



## Madison Gas & Electric Customer Perceptions Study

November 10, 2015



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### **Background and Objectives**

# Background

- Madison Gas & Electric (MGE), in partnership with Wood Communications Group, is in the midst of developing a long-term strategic energy plan that will continue to meet customers' needs today and well into the future.
  - This ten to fifteen year energy plan is meant to identify the energy supply mix and customer services of focus, as well as develop a set of tactical programs, projects and opportunities that will help MGE move in the direction stated in their plan.
- As part of this planning process, MGE was interested in better understanding their customers' perceptions regarding MGE's goals and energy services.
  - The utility conducted a series of Community Energy Conversations with customers to get in-depth feedback these goals and services.



- MGE was also interested in conducting quantitative research among their customer base, to understand which goals and services are most important.
- The Dieringer Research Group (The DRG) was commissioned to conduct a quantitative research study among current customers to meet the following key objectives:
  - Measure relative importance of MGE goal statements and energy services
  - Uncover other goals and energy services important to customers
  - Assess importance of continuing to increase the percentage of the energy supply obtained from renewable sources
  - Gauging whether customers' dependence on electricity has shifted over the past few years

### Methodology



- The DRG collected a total of 601 telephone surveys (362 landline, 239 cell phone) with MGE residential customers.
- A number of steps were taken to ensure that the entire MGE customer base was fairly represented within the research.
  - A Random Digit Dialing methodology (which includes both listed and unlisted phone numbers) was used to avoid response bias
  - Soft quotas for landline vs. cell phone interviews were set to improve the overall demographic composition of the respondents (in terms of age, ethnicity and education).
  - Both Spanish and Hmong speaking interviewers\* were available to conduct the survey in the customer's primary language.
- In order to qualify to participate in the research, respondents were screened to be:
  - 18 years of age or older
  - Current MGE residential electricity customer
  - Not employed by MGE
- The interviews were conducted between October 2 17, 2015 and lasted an average of 14 minutes.
- At the end of the survey, customers were asked if they would be interested in participating in future focus groups; over half (55%) are willing to be contacted.
  - Interested customers' contact information will be shared with MGE via secured communication.

\*Note: A total of 3 interviews were conducted in Spanish and 2 in Hmong.

### Weighting Approach

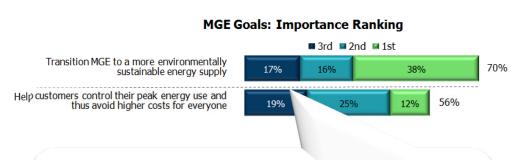


- The DRG's weighting analysis included comparing the key demographics among respondents against the U.S. Census figures based on the zip codes included in MGE's service area including gender, age, ethnicity, education, and income.
- We adjusted the U.S. Census figures to account for the expected differences between the demographic profile of utility customers (individuals personally responsible for paying the utility bills for their household) and the general population.
  - According to the Pew Research Center\*, 36% of adults ages 18 to 31 (Millennial generation) were living in their parents' home in 2012. Based on this statistic, we adjusted the U.S. Census figures down by 35% among 18-24 year olds and Income <\$40K.</p>
- We also took into account the varying penetration of MGE customers within the service area zip codes to ensure that no respondent types would be over or under represented based on geography.
- In the resulting weighting analysis, we determined that weighting by gender, age, ethnicity, education and income should be conducted.
- The data presented in this report is, therefore, weighted.

\*Source: <a href="http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-young-adults-live-in-their-parents-home">http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-young-adults-live-in-their-parents-home</a>

### **How to Read This Report**

- The data throughout this report was analyzed for statistically significant differences at the 95% and 90% confidence levels.
  - Significant differences between data shown in bar chart format is indicated by using a dotted line (see below at left).
  - Wherever data is presented in a table format (see below at right), letters are used to indicate significant differences over the column in reference (columns are each assigned a letter); upper case letters indicate a difference at the 95% confidence level and lower case letters indicate a difference at the 90% confidence level.



Here, the dotted line indicates that there is a significant difference between the proportion of respondents who rank "Transition MGE to a more environmentally sustainable energy supply" as one of the top 3 most important MGE goals and "Help customers control their peak energy use."

	Age						
MGE Goals – Importance Ratings (Top-2-Box)	18-39	40-64	65+				
	(A)	(B)	(C)				
N=	97	282	219				
Transition MGE to a more environmentally sustainable energy supply	95%	96% c	91%				
Help customers control their peak energy use and thus avoid higher costs for everyone in the future	99% BC	93%	89%				

In this example, 18-39 year olds are significantly more likely (at the 95% confidence level) to rate this attributes as being more important than either 40-64 year olds or those 65+.





## **Executive Summary & Recommendations**

### **Executive Summary**

## Importance of MGE Goals

- Transitioning MGE to a more environmentally sustainable energy supply is perceived to be the most important goal among customers, regardless of demographics.
- The following MGE goals fall into a second tier in terms of overall importance rankings:
  - Help customers control their peak energy usage
  - Provide an electric grid that supports new technology
  - Ensure that technology serves all customers equitably
- Nearly all younger customers surveyed (18-39) consider the goals of controlling peak energy use and ensuring that technology serves all customers equally to be important.
- Although not unimportant overall, providing more customized products and services is least likely to be ranked as the 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> most important goal for MGE.

### **Executive Summary**

Importance of MGE Energy Services

- There is less perceived differentiation in the potential energy services MGE could provide.
- Between four and five out of ten customers rank the following energy services as either the 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> most important:
  - Offering tools and technology that give greater control over energy use and costs
  - Offering more tools to help improve home energy efficiencies
  - Offering a variety of pricing options
  - Providing more options for choosing the energy sources used
- Similar to the MGE goals, differences by age stand out in the MGE services results where younger customers (18-39) consider three of the top four attributes above more important than older customers.
- In terms of importance, second tier MGE services focused on easier and more frequent information about individual use as well as enhancing the reliability of the electric service provided.

### **Executive Summary**

of
Renewable
Energy
Sources

- Continuing to increase the percentage of MGE's energy supply from renewable sources is considered universally important among MGE's customer base.
  - There are no significant differences in importance ratings between Caucasians and all other ethnicities in total.
  - However, when breaking out the ethnicities, Hispanics tend to put more importance on renewable energy sources than other ethnicities.

Electricity Dependence

- When asked how their dependence on electricity has changed compared to five years ago, one-third of MGE customers say they are more dependent now than in previous years.
  - Demographically, those who indicate their dependence on electricity has increased are more likely to be younger (18-39) and those with higher incomes (\$75K+).
  - These customers are also more likely to consider it important for MGE to increase the proportion of renewable sources within the energy supply overall.

### **Recommendations to Consider**



Educate and raise public awareness of the various ways that MGE is continuing to **transition to a more sustainable energy supply**, given its high importance among MGE customers as a whole.



Target younger MGE customers with messaging regarding ways to control peak energy use and what MGE is doing to ensure that changes in technology serve all customers equitably, due to the high importance they place on these goals.



Increase awareness of the ways customers can **gain greater control over their energy use** and **improve their homes' energy efficiency**, particularly among younger customers who are most likely to consider these services to be important.



In planning for future MGE brand work, consider contacting the customers from this research who indicated they would be willing to participate in future focus group discussions.





### **Detailed Findings**



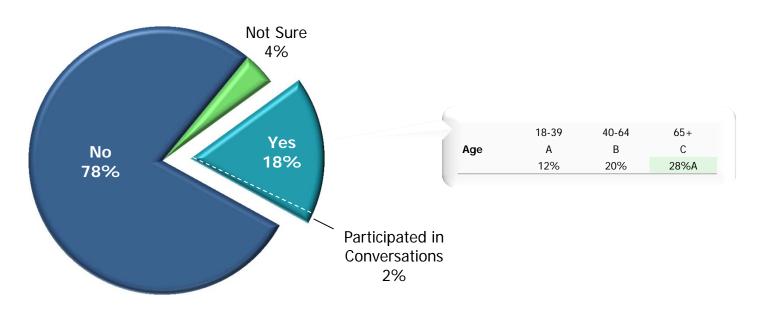


## Awareness of MGE Community Energy Conversations

### Roughly two in ten customers are aware of MGE's Community Energy Conversations, but relatively few have participated

- Among those who have heard of MGE's Community Energy Conversations (18%), older customers are more likely to be aware than younger customers.
  - A total of 9 customers (2%) who participated in this survey, have taken part in one of these discussion groups.

### Awareness & Participation in Community Energy Conversations



S4. Have you heard of the MGE Community Energy Conversations?

Letters indicate a significant difference over the column in reference: upper case for the 95% confidence level and lower case for the 90% confidence level.

S5. Have you participated in any of the MGE Community Energy Conversations?

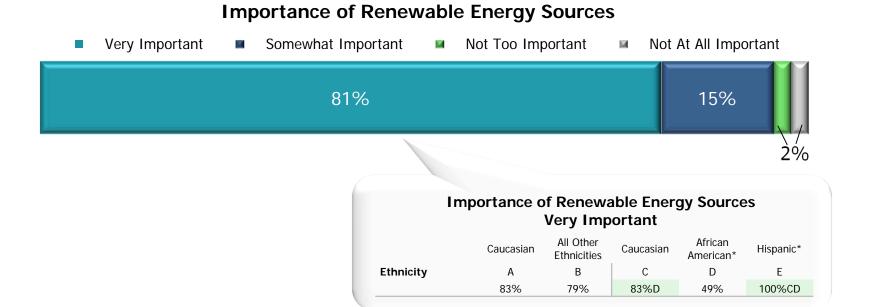




## Importance of Renewable Energy Sources & Electricity Dependence

## Nearly all MGE customers (96%) feel it is important that the utility continues to increase the percentage of the energy supply from renewable sources

- Eight out of ten customers (81%) feel that increasing renewable energy sources is "very important," while 15% say it is "somewhat important".
- Demographics have very little impact on the perceived importance of renewable energy; however, Hispanics are more likely to indicate it is "very important" than Caucasians and African Americans (caution due to small sample sizes).

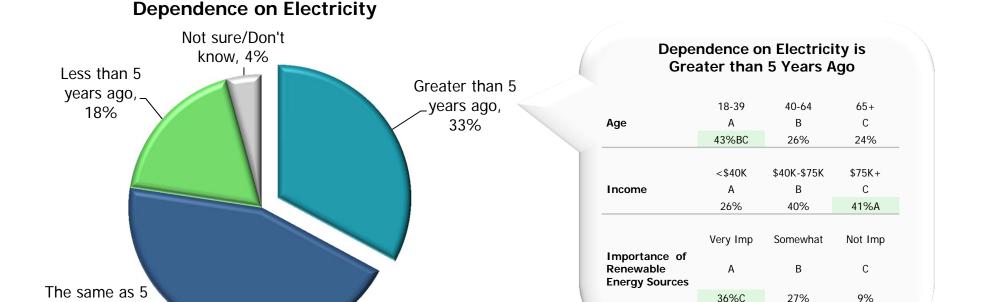


Q7. Thinking about renewable energy sources, such as solar, wind, landfill gas, or animal waste, how important is it to you that MGE continues to increase the percentage of the energy supply from renewable sources? \*Caution: Small sample sizes <30

Letters indicate a significant difference over the column in reference: upper case for the 95% confidence level and lower case for the 90% confidence level.

### One in three (33%) MGE customers overall reports their dependence on electricity has increased over the past five years

 Differences are seen across various types of customers where those reporting a greater dependence on electricity are typically younger (age 18-39), more affluent (\$75,000 annually or more), and those who consider it "very important" for MGE to increase the percentage of the energy supply from renewable sources.



D8. Thinking about your household's energy usage, how would you say your dependence on electricity has changed compared to five years ago? Would you say it is...? Letters indicate a significant difference over the column in reference: upper case for the 95% confidence level and lower case for the 90% confidence level.

years ago, 45%

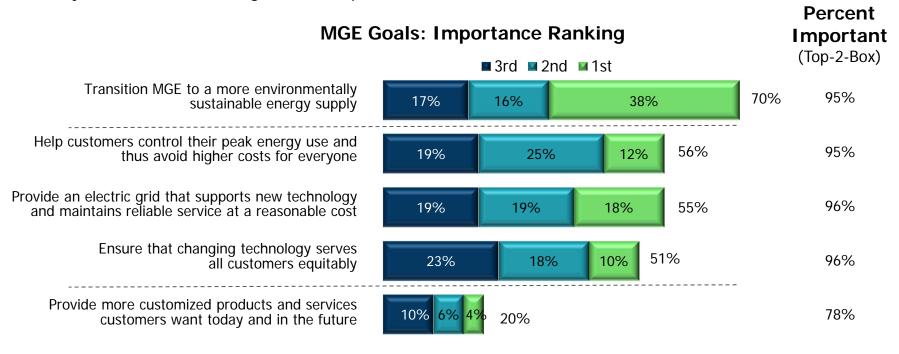




### **Importance of MGE Goals**

### Transitioning MGE to a more environmentally sustainable energy supply is considered the most important goal among customers

- Seven in ten customers rank transitioning to a more sustainable energy supply as one of the top three most important goals.
- Providing more customized products and services is deemed least important by MGE customers, with
  just two in ten ranking it in the top three.



Q1. I'm going to read you a list of Madison Gas & Electric/MGE goals. For each one, please tell me how important that goal is to you. How would you rate...? (Very Important, Somewhat Important, Not Too Important, Not At All Important)

Q3. Now, I'll read you the list of goals again and ask you to rank the top 3 in order of importance to you.

### While the perceived importance of MGE goals is generally similar across demographics, some differences exist

- As highlighted in the chart below, younger customers (age 18-39) and Hispanics rate several of the MGE goals more important than their older and Caucasian counterparts, respectively.
- Not surprisingly, those who feel it is "very important" that MGE continues to increase its renewable energy supply tend to place higher importance on these goals than other MGE customers.

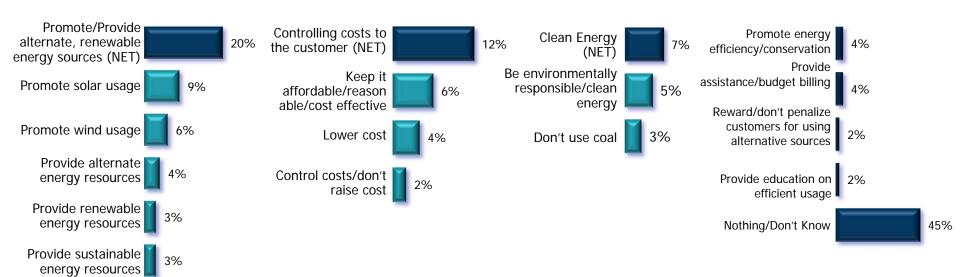
MGE Goals – Importance Ratings (Top-2-Box)												
		Age			Ethnicity					Importance of Renewable Energy		
	18-39	40-64	65+	CAU	AFAM*	HISP*	CAU	All Others	Very Important	Somewhat Important	Not Important	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(٦)	(K)	
N=	97	282	219	526	17	17	526	60	466	92	31	
Transition MGE to a more environmentally sustainable energy supply	95%	96% c	91%	95%	90%	100% D	95%	96%	99% JK	89% K	32%	
Help customers control their peak energy use and thus avoid higher costs for everyone in the future	99% BC	93%	89%	94%	100% D	100% D	94%	99%	98% Kj	89%	74%	
Provide an electric grid that supports new technology and maintains reliable service at a reasonable cost	97%	96%	94%	97% f	95%	83%	97%	93%	97%	93%	91%	
Ensure that changing technology serves all customers equitably	99% C	95%	91%	97%	80%	100% d	97%	94%	98% K	91%	77%	
Provide more customized products and services customers want today and in the future	81% c	77%	70%	75%	90%	97% D	75%	90% G	81% jk	66%	58%	

Q1. How would you rate...? (Very Important, Somewhat Important, Not Too Important, Not At All Important) \*Caution small sample size (N<30) Letters indicate a significant difference over the column in reference: upper case for the 95% confidence level and lower case for the 90% confidence level.

## In addition to the five main goals measured, customers feel MGE should consider promoting/providing renewable energy sources and controlling costs to the customer

- When asked what other goals MGE should consider as it works to become the community energy company of the future, providing alternate, renewable energy sources (20%) and controlling costs (12%) get mentioned most often.
  - Among the customers who mention these goals, 42% and 63%, respectively rank them as being one of the top three most important goals for MGE.
- Nearly half of the customers surveyed (45%) mentioned no other goals for MGE to consider.

#### **Other Goal Considerations**



Q2. What other goals should MGE consider as it works to become the community energy company of the future? Only Mentions of 2% or more are shown. NETs may not be the sum of attributes included due to rounding or multiple mentions.

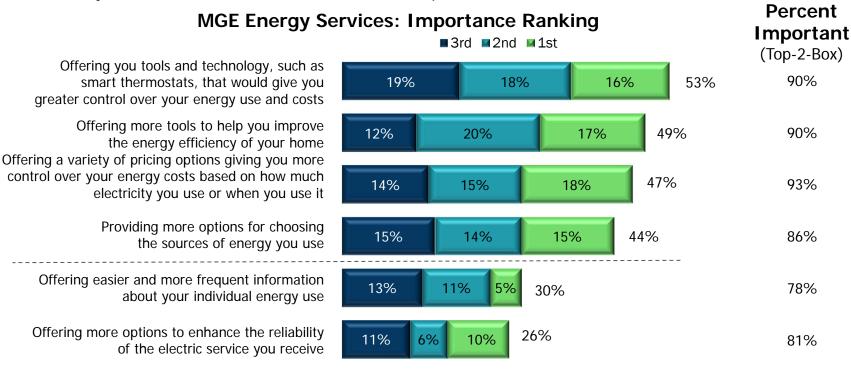




### **Importance of MGE Energy Services**

### Several of the energy services MGE could provide are perceived to be equally important among customers

- Between four and five out of ten MGE customers rank the following services as one of the top three in order of importance to them:
  - Offering you tools and technology to give greater control over energy use and costs, offering more tools to help improve energy efficiency, offering a variety of pricing options, and providing more options of energy sources.
- Two services, offering easier and more frequent information about energy use and offering more options to enhance the reliability of the service received are considered less important.



Q4. I'm going to read you a list of specific types of energy services MGE could provide. For each one, please tell me how important that energy service is to you. How would you rate...? (Very Important, Somewhat Important, Not Too Important, Not At All Important)

Q6. Now, I'll read you the list of energy services MGE could provide and ask you to rank the top 3 in order of importance to you.

## As seen with MGE's goals, demographic differences in the perceived importance of MGE services are seen across age, ethnicity, and the importance of renewable energy

- More younger than older customers rate a few of these services as important, as do Hispanics compared to Caucasians.
- Customers who feel it is "very important" that MGE continues to increase its renewable energy supply rate three of the six services as being more important than those who say renewable energy sources are "somewhat important".

MGE Services – Importance Ratings  (Top-2-Box)											
		Age				Ethnicity	Importance of Renewable Energy				
	18-39	40-64	65+	CAU	AFAM*	HISP*	CAU	All Others	Very Important	Somewhat Important	Not Important
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
N=	97	282	219	526	17	17	526	60	466	92	31
Offering you tools and technology that would give you greater control over your energy use and costs	95% BC	88%	83%	91%	78%	96%	91%	88%	93% J	79%	78%
Offering more tools to help you improve the energy efficiency of your home	93% C	90% C	80%	90%	92%	93%	90%	93%	92% j	79%	82%
Offering a variety of pricing options giving you more control	98% BC	88%	89%	90%	100% D	100% D	90%	100% G	94%	91%	78%
Providing more options for choosing the sources of energy you use	88%	87%	80%	86%	87%	89%	86%	87%	92% JK	70% K	29%
Offering easier and more frequent information about your individual energy use	79%	77%	76%	75%	78%	96% D	75%	90% G	82% Jk	63%	57%
Offering more options to enhance the reliability of the electric service you receive	84%	76%	84% b	78%	89%	100% D	78%	93% G	82%	80%	69%

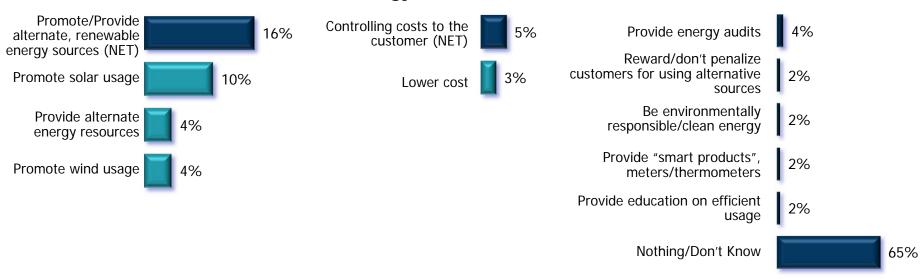
Q4. How would you rate...? (Very Important, Somewhat Important, Not Too Important, Not At All Important) \*Caution small sample size (N<30)

Letters indicate a significant difference over the column in reference: upper case for the 95% confidence level and lower case for the 90% confidence level.

### When asked what other services MGE should consider, providing alternate, renewable energy sources is most commonly cited

- Just under two in ten customers (16%) would like MGE to consider providing alternate, renewable energy sources as
  the utility works to become the community energy company of the future; controlling costs is mentioned by 5% of the
  customers surveyed.
  - Roughly four in ten customers mentioning these services (43% and 46%, respectively) rank them as being one of the top three most important services for MGE to consider.
- Nearly two-thirds of customers (65%) offered no other services to be considered.

### **Other Energy Services Considerations**



Q5. What other energy services should MGE consider offering customers as it works to become the community energy company of the future? Only Mentions of 2% or more are shown.

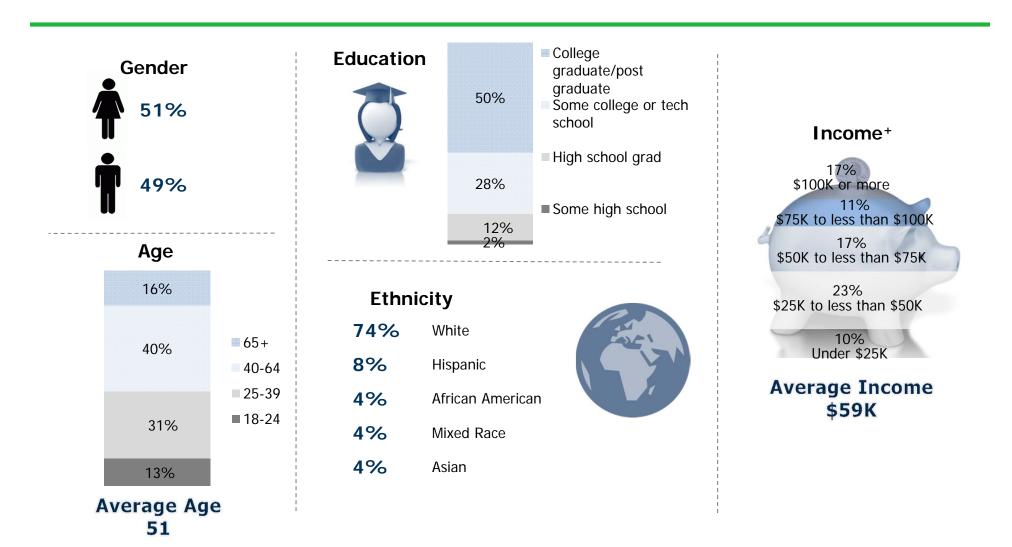
NETs may not be the sum of attributes included due to rounding or multiple mentions.





### **Respondent Profile**

### **Respondent Profile**



### Respondent Profile (continued)

#### **Employment Status**

**54%** Employed Full-time

19% Retired

**12%** Employed Part-time

5% Homemaker

**4%** Full time College/Tech college Student

2% Unemployed

1% Part-time Student

1% Disabled



### **Employment Type**

**63%** White Collar

**31%** Blue Collar



#### **MGE Community Energy Conversations**

#### **Awareness**

**78%** No

**18%** Yes

### Participated in Conversations (Among those aware)

**84%** No

**11%** Yes

6% Not Sure

#### Residence



60% Own their home

**39%** Rent their home





### **Statistical Reliability and Limitations**

### **Statistical Reliability and Limitations**

- Reliability is the degree to which survey sample data reflects the actual population and the true
  parameters of that population. It is dependent primarily upon survey sample size, along with
  other factors, including the degree of representativeness of the original sample selection, types of
  questions asked, answers received, and respondent quality.
- For the MGE Customer Perceptions Study, the sample of 601 respondents yields overall data reliable with 95% confidence and a +/-3.99% sampling error interval.
  - That is to say, if a similar survey were conducted repeatedly, results within plus or minus 3.99% would occur for any one question 95 out of 100 times. Looking at it another way, if a question received a "yes" answer by 60% of the 601 respondents, the chances are 95 out of 100 that between 56.01% and 63.99% of the targeted population would answer a similar "yes" response, if asked.
- Surveys should also never be viewed as 100% reliable. A small difference between two statistics or findings cannot be considered necessarily meaningful; however, as the sample size or market segment increases, the margin of error (sampling error) decreases, thereby providing more conclusive and reliable data.