or removed.



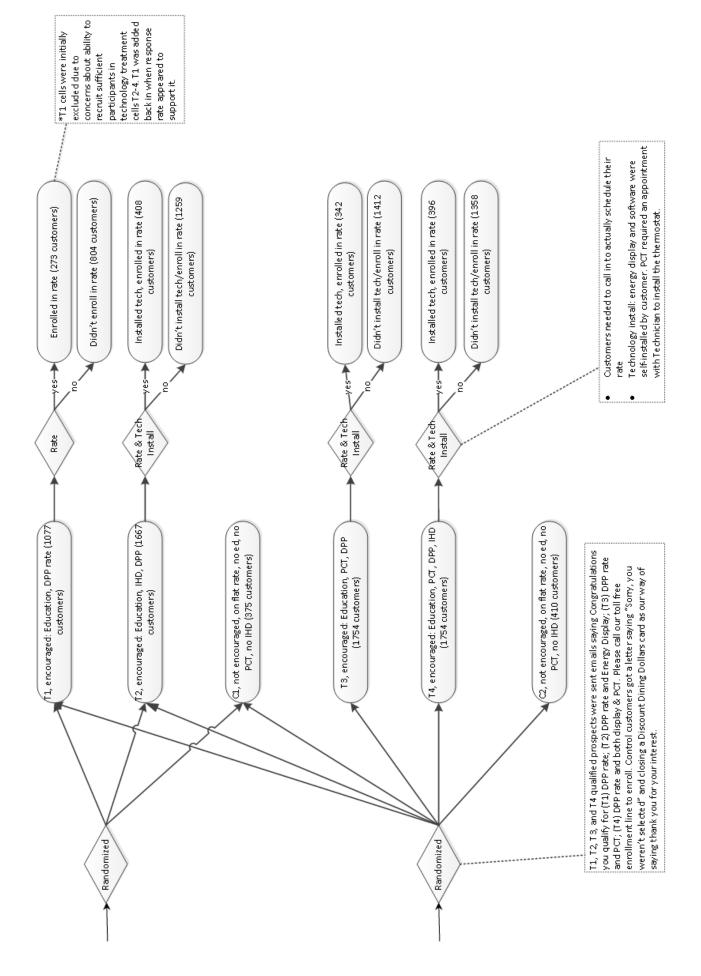
<u>Software Updates:</u> To maximize the full features and benefits of your Nucleus and Brillion system, please be sure to <u>always</u> accept Nucleus software updates when you are prompted.

Questions or need additional help? We're here for you!

Visit GEBrillion.com/support or call us at 800-220-6899

No HVAC (1420 customers) HVAC (5617 customers) Customers were in the no HVAC group if they didn't have HVACor had CAC with the wrong heating system, i.e., boiler, baseboard, etc. Screened Qualified— re sponde d, fille d out survey, screened (7037 customers) Not qualified (2666 customers) Customer fills out party to answer survey—went online for a 3" the questions. Screened Screened In addition, 45,443 reminder postcards were mailed 6/13/ 2012 to Wave 2 letter recipients only. This contributed to the final qualification numbers recorded as of 6/29/2012. generic study, with a chance for a random selection to receive technology and rates oid not re spond Responded (9703 customers) customers) (139,604 Target customers receive an invitation to enroll in a 9 Responded 3,602 3,192 Responded: 5,361 Responded: 4,342 Mailed: 100,585 Wave 1 - 1/23/2012Mailed: 48,772 Wave 2 -- 5/7/2012 Qualified: Qualified: Sustomersno marketedto customers) (300,093 customers sent recruitment invitations (149,307 (ustomers) Target CTE control group, no customer contact Screened (1200 customers) AMI Installed (449,400 customers) Excluding Senior Citizen rate (discounted rate) Customers on standard residential rate (rate Excluding block rates like electric with space heating; electric with block water heating. Excluding customers with Electric vehicles Of the 449,400 AMI meters, the following were Excluding Net metering (customers in our Screened SolarCurrents program) code D1) only. Total Utility Residential Customers (~1.9M) targe ted:

Detroit Edison / DTE/ DECo



Appendix F: Results

T1-C1 August 16 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers		
HE 1	0.089	243	249	341	347		
HE 2	0.080	243	249	341	347		
HE 3	0.074	243	249	341	347		
HE 4	0.062	243	249	341	347		
HE 5	0.059	243	249	341	347		
HE 6	0.063	243	249	341	347		
HE 7	0.069	243	249	341	347		
HE 8	0.067	243	249	341	347		
HE 9	0.070	243	249	341	347		
HE 10	0.077	243	249	342	347		
HE 11	0.089	243	249	342	347		
HE 12	0.097	243	249	342	347		
HE 13	0.100	243	249	342	347		
HE 14	0.100	243	249	342	347		
HE 15	0.106	243	249	342	347		
HE 16	0.106	243	249	342	347		
HE 17	0.118	243	249	342	347		
HE 18	0.125	243	249	342	347		
HE 19	0.126	243	249	342	347		
HE 20	0.123	243	249	342	347		
HE 21	0.124	243	249	342	347		
HE 22	0.124	243	249	342	347		
HE 23	0.122	243	249	342	347		
HE 24	0.064	243	249	342	347		

T2-C1 August 16 Event							
	Standard Error of the T Observation Difference		T Customers C Observati		ns C Customers		
HE 1	0.080	384	390	341	347		
HE 2	0.069	384	390	341	347		
HE 3	0.063	384	390	341	347		
HE 4	0.057	384	390	341	347		
HE 5	0.054	384	390	341	347		
HE 6	0.059	384	390	341	347		
HE 7	0.061	384	390	341	347		
HE 8	0.064	384	390	341	347		
HE 9	0.066	384	390	341	347		
HE 10	0.070	384	390	342	347		
HE 11	0.082	384	390	342	347		
HE 12	0.093	384	390	342	347		
HE 13	0.102	384	390	342	347		
HE 14	0.102	384	390	342	347		
HE 15	0.099	384	390	342	347		
HE 16	0.089	384	390	342	347		
HE 17	0.100	384	390	342	347		
HE 18	0.099	384	390	342	347		
HE 19	0.095	384	390	342	347		
HE 20	0.101	384	390	342	347		
HE 21	0.104	384	390	342	347		
HE 22	0.109	384	390	342	347		
HE 23	0.112	384	390	342	347		
HE 24	0.051	384	390	342	347		

	T3-C2 August 16 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers			
HE 1	0.076	320	328	354	356			
HE 2	0.070	320	328	354	356			
HE 3	0.060	320	328	354	356			
HE 4	0.053	320	328	354	356			
HE 5	0.048	320	328	354	356			
HE 6	0.054	320	328	354	356			
HE 7	0.060	320	328	354	356			
HE 8	0.059	320	328	354	356			
HE 9	0.067	320	328	354	356			
HE 10	0.075	320	328	354	356			
HE 11	0.087	320	328	354	356			
HE 12	0.106	320	328	354	356			
HE 13	0.109	320	328	354	356			
HE 14	0.102	320	328	354	356			
HE 15	0.094	320	328	354	356			
HE 16	0.092	320	328	354	356			
HE 17	0.102	320	328	354	356			
HE 18	0.100	320	328	354	356			
HE 19	0.104	320	328	354	356			
HE 20	0.116	320	328	354	356			
HE 21	0.104	320	328	354	356			
HE 22	0.105	320	328	354	356			
HE 23	0.100	320	328	354	356			
HE 24	0.067	320	328	354	356			

T4-C2 August 16 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers		
HE 1	0.073	365	369	354	356		
HE 2	0.067	65	369	354	356		
HE 3	0.056	365	369	354	356		
HE 4	0.051	365	369	354	356		
HE 5	0.047	365	369	354	356		
HE 6	0.052	365	369	354	356		
HE 7	0.060	365	369	354	356		
HE 8	0.059	365	369	354	356		
HE 9	0.068	362	369	354	356		
HE 10	0.074	362	369	354	356		
HE 11	0.084	362	369	354	356		
HE 12	0.100	361	369	354	356		
HE 13	0.110	362	369	354	356		
HE 14	0.104	362	369	354	356		
HE 15	0.099	362	369	354	356		
HE 16	0.089	362	369	354	356		
HE 17	0.094	364	369	354	356		
HE 18	0.098	364	369	354	356		
HE 19	0.103	364	369	354	356		
HE 20	0.110	364	369	354	356		
HE 21	0.104	364	369	354	356		
HE 22	0.105	364	369	354	356		
HE 23	0.101	364	369	354	356		
HE 24	0.063	364	369	354	356		

T1-C1 May 30 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers		
HE 1	0.090	248	249	345	347		
HE 2	0.078	248	249	345	347		
HE 3	0.069	248	249	345	347		
HE 4	0.070	248	249	345	347		
HE 5	0.064	248	249	345	347		
HE 6	0.066	248	249	345	347		
HE 7	0.076	248	249	345	347		
HE 8	0.070	248	249	345	347		
HE 9	0.075	246	249	345	347		
HE 10	0.080	246	249	345	347		
HE 11	0.090	246	249	345	347		
HE 12	0.100	246	249	345	347		
HE 13	0.114	246	249	345	347		
HE 14	0.127	246	249	345	347		
HE 15	0.128	246	249	345	347		
HE 16	0.126	246	249	345	347		
HE 17	0.138	246	249	342	347		
HE 18	0.138	246	249	342	347		
HE 19	0.139	246	249	342	347		
HE 20	0.132	246	249	342	347		
HE 21	0.128	246	249	342	347		
HE 22	0.125	246	249	342	347		
HE 23	0.117	246	249	342	347		
HE 24	0.100	246	249	342	347		

					
		T2-	C1 May 30 Event		
	Standard				
	Error of the	T Observations	T Customers	C Observations	C Customers
	Difference				
HE 1	0.081	386	390	345	347
HE 2	0.073	386	390	345	347
HE 3	0.066	386	390	345	347
HE 4	0.059	386	390	345	347
HE 5	0.059	386	390	345	347
HE 6	0.059	386	390	345	347
HE 7	0.062	386	390	345	347
HE 8	0.062	386	390	345	347
HE 9	0.062	386	390	345	347
HE 10	0.077	386	390	345	347
HE 11	0.088	386	390	345	347
HE 12	0.096	386	390	345	347
HE 13	0.109	386	390	345	347
HE 14	0.117	386	390	345	347
HE 15	0.113	386	390	345	347
HE 16	0.110	386	390	345	347
HE 17	0.126	386	390	342	347
HE 18	0.124	386	390	342	347
HE 19	0.120	386	390	342	347
HE 20	0.126	386	390	342	347
HE 21	0.127	386	390	342	347
HE 22	0.120	386	390	342	347
HE 23	0.107	386	390	342	347
HE 24	0.064	386	390	342	347

T3-C2 May 30 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers		
HE 1	0.082	324	328	354	356		
HE 2	0.068	325	328	354	356		
HE 3	0.059	325	328	354	356		
HE 4	0.053	325	328	354	356		
HE 5	0.047	325	328	354	356		
HE 6	0.048	325	328	354	356		
HE 7	0.066	325	328	354	356		
HE 8	0.064	320	328	354	356		
HE 9	0.063	320	320 328 354		356		
HE 10	0.069	320	328	354	356		
HE 11	0.088	322	328	354	356		
HE 12	0.100	322	328	354	356		
HE 13	0.112	322	328	354	356		
HE 14	0.113	322	328	354	356		
HE 15	0.108	322	328	354	356		
HE 16	0.105	322	328	354	356		
HE 17	0.114	322	328	351	356		
HE 18	0.108	321	328	351	356		
HE 19	0.113	314	328	351	356		
HE 20	0.116	315	328	351	356		
HE 21	0.108	319	328	351	356		
HE 22	0.113	320	328	351	356		
HE 23	0.104	320	328	351	356		
HE 24	0.062	322	328	351	356		

T4-C2 May 30 Event							
	Standard Error of the Difference	T Observations	T Customers	C Observations	C Customers		
HE 1	0.079	368	369	354	356		
HE 2	0.066	368	369	354	356		
HE 3	0.059	368	369	354	356		
HE 4	0.052	368	369	354	356		
HE 5	0.042	368	369	354	356		
HE 6	0.044	368	369	354	356		
HE 7	0.059	368	369	354	356		
HE 8	0.057	368	369	354	356		
HE 9	0.061	368	368 369 354		356		
HE 10	0.066	368	369	354	356		
HE 11	0.079	368	369	354	356		
HE 12	0.092	368	369	354	356		
HE 13	0.110	368	369	354	356		
HE 14	0.108	368	369	354	356		
HE 15	0.107	368	369	354	356		
HE 16	0.098	366	369	354	356		
HE 17	0.103	363	369	351	356		
HE 18	0.102	363	369	351	356		
HE 19	0.107	362	369	351	356		
HE 20	0.117	364	369	351	356		
HE 21	0.115	364	369	351	356		
HE 22	0.115	364	369	351	356		
HE 23	0.102	364	369	351	356		
HE 24	0.059	364	369	351	356		

Appendix G: Data Description

From DTE CBS Plan	(pg 43)- Table 11	ID: 113		ID: 112	ID: 117	Treatment Group customers	Control Group - with study awareness/educat ion (Eg. C1, C2)	Control group - without study awareness/educat ion (Eg. CTE group)
DTE Major Group	Cohort	Housing Type	Annual Usage (Weather Normalized)	Annual Household Income	Central A/C	Number of Customers	Number of Customers	Number of Customers
	Cohort_T1_01	All	All	All	All	249	347	1142
	Cohort_T1_02	Single				228	321	N/A
	Cohort_T1_03	Multi (>1)				21	26	N/A
	Cohort_T1_04		Medium			175	240	N/A
	Cohort_T1_05 Cohort_T1_06		High	<30K		66 53	87 75	N/A N/A
	Cohort_T1_07			30k to 75K		50	89	N/A
	Cohort_T1_08			>75K		146	183	N/A
T1 - DPP	Cohort_T1_09				Υ	206	247	N/A
	Cohort_T1_10				N	43	100	N/A
	Cohort_T1_11	Single		<30K	Υ	35	52	N/A
	Cohort_T1_12	Single		30k to 75K	Υ	29	34	N/A
	Cohort_T1_13	Single		>75K	Υ	121	137	N/A
	Cohort_T1_14	Single	Medium	<30K	Y	25	37	N/A
	Cohort_T1_15	Single	Medium	30k to 75K	Y	24	27	N/A
	Cohort_T1_16 Cohort_T1_17	Single	Medium High	>75K >75K	Y	70 51	80 57	N/A N/A
	Cohort_T2_01	Single All	All	>/5K All	All	390	347	1142
	Cohort T2 02	Single	VII	All	AII	366	321	N/A
	Cohort_T2_02	Multi (>1)			1	24	26	N/A
	Cohort_T2_04	(/	Medium			259	240	N/A
	Cohort_T2_05		High			125	87	N/A
	Cohort_T2_06			<30K		81	75	N/A
	Cohort_T2_07			30k to 75K		67	89	N/A
	Cohort_T2_08			>75K		242	183	N/A
T2 - DPP w/IHD	Cohort_T2_09				Υ	319	247	N/A
	Cohort_T2_10	Ci I .		-2014	N	71	100	N/A
	Cohort_T2_11	Single		<30K	Y	64	52 34	N/A N/A
	Cohort_T2_12 Cohort_T2_13	Single Single		30k to 75K >75K	Y	38 194	137	N/A N/A
	Cohort_T2_13	Single	Medium	<30K	Y	31	37	N/A
	Cohort_T2_15	Single	Medium	30k to 75K	Y	29	27	N/A
	Cohort_T2_16	Single	Medium	>75K	Υ	120	80	N/A
	Cohort_T2_17	Single	High	>75K	Υ	74	57	N/A
	Cohort_T3_01	All	All	All	All	328	356	1142
	Cohort_T3_02	Single				304	323	N/A
	Cohort_T3_03	Multi (>1)				24	33	N/A
	Cohort_T3_04		Medium			239	237	N/A
	Cohort_T3_05		High	*301/		77	107	N/A
	Cohort_T3_06 Cohort_T3_07			<30K 30k to 75K		65 79	82 83	N/A N/A
	Cohort_T3_08			>75K		184	191	N/A
T3 - DPP w/PCT	Cohort T3 09			275K	Υ	N/A	N/A	N/A
	Cohort_T3_10				N	N/A	N/A	N/A
	Cohort_T3_11	Single		<30K	Υ	58	76	N/A
	Cohort_T3_12	Single		30k to 75K	Υ	72	72	N/A
	Cohort_T3_13	Single		>75K	Υ	174	175	N/A
	Cohort_T3_14	Single	Medium	<30K	Y	43	48	N/A
	Cohort_T3_15	Single	Medium	30k to 75K	Y	55	58	N/A
	Cohort_T3_16 Cohort_T3_17	Single Single	Medium High	>75K >75K	Y	122 51	109 64	N/A N/A
	Cohort_T3_17	All	All	>/5K All	All	369	356	1142
	Cohort_T4_01	Single	- All	7311	Ail .	343	323	N/A
	Cohort_T4_03	Multi (>1)				26	33	N/A
	Cohort_T4_04	, ,	Medium			270	237	N/A
	Cohort_T4_05		High			86	107	N/A
	Cohort_T4_06			<30K		74	82	N/A
	Cohort_T4_07			30k to 75K	1	78	83	N/A
T4 - DPP	Cohort_T4_08			>75K		217	191	N/A
w/PCT&IHD	Cohort_T4_09				Y	N/A	N/A	N/A
	Cohort_T4_10 Cohort_T4_11	Single		<30K	N Y	N/A	N/A 76	N/A
	Cohort_T4_11 Cohort_T4_12	Single Single		30k to 75K	Y	68 69	76	N/A N/A
	Cohort_T4_12	Single		>75K	Y	205	175	N/A N/A
	Cohort_T4_13	Single	Medium	<30K	Y	47	48	N/A
	Cohort_T4_15	Single	Medium	30k to 75K	Y	52	58	N/A
	Cohort_T4_16	Single	Medium	>75K	Υ	150	109	N/A
	Cohort_T4_17	Single	High	>75K	Υ	54	64	N/A