MEMORANDUM

To: Brenda Gettig, Senior Business Analyst

From: Research Into Action

Date: September 10, 2012

Re: 2012 PTR Test Event: Post-Event Survey Findings

This memorandum presents the results of a survey conducted with residential and small commercial customers of San Diego Gas and Electric (SDG&E) following the first county-wide San Diego Reduce Your Use day. This test event was conducted on July 20th, as part of the 2012 Peak Time Rebate Program.

This post-event survey assessed:

- Respondent understanding and awareness of event days
- Means of notification
- Possible actions to reduce electricity use
- Intent to participate in the future
- General suggestions to improve future event days.

METHODOLOGY

Following the county-wide Peak Time Rebate test event on July 20th, 2012, we launched a phone survey of residential and small commercial San Diego Gas and Electric customers. Between July 21 and 26, CIC Research completed 576 surveys of less than seven minutes in length. These surveys asked about: respondent understanding and awareness of event days, means of notification, possible actions to reduce electricity use, intent to participate in the future, and general suggestions.

SAMPLE DEVELOPMENT AND WEIGHTING

To understand the differing awareness of those who signed up for event day alerts through email or text message, and those who received email alerts because of their use of MyAccount, we stratified both the residential and commercial samples. Table 1 and Table 2 show the number of surveys completed with each stratum, as well as the population of each.

Because we were particularly interested in understanding the event day experiences of those in the alert groups, the sample overrepresented the alert groups, relative to the population. Thus, to develop an estimate of *overall* RYU day awareness across the SDG&E population, we used proportional weights to correct for this oversampling, according to the following formula:

$$Stratum\ weight = \frac{\%\ of\ stratum\ in\ population}{\%\ of\ stratum\ in\ sample}$$

Table 1 and Table 2 show the weights of the residential and commercial sample strata, respectively, as well as their relative contributions to the weighted totals (shown in the final column). Note that these are proportional, not scaled weights, so the weighted sample size is equal to the unweighted sample size rather than the population as a whole.

Table 1: Residential Population, Sample, and Weights

Sample Group		Population	Sample Size	Weight	Weighted Sample Size
Non-Alert	No MyAccount	658,811	100	2.15	214.7
	Yes MyAccount	544,854	100	1.78	177.5
Alert		30,148	202	0.049	9.8
Total		**1,233,813**	**402**	**N/A**	**402**

Table 2: Small Commercial Population, Sample, and Weights

Sample Group	Population	Sample Size	Weight	Weighted Sample Size
Non-Alert	115,063	104	1.67	173.5
Alert	305	70	0.01	0.5
Total	**115,368**	**174**	**N/A**	**174**

Note that because of the magnitude of oversampling of the "alert" groups (while the alert group makes up half of the residential sample, alert group members make up less than 3% of the population as a whole), the weighted results are approximately equal to the results of the non-alert groups alone. For this reason, weights have not been applied to results within strata, but when results have been averaged across the whole sample. Unless signified by the column header "Wt. Total," all results in this report are unweighted.

RESIDENTIAL

This section presents key findings from the residential post-event survey, and tables showing response frequencies.

KEY FINDINGS

- **Overall, half of respondents had a solid understanding of the concept of Reduce Your Use days, while less than a quarter were aware of the July 20th test event.** While awareness of the concept differed significantly across groups, nearly all alert group contacts, and roughly half of those in the non-alert groups had an accurate understanding of RYU days (Table 3). When responses were weighted to represent the population, roughly one fifth were aware that an event had occurred July 20th. Awareness was lowest for those in the non-alert, no MyAccount group.

- **Alert opt-ins had high event awareness and understanding.** Those contacts who had signed up for event notifications (referred to as the "Alert" group in tables below) had higher even awareness than those who had not signed up for alerts: four-fifths of the alert group (79%) was aware of the event on July 20th, compared with 19% across the SDG&E territory population as a whole (referred to as the "Wt. Total" group, below; Table 3).

- **Email blasts to MyAccount customers increased awareness of event day.** Among those contacts who did not sign up to receive an alert, those with MyAccount had significantly higher awareness than those without (31% versus 7%, respectively, were aware of the test event on July 20th; Table 3). Interestingly, 7% of MyAccount group contacts learned of the event day by any means other than email, (equivalent to the 7% awareness among the non-MyAccount group, none of whom received event emails; Table 4). This finding suggests that the email blast sent to MyAccount customers was helpful in facilitating awareness among this group, but that only about a quarter of MyAccount customers recalled receiving them.

- **Non-Alert, No MyAccount group have generally positive attitudes but are harder to reach.** This group was similarly willing to reduce their electricity use when future events are called (85% "somewhat" or "strongly" agree; Table 12). Their somewhat lower awareness of the concept of PTR event days (44% compared with 58% of those with My Account; Table 3), and their preference for receiving notifications by phone rather than email (51%, compared with 27% of those with MyAccount, volunteered that they would prefer to receive event day notifications by phone; Table 10), suggests that they may be less receptive to learning about PTR through email or text message.

    - ***To Investigate:*** The No-Alert, Non MyAccount group's comparatively low preference for email notifications (25% of this group prefers event notification by email, compared with 56% of those with MyAccount) suggests that they may be hard to reach by email survey.

- **Recall of event-day mass media messaging was low across all three alert groups.** Less than 5% of contacts in any group recalled hearing about the July 20th event through mass media channels like radio or television (Table 4).

- **Preference for text message notifications was low among both Non-Alert groups.** An average of 6% of the non-alert groups preferred text messages for future event notification (Table 10).

➡ **Alert groups, event awareness, and understanding of alert days differ across demographic characteristics, in different ways.** The three alert strata differed significantly in terms of race, income, and age, and marginally by level of education (see Table 19 through Table 22). Among the non-alert groups, Non-MyAccount customers tended to be older than those with MyAccount. Home ownership and education was highest among alert group contacts. Awareness of the July 20th event also differed across demographic characteristics: Caucasian and higher-income contacts had significantly higher levels of awareness of the event day, and non-Hispanic contacts had marginally higher levels of awareness than Hispanic contacts (Table 6). On the other hand, understanding of the RYU day concept did not differ significantly across demographic characteristics: contacts were equally likely to understand RYU days, regardless of ethnicity, income, or education (although the effect of race was marginally statistically significant Table 7).

- ***To investigate:*** To what extent are differences in awareness by demographic characteristics true over and above the differences in group membership?
- ***To investigate:*** Although differences are low to moderate, current messaging strategies may not be reaching all demographic segments equally.

Summary of Awareness Measurements

Table 3: Summary of Event Awareness Measurements among Residential Respondents

	No Alert		Alert (n=202)	Wt. Total (n=402)	X^2 sig.
	MyAcc. (n=100)	No MyAcc. (n=100)			
Aware of event on July 20th	31%	7%	79%	19%	< 0.0001
Aware of event and bill credit	20%	4%	73%	13%	< 0.0001
Aware of event and event hours	10%	1%	44%	6%	< 0.0001
Aware of event, bill credit, and event hours	8%	0%	41%	5%	< 0.0001
Accurate understanding of PTR concept	58%	44%	95%	51%	< 0.0001

Table 4: Source of Notification

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
None	69%	93%	21%
Email	24%	0%	62%
Text Message	1%	0%	28%
Other	2%	2%	1%
Radio	0%	1%	0%

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
TV	2%	4%	0%
Mail	3%	0%	0%
Word of mouth	0%	0%	0%

Table 5: Awareness of Event Notification Option and Use of Website

	No Alert		Alert	Wt. Total
	MyAcc.	No MyAcc.		
Aware of event notification option, among those aware of PTR events	31%	27%	N/A	29%
Used SDG&E website to check energy use, among those aware of 7/20 event	10%	0%	31%	9%

Demographics and Event Awareness

We present the detailed results in two forms below. First are tables with counts and significance reported, followed by the same data presented via bar graph.

Table 6: Awareness of July 20th Event by Demographics

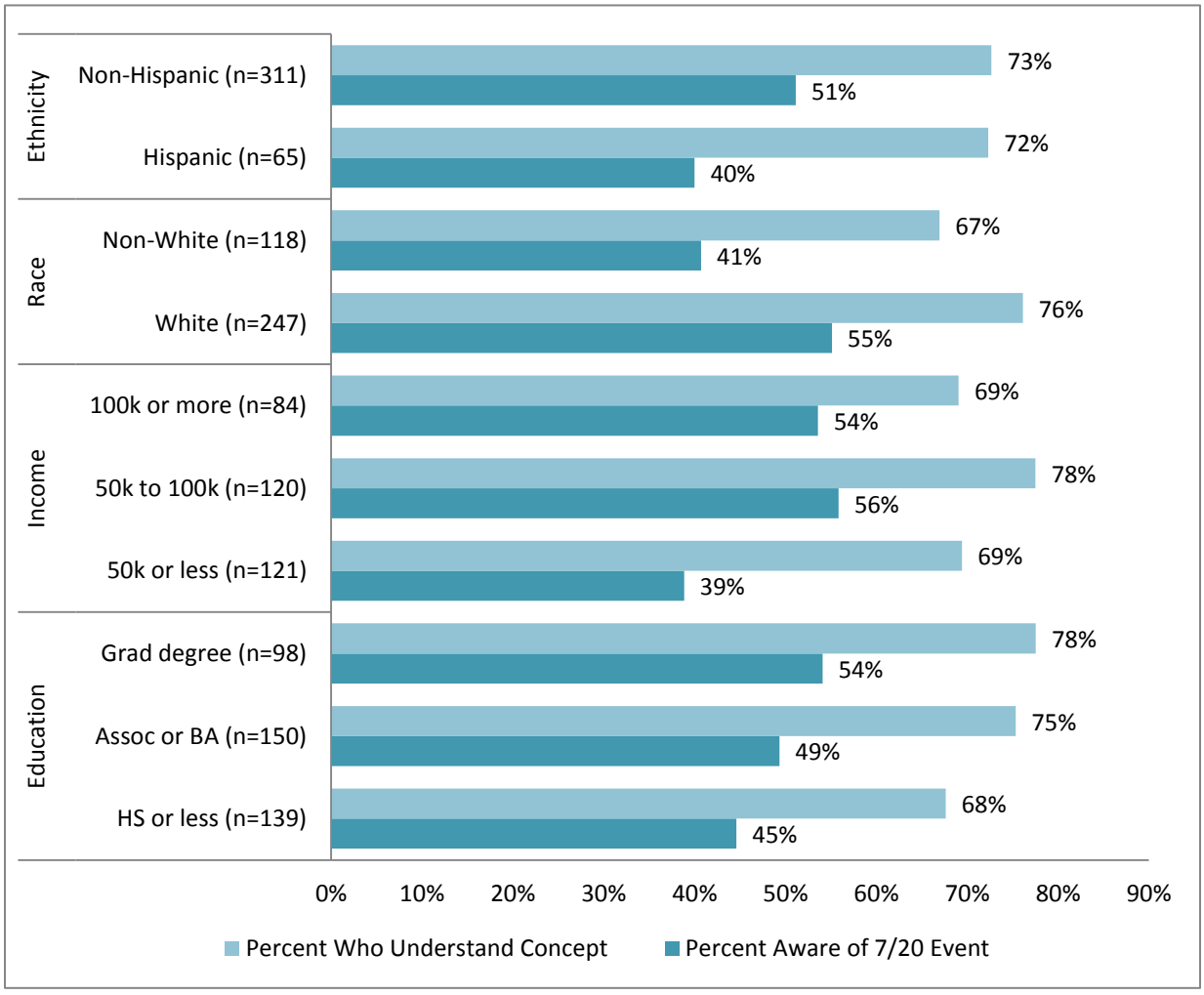
DEMOGRAPHIC CHARACTERISTIC		PERCENT AWARE	X^2 SIG.
Education	HS or less (n=139)	45%	>.05
	Assoc or BA (n=150)	49%	
	Grad degree (n=98)	54%	
Income	50k or less (n=121)	39%	<.05
	50k to 100k (n=120)	56%	
	100k or more (n=84)	54%	
Race	White (n=247)	55%	<.05
	Non-White (n=118)	41%	
Ethnicity	Hispanic (n=65)	40%	0.10
	Non-Hispanic (n=311)	51%	

Table 7: Awareness of Event Day Concept by Demographics

DEMOGRAPHIC CHARACTERISTIC		PERCENT WHO UNDERSTAND	X^2 SIG.
Education	HS or less (n=139)	68%	>.05
	Assoc or BA (n=150)	75%	

	Grad degree (n=98)	78%	
Income	50k or less (n=121)	69%	>.05
	50k to 100k (n=120)	78%	
	100k or more (n=84)	69%	
Race	White (n=247)	76%	0.065
	Non-White (n=118)	67%	
Ethnicity	Hispanic (n=65)	72%	>.05
	Non-Hispanic (n=311)	73%	

Figure 1: Awareness by Demographic Factors



Possible Actions to Reduce Use

Table 8: Options to Reduce Energy Use

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
Turn off lights	12%	19%	14%
Reduce AC Temp	16%	10%	19%
Turn off Appliances	17%	14%	35%
Leave the house	13%	5%	10%
Nothing	22%	25%	7%
Other	49%	47%	63%
Don't know	4%	3%	0%

Table 9: Options to Reduce Energy Use – "Other" Mentions

	No Alert		Alert (n=127)
	MyAcc. (n=49)	No MyAcc. (n=47)	
Turn off or don't use energy	42	39	109
• Turn off: TV	17	12	21
• Turn off: PC	9	3	13
• Turn off: AC	11	9	34
• Turn off: Lights	2	0	3
• Turn off: Everything	6	6	11
• Turn off: Vampires (not in use)	8	6	28
• Turn off: Pool Pump or Spa	1	2	12
• Turn off: Refrigerator	0	2	0
• Turn off: Water Heater	2	0	1
• Turn off: Fan	3	1	11
• Turn off: Other	1	5	5
• Turn off: Appliances	3	4	9
Put off doing energy related activities	5	7	23
• Put off: Food prep (or not at all)	4	2	8

	No Alert		Alert (n=127)
	MyAcc. (n=49)	No MyAcc. (n=47)	
• Put off: Dishes	0	0	2
• Put off: Laundry	1	5	10
• Put off: Other	1	0	5
Lower use of energy equipment	3	2	5
• Lower use: AC	1	1	1
• Lower use: TV	1	0	2
• Lower use: Other	0	1	3
Generally reduce energy	0	2	3
Has solar panels, doesn't need to reduce	0	1	0
Not at home during events	0	1	0
Not reducing	0	1	0
Generic other responses	0	0	1

Feedback and Suggestions

Table 10: Best Contact Method for Advance Event Notification

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100)		
Text message	7%	4%	23%	6%
Email	56%	25%	64%	40%
Mailing	3%	11%	0%	7%
Phone	27%	53%	9%	41%
Radio	0%	0%	0%	0%
Other	6%	7%	3%	6%
Don’t know	1%	0%	0%	0%

Table 11: Agreement with “Announcement about RYU day events are adequate,” among those aware of July 20th event day

	No Alert		Alert (n=158)	Wt. Total
	MyAcc. (n=31)	No MyAcc. (n=7)		
Strongly disagree	0%	0%	2%	0%

	No Alert		Alert (n=158)	Wt. Total
	MyAcc. (n=31)	No MyAcc. (n=7)		
Somewhat disagree	10%	0%	3%	7%
Neither agree not disagree	10%	29%	2%	12%
Somewhat agree	29%	43%	25%	32%
Strongly agree	52%	29%	69%	49%

Don't know responses have been excluded.

Table 12: Agreement with "I will reduce my energy use when future RYU days are announced."

	No Alert		Alert (n=198)	Wt. Total
	MyAcc. (n=97)	No MyAcc. (n=90)		
Strongly disagree	4%	1%	1%	2%
Somewhat disagree	5%	6%	2%	5%
Neither agree not disagree	8%	8%	2%	8%
Somewhat agree	28%	32%	34%	30%
Strongly agree	55%	53%	61%	54%

DK responses are excluded.

Table 13: Suggestions to Improve RYU Days

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
Advanced Notice/more notice	7%	10%	12%
Tips	3%	1%	7%
Money savings/credit information	0%	1%	5%
More information/quick feedback	0%	0%	3%
Different timing/hours	6%	2%	2%
General behaviors described (off topic)	2%	5%	2%
Increase credits	1%	2%	1%
Other request	1%	1%	1%
Increase general awareness	2%	1%	0%
More General Education on how to save/impact of saving	2%	0%	0%
Lower rate	2%	1%	0%
Add solar panels	1%	1%	0%

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
Treat solar customers better	2%	0%	0%
Help to understand why it helps	2%	0%	0%

Demographics

Table 14: Summer AC Use

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100)		
Yes	27%	30%	39%	29%
No	73%	70%	61%	71%

Table 15: Number of Household Members

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100)		
1	26%	23%	20%	24%
2	35%	41%	37%	38%
3	10%	10%	16%	10%
4	19%	11%	17%	15%
5	5%	8%	4%	6%
6	3%	1%	3%	2%
7	1%	3%	1%	2%
8	1%	0%	0%	0%
Refused	0%	3%	0%	1%

Table 16: Number of Children Under 5 Years of Age

	No Alert		Alert (n=161)	Wt. Total
	MyAcc. (n=74)	No MyAcc. (n=74)		
0	81%	83%	80%	82%
1	15%	13%	11%	14%

	No Alert		Alert (n=161)	Wt. Total
	MyAcc. (n=74)	No MyAcc. (n=74)		
2	1%	1%	8%	2%
3	1%	3%	1%	2%
4	1%	0%	0%	1%

Asked of those with multiple household members.

Table 17: Number of Adults 70 Years or Older

	No Alert		Alert (n=201)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=98)		
0	91%	68%	83%	79%
1	7%	21%	10%	15%
2	2%	10%	7%	7%
3	0%	0%	0%	0%

Table 18: Home Size in Square Feet

	No Alert		Alert (n=185)	Wt. Total
	MyAcc. (n=84)	No MyAcc. (n=70)		
Mean	1,496	1,945	1,873	1,726
Minimum	500	200	400	200
Maximum	7,627	8,200	5,700	8,200

Table 19: Do You Own the Home? (Significant difference)

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100).		
Yes	46%	56%	69%	52%
No	54%	43%	30%	48%
Refused	0%	1%	0%	0%

Table 20: Household Income (Significant difference)

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100)		
Under $50,000	37%	36%	24%	36%
$50,000 to $100,000	31%	22%	33%	26%
$100,000 to $200,000	15%	13%	18%	14%
$200,000 and above	4%	5%	5%	4%
Refused	11%	20%	20%	16%
Don't know	2%	4%	0%	3%

Table 21: Highest Level of Education (Marginally significant difference)

	No Alert		Alert (n=202)	Wt. Total
	MyAcc. (n=100)	No MyAcc. (n=100)		
9th to 12th grade with no diploma	0%	3%	0%	2%
High school graduate or GED	13%	17%	8%	15%
Some college, with no degree	25%	25%	19%	25%
Associate degree	7%	9%	6%	8%
Bachelor's degree	31%	20%	35%	25%
Graduate or professional degree	21%	22%	27%	22%
Refused	3%	4%	4%	4%

Table 22: Race/Ethnicity (Significant difference)

	No Alert		Alert (n=202)
	MyAcc. (n=100)	No MyAcc. (n=100)	
Caucasian	53%	55%	72%
Asian	11%	5%	8%
African American	4%	7%	2%
Pacific Islander	2%	2%	1%
American Indian or Alaska Native	0%	2%	0%
Other	22%	19%	12%
Don't know	8%	13%	7%
Refused	0%	1%	0%

Table 23: Are you Hispanic or Latino descent?

	No Alert		Alert (n=187)	Wt. Total
	MyAcc. (n=97)	No MyAcc. (n=92)		
Yes	25%	22%	11%	23%
No	75%	78%	89%	77%

SMALL COMMERCIAL

This section presents key findings from the residential post-event survey, and tables showing response frequencies.

KEY FINDINGS

- **Overall, half of respondents had a solid understanding of the concept of Reduce Your Use days, while less than one-fifth were aware of the July 20th test event.** While awareness of the concept differed significantly across groups, nearly all alert group contacts, and roughly half of those in the non-alert group had an accurate understanding of RYU days (Table 24). When responses were weighted to represent the population, less than one fifth were aware that an event had occurred July 20th.

- **Email is a preferred means of notification for both alert and non-alert groups, but few prefer text message.** In both groups, email was most commonly mentioned as the best method for advance event notification, with 47% of non-alert group contacts and 71% of alert group contacts preferring email notifications (Table 29). (Phone was a close second in the no alert group, with 41% volunteering it as their preferred means of notification.) Just 4% of each group cited text message as the best means of notification.

- **Recall of mass media event messaging was low among both groups.** Less than five percent of either group recalled receiving notification of the July 20 event through mass media channels (Table 25).

- **Some small businesses, particularly those in the non-alert group, are ambivalent about the feasibility of participating.** One-fourth of the non-alert group reported that there was nothing they could do to reduce their energy use during an event day (Table 27). Similarly, when asked about whether they intended to reduce their energy use in response to future requests, 23% of the non-alert group "strongly agreed" that they would do so, compared with 59% of those in the alert group (Table 31).

- **There are no notable differences among the types of sampled businesses who signed up for alerts, versus those who did not.** Business type, building ownership, square footage, and air conditioning use were all similar across the sampled alert and non-alert groups (Table 33 - Table 36).

Summary of Awareness Measurements

Table 24: Summary of Event Awareness Measurements among Residential Respondents

	No Alert (n=104)	Alert (n=70)	Wt. Total (n=174)	X^2 sig.
Aware of event on July 20th	14%	79%	15%	<.05
Aware of event and bill credit	13%	69%	13%	<.05
Aware of event and event hours	1%	39%	1%	<.05
Aware of event, bill credit, and event hours	1%	34%	1%	<.05
Aware of PTR concept correctly	48%	87%	48%	<.05

Table 25: Source of Notification

	No Alert (n=104)	Alert (n=70)
None	86%	21%
Email	10%	73%
Text Message	0%	11%
Radio	2%	1%
Other	3%	1%
TV	1%	0%
Word of Mouth	1%	0%

Table 26: Awareness of Event Notification Option, Bill Credits, and Use of Website

	No Alert	Alert	Wt. Total
Aware of event notification option, among those aware of PTR events (n=96)	37%	N/A	36%
Used SDG&E website to check energy use, among those aware of July 20th events (n=70)	27%	45%	28%

Possible Actions to Reduce Use

Table 27: Possible Actions to Reduce Energy Use

	No Alert (n=104)	Alert (n=70)
Adjust AC temp	37%	50%
Turn off lights	34%	49%

	No Alert (n=104)	Alert (n=70)
Nothing	25%	10%
Send staff home early	2%	4%
Close early	2%	1%
Turn off cooking equipment	2%	0%
Send staff to work at home	1%	0%
Other	20%	43%

Table 28: Possible Actions to Reduce Energy Use – "Other" Mentions

	No Alert	Alert
Incorrect explanation	10	6
Did not know	3	5
Turn off or don't use energy (super category)	13	25
• Turn off: TV	1	0
• Turn off: PC	0	7
• Turn off: AC	5	13
• Turn off: Lights	2	1
• Turn off: Everything	0	1
• Turn off: Vampires (not in use)	0	4
• Turn off: Machinery, Equipment, or other Electronics	6	3
• Turn off: Fan	0	1
Change Schedules to off-peak	2	1
Leave facility - stay home	3	0
Lower use of energy equipment	0	2
Generic other responses	3	2

Feedback and Suggestions

Table 29: Best Contact Method for Advance Event Notification

	No Alert (n=104)	Alert (n=70)	Wt. Total
Email	47%	71%	47%
Phone (volunteered)	41%	21%	41%
Text message	4%	4%	4%
Mailing	1%	1%	1%

	No Alert (n=104)	Alert (n=70)	Wt. Total
Other	7%	1%	7%

Table 30: Agreement with "Announcement about RYU day events are adequate," among those aware of July 20th event

	No Alert (n=15)	Alert (n=53)	Wt. Total
Strongly disagree	0%	2%	0%
Somewhat disagree	7%	0%	8%
Neither agree not disagree	7%	0%	8%
Somewhat agree	40%	26%	38%
Strongly agree	47%	72%	46%

Table 31: Agreement with "I will reduce my energy use when future RYU days are announced."

	No Alert (n=94)	Alert (n=68)	Wt. Total
Strongly disagree	9%	0%	8%
Somewhat disagree	11%	1%	11%
Neither agree not disagree	15%	6%	15%
Somewhat agree	43%	34%	43%
Strongly agree	23%	59%	24%

Table 32: Suggestions to Improved RYU Days

	No Alert	Alert	Wt. Total
Advanced Notice/more notice	10%	9%	10%
More Education on how to save/impact of saving	4%	3%	4%
Different timing/hours	3%	6%	3%
Research business needs/target better	3%	0%	3%
Logging into accounts hard	3%	3%	3%
Make facility more EE/more info on facility	3%	0%	3%
Increase general awareness	2%	0%	2%
More information/quick feedback	2%	1%	2%
Increase credits	2%	3%	2%
Other request	2%	0%	2%
Increase Tenant Awareness	2%	0%	2%
Money savings/credit information	1%	4%	1%

	No Alert	Alert	Wt. Total
General behaviors described (off topic)	0%	1%	0%
Help to understand why RYU days help	0%	9%	0%
Lower rates	0%	0%	0%

Firmographics

Table 33: Summer AC Use

	No Alert (n=104)	Alert (n=70)	Wt. Total
Yes	68%	74%	68%
No	29%	24%	29%
Refused	3%	1%	3%

Table 34: Business Type

	No Alert (n=104)	Alert (n=70)	Wt. Total
General office	24%	24%	24%
Retail	17%	20%	17%
Food service	8%	4%	7%
Manufacturing	7%	7%	7%
Personal services (spas, gyms, salons)	6%	9%	6%
Medical or dental (including mental health)	6%	4%	6%
Property management	5%	0%	5%
Construction	3%	0%	3%
R&D, biomed, product design	3%	1%	3%
Sales, marketing, advertisement	3%	0%	3%
Parks & recs	3%	0%	3%
Business services (consulting, architecture, engineering)	2%	4%	2%
Education, school, youth programs	2%	4%	2%
Services (repair shops, etc.)	2%	4%	2%
Financial	2%	1%	2%
Religious services	1%	4%	1%
Real estate	1%	3%	1%
Agriculture	1%	1%	1%

	No Alert (n=104)	Alert (n=70)	Wt. Total
Other	6%	7%	6%

Table 35: Building Ownership

	No Alert (n=104)	Alert (n=70)	Wt. Total
Own and occupy the entire building	18%	26%	18%
Own the building and occupy part of it	13%	4%	13%
Lease the space you are in	66%	66%	66%
Something else	2%	4%	2%
Don't know	1%	0%	1%

Table 36: Space Size in Square Feet

	No Alert (n=84)	Alert (n=58)	Wt. Total
Mean	11,618	9,586	11,612
Minimum	600	800	600
Maximum	436,000	150,000	436,000