# 2023 Member Satisfaction Study

### **Vermont Electric Cooperative**

**PREPARED BY:** 

**NRECA Market Research Services** 



June 29, 2023

## **Table of Contents**

EXECUTIVE SUMMARY	
OBJECTIVES, METHODOLOGY, & ANALYSIS	
Objectives	
Methodology	
Analysis	4
KEY FINDINGS	6
Overall Satisfaction	6
Performance Quality Attributes	7
Performance Quality Trends and Benchmarks	8
Prioritizing Improvement and Maintenance Efforts	9
Member Service	
Electric Rates	
Electric Service	
Payments and Bills	
Renewable Energy	
Products and Services	
Communication	
Co-op Membership	
Member Demographics and Segmentation	
Verbatim Comments	
APPENDIX A: MEMBER DEMOGRAPHICS	
APPENDIX B: KEY DRIVER/FACTOR EXPLANATION	
Factor Analysis	
Key Driver Analysis	
APPENDIX C: VERBATIM RESPONSES	43
APPENDIX D: QUESTIONNAIRE	135

#### **Executive Summary**

Following are the top-line findings based on the results of an online survey of 1,154 residential and non-residential members of Vermont Electric Cooperative conducted in May/June of 2023:

- Overall satisfaction with Vermont Electric is very good, with an overall mean rating of 8.66. This has not changed significantly from recent studies and continues to be significantly higher than in 2015. However, it is lower than the Co-op Norms mean rating of 8.90.
- The mean ratings for 19 of the 23 service attributes are evaluated above 4.00 on a 5-point scale, which is considered "good". Nine attributes receive mean ratings near or above 4.50, the "excellent" threshold.
  - VEC receives the highest ratings for *having professional employees*, *customer service*, and *providing consistent voltage*.
  - The lowest rated attributes are *the monthly service fees*, *charging reasonable rates*, and *helping customers keep bills as low as possible*.
  - Compared to the 2022 study, one attribute has increased significantly (*the accuracy of meter reading and billing*) and none have decreased. While *keeping the number of longer outages to a minimum* and *the restoration of power after an outage* are lower than in 2021, almost all of the attributes continued to be higher than in at least one of the studies between 2014 and 2017.
- **Member Service** is the strongest key driver of overall satisfaction. This means that increases/ decreases in the ratings for the attributes included in this area should cause a corresponding increase/ decrease in overall satisfaction ratings. This area contains nine attributes and all are evaluated well above 4.0, if not above 4.50, including the highest rated attribute in the study. Most members feel VEC's office hours are convenient, giving a mean rating of 4.32 on a 5-point scale.
- Electric Rates is the second-strongest key driver of satisfaction. Not surprisingly, the four attributes that make up this driver are the lowest rated attributes in the study. Although this is typical in studies of this type, with mean ratings below 4.0 for all four attributes and three having decreased significantly from the 2019 study, this is an area to watch in future studies. Member evaluations for *the value they feel they receive for the money* are positive with a mean rating of 4.10.
- The next driver of satisfaction is **Electric Service** and is another area that is evaluated very well, with mean ratings for four of the six attributes close to or above 4.50. Additionally, three are higher than in the 2019 study. In an extended power outage, members are most concerned about keeping their food cold or frozen, staying warm, and running water.
- The final key driver of satisfaction is **Payments and Bills**. While the three attributes in this area do not have a strong impact on overall satisfaction, they are all evaluated well above 4.0. Forty-two percent still receive a printed copy of their bill in the mail, with most of them saying the reason they have not gone paperless is because they like getting a paper bill.
- Members continue to feel that providing electricity from solar and hydro power is important but ratings have fallen from all of the previous studies with most of those differences being significant.

Ratings for the importance of wind and bio-mass are also lower than previous studies, again with most of the differences being significant. Although the importance of providing power from nuclear energy and natural gas remains low, the importance of nuclear is higher than in the studies between 2016 and 2021. As with most of the other sources, importance ratings for natural gas are lower than in previous studies.

- Providing low-cost energy is more important than receiving power from renewable energy and carbon free energy regardless of where it is generated. Receiving power from renewable energy and carbon free energy that is generated in-state does not appear to be more important than that generated elsewhere. The importance of receiving carbon free energy that is generated in-state has decreased from the 2021 and 2022 studies. Other ratings have not changed significantly.
- The proportion of members who currently own or lease an electric vehicle has increased from previous studies although the proportion who are likely to purchase or lease one in the next 5 years has decreased from 2021 and 2022. However, this does remain higher than in the 2019 study.
- The likelihood of members purchasing or leasing on-site back up battery storage for their home in the next 5 years has also decreased from 2021 and 2022. Forty-four percent say they own a backup generator.
- One-fifth heat their home with a heat pump. The cost of a system is given most often as the reason members do not have one. Members are most likely to primarily heat their home with oil or propane and two-thirds have a secondary heat source.
- While overall newsletter readership has increased due to a drop in those who say they never read it, the frequency of readership is lower. The proportion of members who always or usually read the newsletter is down from 2022 while the proportion who rarely or never read it is up. Overall readership and frequency of reading bill inserts are down from 2022.
- Members continue to prefer receiving information from VEC by email on a monthly or quarterly basis.
- Eight in ten say they use VEC's SmartHub online tool. This is almost identical to previous studies. The top reasons for not using it are being unaware of it, concerns about privacy, and using their bank's bill pay service instead.
- Four in ten view themselves as a member of the co-op, rather than just a customer. This is consistent with previous studies as well as the Co-op Norms.

#### **Objectives, Methodology, & Analysis**

#### **Objectives**

This residential member survey addresses, but is not limited to, the following informational objectives:

- Overall Satisfaction: Assess how satisfied members are with Vermont Electric Cooperative.
- **Performance Quality Attributes:** Evaluate residential member perceptions of service quality on a variety of attributes (e.g., rates, billing, outages, problem resolution, etc.).
- **Performance Quality Trends and Benchmarks:** Compare the results to past studies to identify trends and benchmark the results against co-ops nationwide using NRECA's Co-op Norms Database.
- **Prioritizing Improvement and Maintenance Efforts:** Derive the key drivers of overall satisfaction and the degree to which consumer needs are being met to help VEC prioritize any improvement efforts.
- Other: Explore other areas of specific interest to the co-op, including perceived importance of renewable power sources, likelihood of purchasing/leasing a plug-in electric vehicle and battery storage in the next 5 years, member concerns during an extended power outage, newsletter and bill insert readership, and communication preferences.
- **Member Demographics:** Provide demographics of the residential member base and identify differences in attitudes between demographic groups.

#### Methodology

As in 2021 and 2022, data were collected through online surveying. An email invitation was sent on May 30 to a random sample of 13,778 members for whom VEC has an email address, with 301 returned as being undeliverable. The survey was closed on June 11 with a total of 1,154 surveys completed online, resulting in a response rate of 9%. The online survey respondents are weighted by connect date to match the overall tenure distribution of the co-op.

The margin of error at the 95% confidence level for the entire sample is plus or minus 3.0 percentage points. This means that a result of 50% in the survey may range between 47% and 53% in an infinite number of residential samples this size.

#### Analysis

The graphics presented in this report are based on data collected from the current study and tracking comparable results from 18 studies conducted between 2003 and 2022. The results of tracking surveys provide value by demonstrating when results remain consistent and indicating where there has been significant change over time.

Comparisons to previous studies are primarily focused on the studies since 2014, the first year an online component was introduced in the methodology. Due to the co-op's desire to move to a combined survey including both residential and non-residential members, data from the separate residential and non-residential surveys prior to 2021 have been combined. Because of this, it is important to remember that results in this report from those studies will not be the same as presented in the earlier reports.

The co-op has experienced some recent events that are likely to have an impact on attitudes and satisfaction:

- The co-op has faced a number of challenges in the past year including national inflation, supply chain issues, and rising costs. Despite these, the co-op finished the year below budget and was also able to distribute member capital.
- Winter Storm Elliot hit VEC's service area at the end of 2022 causing severe damage and widespread outages, also contributing to the other financial challenges.
- The 2023 Energy Efficiency Charge was decreased slightly for residential members (-0.5%) and more substantially for commercial and industrial members (-4.9% and -3.8%, respectively).
- However, VEC recently implemented an 8.19% increase in its rates. This was effective on January 1, 2023, as an interim rate increase and received approval from the Vermont Public Utility Commission on April 24.
- Members are now able to receive a free Level II EV charger for their home through the co-op.
- Bill credits are also available for a number of other energy efficiency purchases including induction cooktops, electric vehicles, EV charging stations, and heat pumps.

Comparisons are also made to results from similar studies conducted by 90 co-ops among almost 120,000 residential members across the country between January 2020 and December 2022. These "Co-op Norms" can be viewed as an example of other co-ops' scores, not a national benchmark as they are not taken from the universe of all cooperatives. Rather, these are co-ops for whom NRECA Market Research Services has conducted a study in that 3-year time period.

Differences between current and previous studies and between member segments, such as differences by age or service tenure, are either statistically significant or not. A "significant" change refers to the certainty of a difference, not the magnitude or size of the difference. Throughout this report, only significant changes or comparisons will be mentioned even if the word "significant" is not used, unless noted otherwise. Significance is measured at the 95% confidence level, meaning that at least 95% of the time, using the same sampling procedure, this difference will occur; the difference is likely not a matter of chance.

When evaluating the mean ratings in this report, on a 5-point scale a mean of 4.50 or above should be considered "excellent" and a mean between 4.00 and 4.49 is considered "good". Means below 4.00 may be cause for concern and those below 3.75 indicate a need for improvement.

To provide additional points for analysis, demographic information was purchased from Acxiom Corporation for each household served (residential members only). For those households that matched by surname and address, an enhanced package of demographic data was appended to the file. The data elements are listed below:

- Adult Age Ranges Present in Household
- Number of Children in Household
- Children Age Ranges in Household
- Marital Status in Household
- Number of Adults in Household
- Household size
- Home market value
- Home year built
- Population density
- Personicx lifestage cluster

- Education
- Homeowner/Renter
- Length of Residence
- Estimated Household Income
- Gender of head of household
- Age of head of household
- Occupation of head of household
- Dwelling type
- Personicx lifestage group
- Personicx lifestage insurance group

#### **Key Findings**

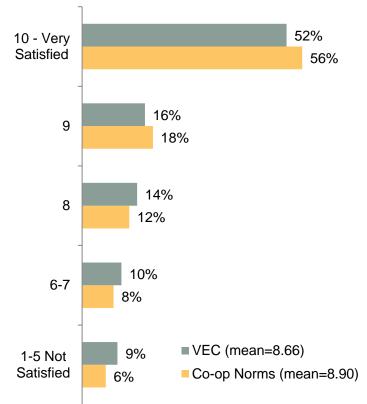
#### **Overall Satisfaction**

With a mean rating of 8.66, overall satisfaction among VEC's members continues to be very good. Additionally, 68% give a top rating of "9" or "10".

- This does not differ significantly from any of the recent studies and remains higher than in the 2015 study.
- However, it is lower than the Co-op Norms.

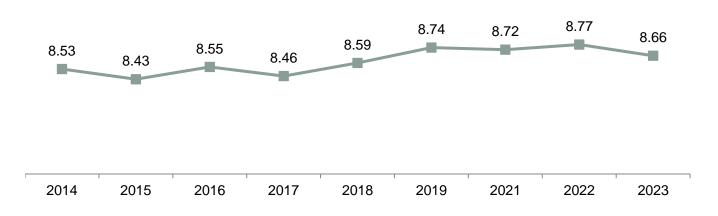
Member segments with higher satisfaction than their counterparts include:

- Those with member identity.
- Older members.
- Those paying lower monthly electric bills.
- Those with more formal education.
- Those who are retired.
- Those with higher household income.
- Members in Districts 3 and 7 (significantly compared to those in District 6).



#### **Overall Satisfaction**

#### Satisfaction Mean Ratings By Year



#### **Performance Quality Attributes**

Members were asked to evaluate 23 performance quality attributes related to member service, electric service, communication, billing, and cost. On 19 of the attributes measured, the mean ratings are above 4.00, a "good" rating on a 5-point scale.

Additionally, mean ratings for nine attributes are approximately 4.50 or higher which is considered excellent. These are:

- Having professional employees (4.64)
- The overall customer service they provide (4.61)
- Providing consistent voltage without surges or brownouts (4.61)
- The courtesy, understanding and helpfulness of employees to your inquiries or problems (4.56)
- The reliability of service and frequency of interruptions (4.54)
- Keeping blinks and momentary outages to a minimum (4.51)
- Having convenient payment options (4.51)
- Communicating with members and keeping them informed (4.49)
- Keeping the number of longer outages to a minimum (4.48)

Conversely, the attributes on which VEC is rated least well are *the monthly service fees* (59% rating "4" or "5"), *charging reasonable rates* (62%), and *helping customers keep bills as low as possible* (61%). While these are areas that are often rated lower in cooperative satisfaction research and ratings often fall below the "good" threshold of 4.00, with mean ratings of 3.65, 3.70, and 3.71, respectively, this may be of concern to the co-op.

#### Performance Quality Trends and Benchmarks

Compared to the 2022 study, one of the attributes has changed significantly – *the accuracy of meter reading and billing* has increased. Additionally, almost all of the attributes continue to be higher than in at least one of the studies between 2014 and 2017.

While none of the attributes have decreased from 2022, two have decreased from 2021:

- Keeping the number of longer outages to a minimum.
- The restoration of power after an outage.

While mean ratings for almost all of the comparable attributes are similar to the Co-op Norms, there are some with gaps greater than 0.10, both higher and lower than the Co-op Norms:

	VEC Mean	Co-op Norms	Gap
Keeping members informed on the status of outages	4.44	4.22	+0.22
Charging reasonable rates	3.70	3.89	-0.19
Helping members to be more efficient in their use of electricity	3.87	4.06	-0.19
Delivering a good value for the money	4.10	4.23	-0.13

#### **Prioritizing Improvement and Maintenance Efforts**

The key drivers of overall satisfaction among VEC's members are Member Service, Electric Rates, Electric Service, and Payments and Bills. Going forward, these are the areas that Vermont Electric Cooperative should focus on most.

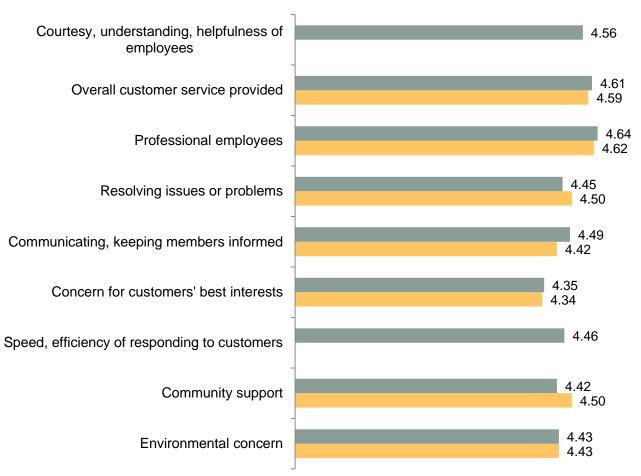
Regression analysis was used to determine the key drivers of overall satisfaction. The scores are to be interpreted relative to each other. For example, since *member service* has an importance score of 0.43 and *payments and bills* has a score of 0.15, we can say that members' perceptions of the member service they receive have about 3 times the impact on overall satisfaction as their perceptions of the payment options and bills provided by VEC. More information on how the factors were formed and importance scores derived can be found in Appendix B.

Member Service	<ul> <li>Courtesy, understanding, helpfulness of employees</li> <li>Overall customer service provided</li> <li>Having professional employees</li> <li>Resolving any issues or problems</li> <li>Plus 5 other performance attributes</li> </ul>	0.43	
Electric Rates	<ul> <li>Charging reasonable rates</li> <li>Helping customers keep bills as low as possible</li> <li>The monthly service fees</li> <li>Helping members be more efficient in electric use</li> </ul>	0.36	
Electric Service	<ul> <li>Keeping longer outages to a minimum</li> <li>Keeping blinks, momentary outages to a minimum</li> <li>Reliability of service and frequency of interruptions</li> <li>Restoration of power after an outage</li> <li>Providing consistent voltage</li> <li>Keeping members informed on the status of outages</li> </ul>	0.27	ווסומכווט
Payments and Bills	<ul> <li>Having convenient payment options</li> <li>Providing accurate, easy to understand bills</li> <li>Accuracy of meter reading and billing</li> </ul>	0.15	

#### **Member Service**

The strongest key driver of overall satisfaction is Member Service.

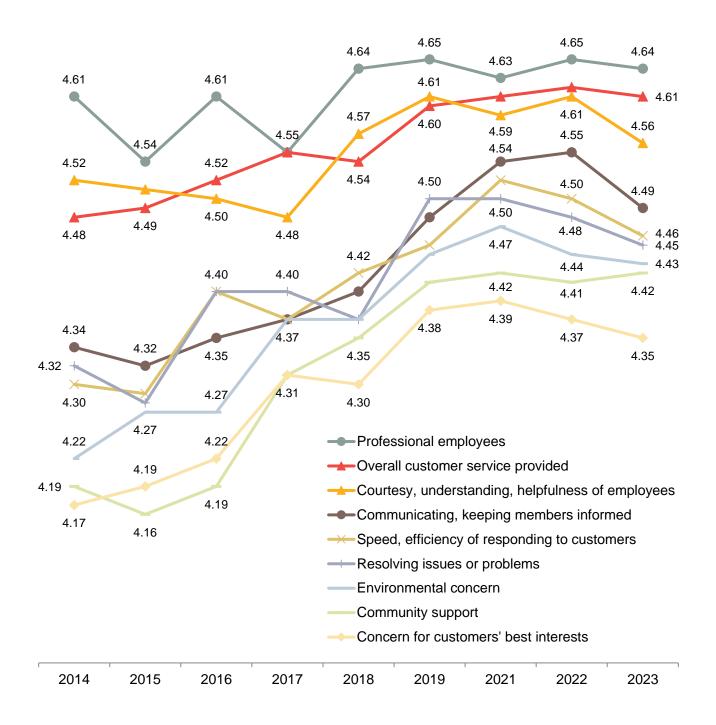
- This driver contains nine attributes, all of which are evaluated well above 4.0 and four evaluated approximately 4.50 or higher, including the two highest rated attributes in the study, *having professional employees* and *the overall customer service provided*.
- Most of the attributes are significantly higher than at least two studies between 2014 and 2017. These are graphed on the following page. Two are higher than in all four of those studies:
  - Communicating with members and keeping them informed.
  - Supporting the local community.
- All of the attributes are consistent with the Co-op Norms.



#### 2023 Mean Ratings

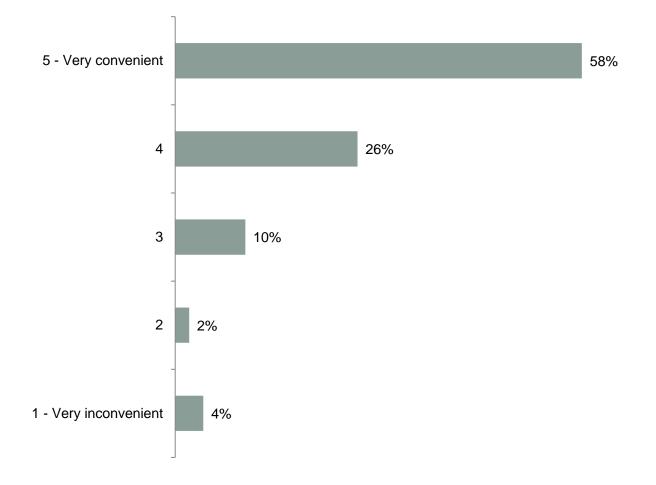
VEC Co-op Norms

#### Mean Ratings by Year



Most members feel that VEC's office hours are convenient, giving a rating of "4" (26%) or "5 – very convenient" (58%). Member segments that give higher ratings than their counterparts include:

- Those who are more satisfied with VEC.
- Those with member identity.
- Older members.
- Those paying lower monthly electric bills.
- Retired members.

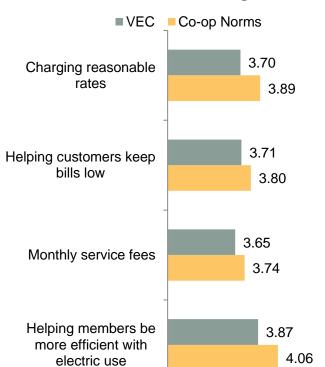


#### Convenience of Office Hours Mean=4.32

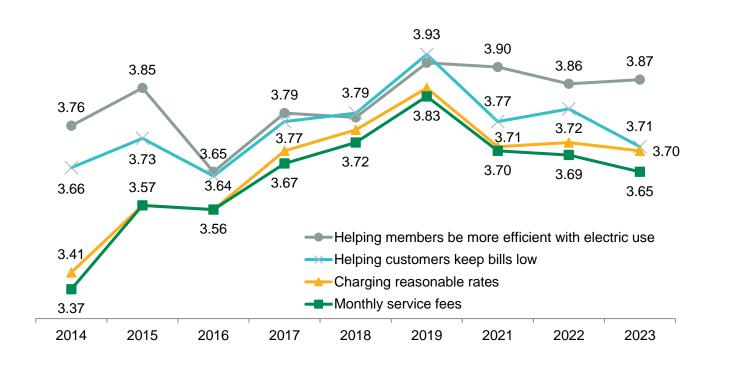
#### Electric Rates

**Electric Rates** is the second-strongest key driver of overall satisfaction.

- This driver is the one with the greatest room for improvement, containing the four lowest rated attributes in the study.
- Additionally, two are lower than the Co-op Norms – charging reasonable rates and helping members be more efficient in their electric use.
- Although charging reasonable rates and the monthly service fees are lower than in 2019, both remain higher than in 2014. Charging reasonable rates also continues to be higher than in 2016. Helping customers keep bills low is also lower than in 2019.
- Helping members to be more efficient in their electric use continues to be higher than in 2016.



#### 2023 Mean Ratings

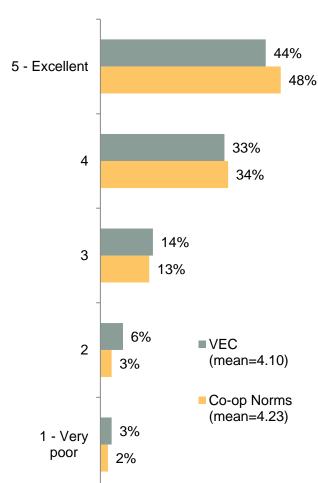


Mean Ratings by Year

Member evaluations of *the value they receive for their money* are good, with a mean rating of 4.10.

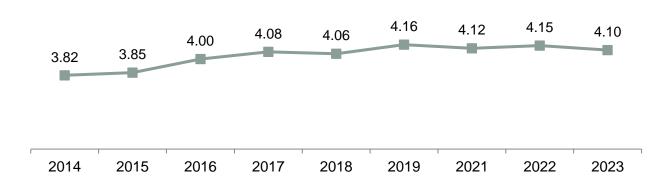
- This continues to be higher than in the 2014 and 2015 studies.
- However, it is lower than the Co-op Norms.
- Not surprisingly, the strongest key driver of value is Electric Rates.
- However, as shown in the table below, cost is not the only factor in the "value equation."

Key Drivers of Value	
Electric Rates	0.63
Member Service	0.41
Electric Service	0.24
Payments and Bills	0.13



#### Value for the Money

Mean Value Rating By Year

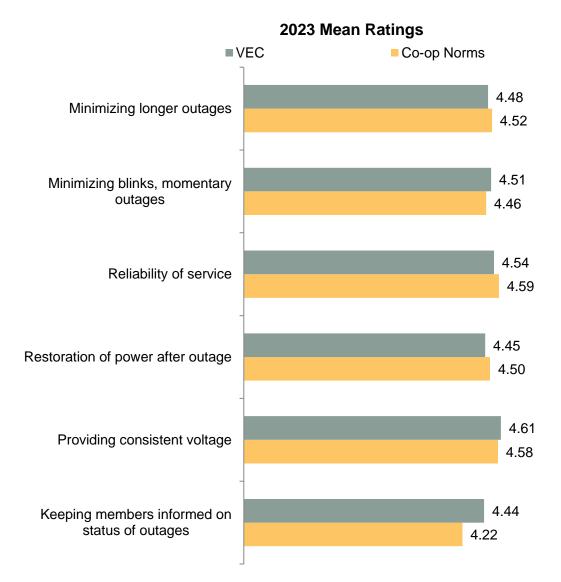


#### 15

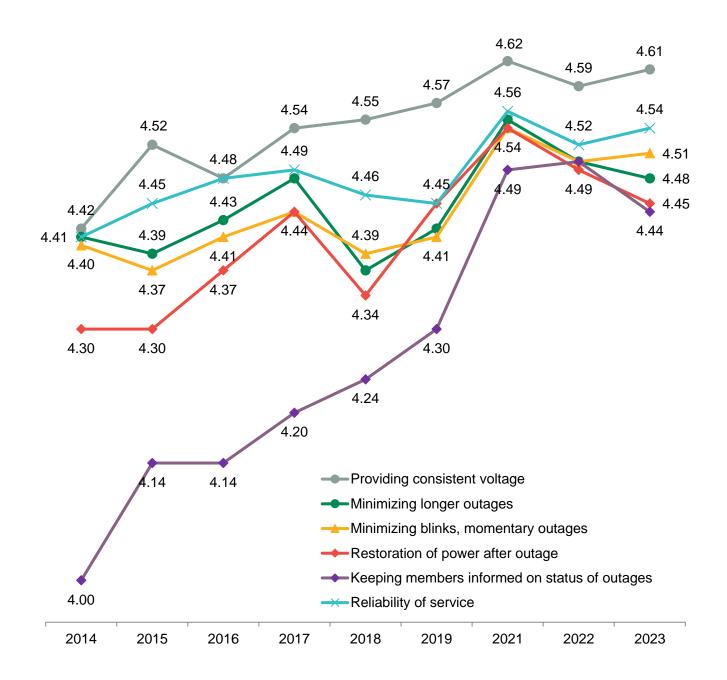
#### **Electric Service**

The next key driver of overall satisfaction is Electric Service.

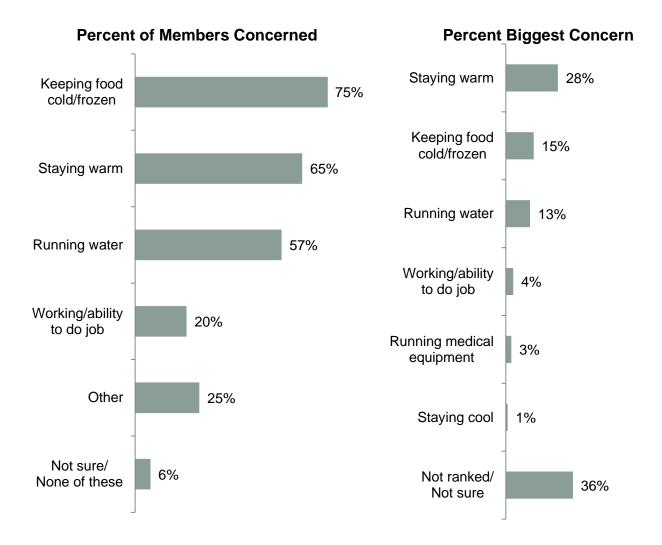
- This driver contains six attributes, all of which are evaluated well above 4.0 and four evaluated approximately 4.50 or higher.
- All of the attributes remain higher than at least one study between 2014 and 2018 and three are higher than in 2019. Trending is graphed on the following page.
- However, *keeping longer outages to a minimum* and *the restoration of power* are lower than in 2021.
- All of the attributes are consistent with the Co-op Norms.



Mean Ratings by Year



In an extended power outage, members are most concerned about keeping their food cold or frozen, staying warm, and running water. When asked which was their biggest concern, most were not able to rank them or did not answer this part of the question. Of those providing a response, staying warm was the top response.

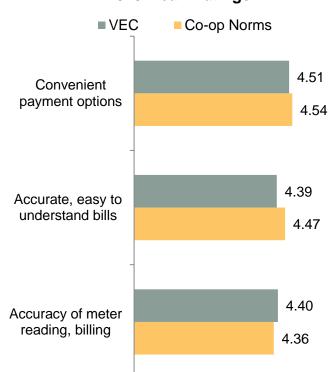


Members were also asked for their feedback or suggestions regarding VEC's communication to members in power outages. A full listing of the responses to this question can be found in Appendix C.

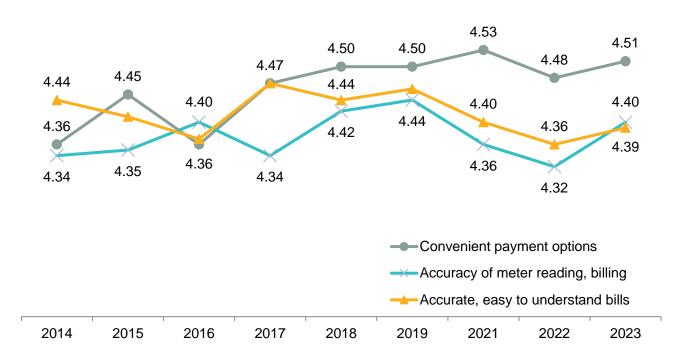
#### Payments and Bills

The final key driver of overall satisfaction is **Payments and Bills**.

- There are three attributes in this area, all of which receive very good to excellent evaluations.
- The accuracy of meter reading and billing is higher than in the 2022 study. Having convenient payment options is higher than in 2014 and 2016.
- As with most of the other attributes, mean ratings are similar to the Co-op Norms.
- Open-end responses from members giving a rating of "3" or less for the accuracy of meter reading and bills can be found in Appendix C.



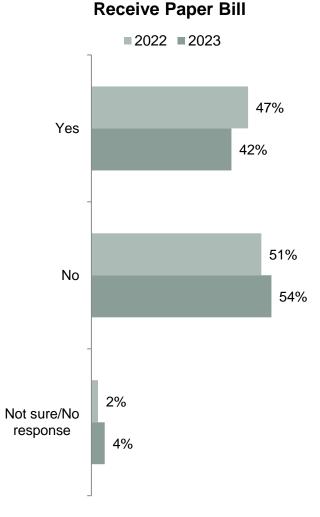
#### Mean Ratings by Year



#### 2023 Mean Ratings

Just over four in ten members receive a printed hard copy of their VEC bill in the mail. Those who do not are most likely to say the reason they have not opted for paperless billing is because they like getting a paper bill. A full listing of the "other" responses can be found in Appendix C.

- This is lower than the 2022 study.
- Member segments that are more likely than their counterparts to still receive a paper bill include:
  - Those less satisfied with VEC.
  - Longer-tenured members.
  - o Older members.
  - Those paying higher monthly electric bills.
  - o Less affluent members.



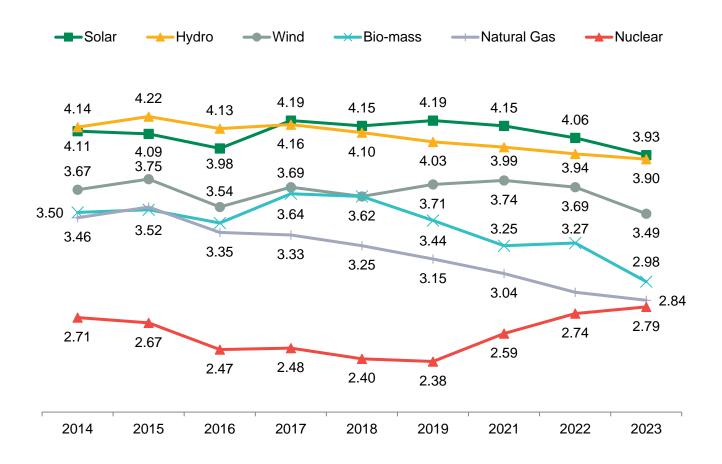
#### If Receive Paper Bill (n=488): Reasons for not opting for paperless billing (Multiple responses allowed)

Like getting paper bill	65%
Just haven't made the change	15%
Don't trust email to get to them	12%
Was unaware of paperless option	5%
Thought they were/Get both	3%
Reminds them to pay bill	2%
Record keeping	2%
Not sure/No reason/No response	4%

#### Renewable Energy

Members continue to give the highest ratings for the importance of VEC providing green power from solar and hydro renewable sources. Power from nuclear and natural gas are least important to members. There is not a consistent profile of members who feel green power from these sources is important. Please see the Member Demographics and Segmentation section for breakdowns of importance by age and district.

With the exception of nuclear, the importance of green power from these sources is lower than in most of the studies since 2014. Since 2022, importance has decreased for wind, solar, and bio-mass. Conversely, mean ratings for the importance of nuclear is higher than in the studies between 2016 and 2021.

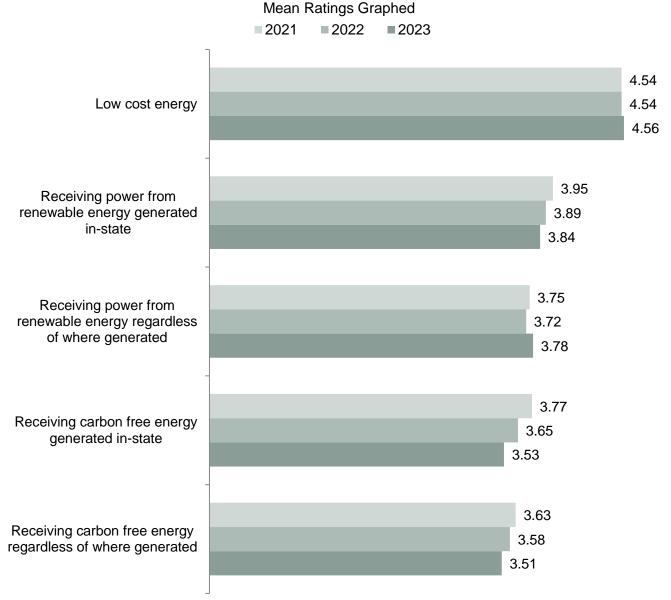


#### Mean Ratings by Year

It is more important to VEC members to have low-cost energy than to receive power from renewable energy and carbon free energy, even if generated in-state. Additionally, receiving power from renewable energy is more important than receiving carbon free energy regardless of where it is generated.

Renewable energy and carbon free energy generated elsewhere have about the same importance as either one being generated in-state.

With one exception, mean importance ratings have not changed significantly from previous studies. The exception is receiving carbon free energy that is generated in-state which has decreased from both 2021 and 2022.

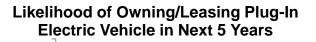


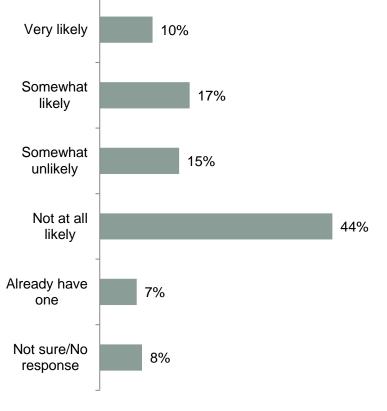
Importance of Cost and Location of Generation

#### **Products and Services**

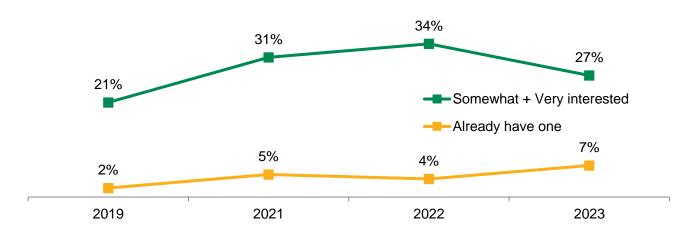
Seven percent of the members indicate they currently own or lease a plug-in electric vehicle and just over onequarter say they are very (10%) or somewhat (17%) likely to purchase or lease an electric vehicle in the next 5 years.

- While the proportion of members who currently have an EV is higher than in the previous studies, those likely to purchase or lease one in the next 5 years is lower than in 2021 and 2022 although it does remain higher than in the 2019 study.
- Those with higher household income are more likely than those with less household income to both currently own/lease an EV and be likely to purchase or lease one in the next 5 years.
- Newer members are also more likely than longer-tenured members to own/lease one in the next 5 years.





#### EV Ownership/Likelihood of Purchasing by Year

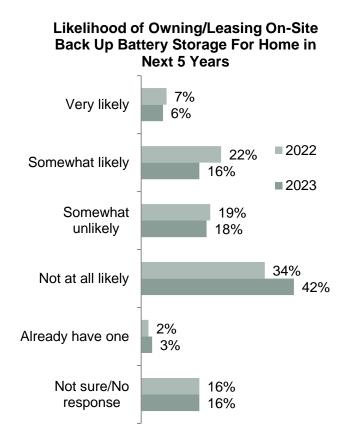


Not surprisingly, the cost of an electric vehicle is mentioned most often as the biggest obstacle to purchasing/leasing one. Other obstacles mentioned include concerns about battery range and finding charging stations. A full listing of "other" responses can be found in Appendix C.

# If Do Not Already Have EV<br/>(n=1,078): Biggest Obstacle to Purchasing/ Leasing EVBiggest Obstacle to Purchasing/ Leasing EV51%Cost of vehicle51%Battery range concerns44%Concerns about finding<br/>charging station38%Just don't want one28%No need for a new vehicle26%

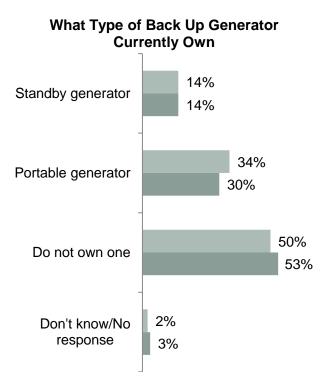
Just over one-fifth say they are very (6%) or somewhat (16%) likely to purchase or lease onsite back up battery storage for their home in the next 5 years while 3% indicate that they already own battery storage.

- The likelihood of owning/leasing on-site back up battery storage is lower than in 2021 and 2022.
- Member segments that are more likely than their counterparts to own/lease on-site back up battery storage include:
  - o Newer members.
  - Younger members.
  - Those who are currently employed.
  - More affluent members.



More than four in ten members own a standby (14%) or portable generator (30%) to power their home or business.

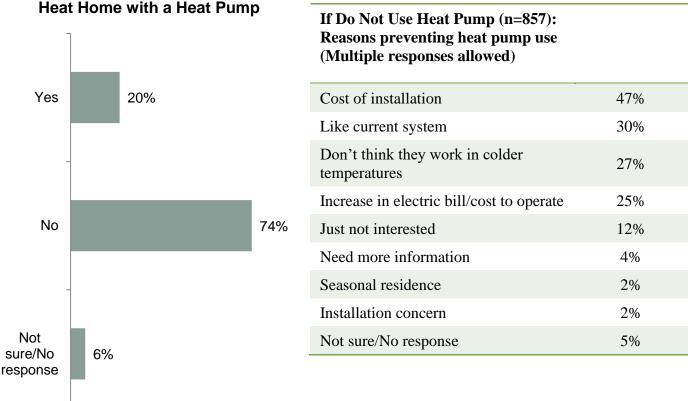
- While the proportion of members who have a generator, either standby or portable, has not changed significantly from the 2022 study, the proportion with a portable generator has decreased.
- Member segments that are more likely than their counterparts to have a generator include:
  - o Older members.
  - $\circ$  Those who are married.
  - More affluent members.
  - Those living in a rural area.



One-fifth of the members say they heat their home with a heat pump. Those who are more likely than their counterparts to do so include:

- Non-residential members.
- Those with more formal education.
- More affluent members.
- Those living in a rural area.

It is not surprising that the cost of installing a heat pump is mentioned most often as the biggest obstacle to installing one. Other obstacles mentioned include that they like their current system, they don't think heat pumps work in colder weather, and the concern that there would be an increase in their electric bill or would cost more to operate. A full listing of "other" responses can be found in Appendix C.



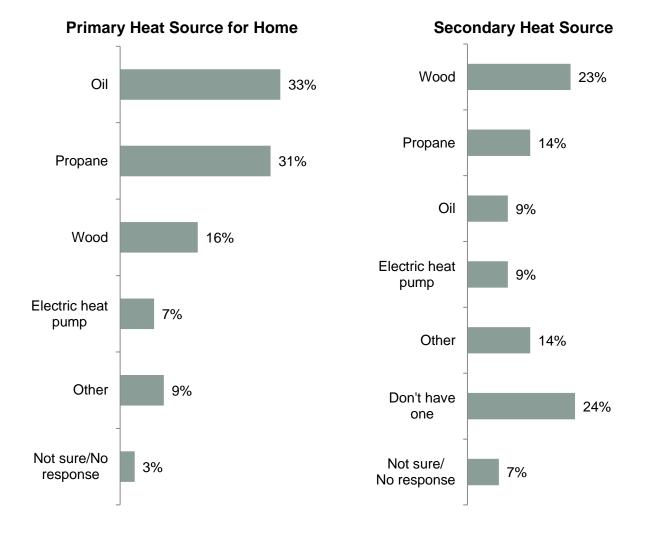
Members are most likely to use oil or propane as their home's primary heat source. Two-thirds indicate they use a secondary heat source, most likely wood.

Member segments that are more likely than their counterparts to use a secondary heat source include:

- Non-residential members.
- Longer-tenured members.
- Older members.

- Those living in larger households.
- Those paying higher monthly electric bills.
- More affluent members.

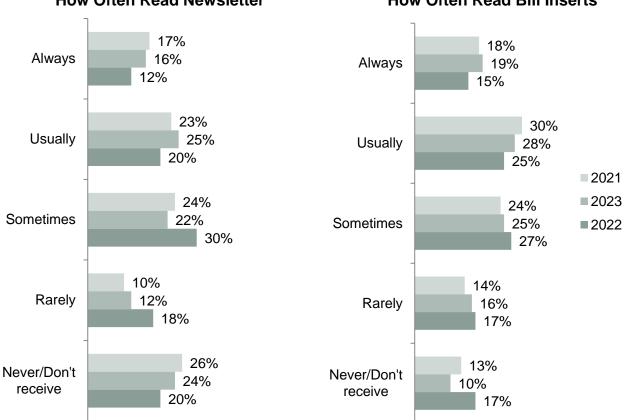
Those who use wood as their primary heat source are more likely than those who use either oil or propane to use a secondary heat source. Those who use oil are also more likely to have a secondary source than are those who use propane.



#### Communication

Members read bill inserts more frequently than they do the *Co-op Life* newsletter, either in printed or digital form. One-third always or usually read the newsletter while four in ten always or usually read bill inserts.

- While the frequency of reading the newsletter is down from recent studies, overall readership is higher. This is due to a decrease in the proportion of members who say they never read it.
- However, both overall readership and the frequency of reading bill inserts is lower.
- Member segments that are more likely to always read the newsletters include:
  - Non-residential members.  $\bigcirc$
  - Those more satisfied with VEC.
  - Those with member identity.
  - Longer-tenured members.
- Older members.  $\bigcirc$
- Those paying lower monthly electric bills. 0
- Those with more formal education.  $\bigcirc$
- Retired members.
- While there are few differences between members segments in the proportion who "always" read bill inserts, there are a number of differences for the overall readership of them. These include:
  - Those more satisfied with VEC. Those with member identity.
- Longer-tenured members.
- Older members.  $\bigcirc$

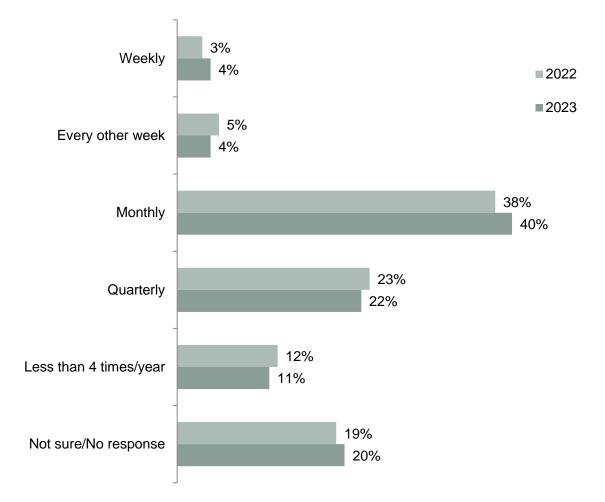


#### How Often Read Newsletter

#### How Often Read Bill Inserts

Members prefer to receive email communications from VEC on a monthly (40%) or quarterly (22%) basis.

- This is similar to the 2022 study.
- While both groups most prefer monthly email communications, those with member identity are more likely to prefer monthly communication while those who consider themselves a customer are more likely to prefer information less often than four times a year.
- Similarly, those with higher satisfaction with VEC are more likely to prefer more frequent email communication.



#### How Often Would Like to Receive Email Information From VEC

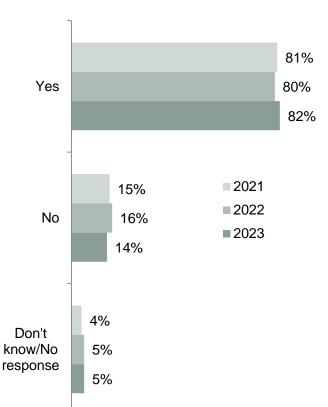
Fully eight in ten VEC members use the SmartHub online tool.

- This is almost identical to the 2021 and 2022 studies.
- Member segments that are more likely than their counterparts to use SmartHub include:
  - Younger members.
  - Those who are currently employed.
  - $\circ$  Those who are single.
  - Those with children in the home.

One-quarter of the members who do not use SmartHub did not give a reason for not using it. Among those that gave a response, being unaware of it is the top reason given. This is followed by privacy concerns and already using their bank's bill pay service. A full listing of the "other" responses can be found in Appendix C.

#### If Do Not Use SmartHub (n=156): Main Reason do not Use SmartHub

Unaware of it	22%
Worry about privacy	15%
Use bank bill pay service	12%
Not worth time to sign up	8%
No/poor internet	8%
Had issue with SmartHub	3%
Record keeping	2%
Not sure/No reason/No response	26%



#### **Uses VEC's SmartHub Online Tool**

#### 30

#### **Co-op Membership**

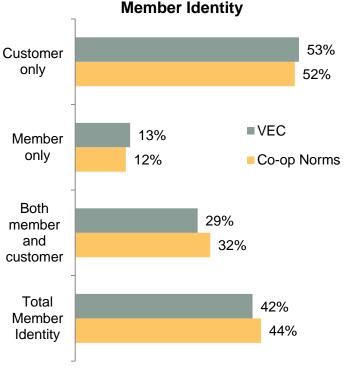
Fully four in ten view themselves as a member of the co-op as opposed to feeling like a customer. That is, they view themselves as a member/owner (13%) or both a member/owner and a customer (29%).

- This is consistent with all of the studies since 2014 (graphed on the following page) as well as the Co-op Norms.
- Segments that are more likely than their counterparts to feel like a member of VEC include:
  - Those more satisfied with VEC.
  - Longer-tenured members.
  - Older members.
  - Those paying lower monthly electric bills.
  - Those with more formal education.
  - o Retired members.
  - Those who are married.
  - Those with no children in the home.
  - Those living in a non-rural area.

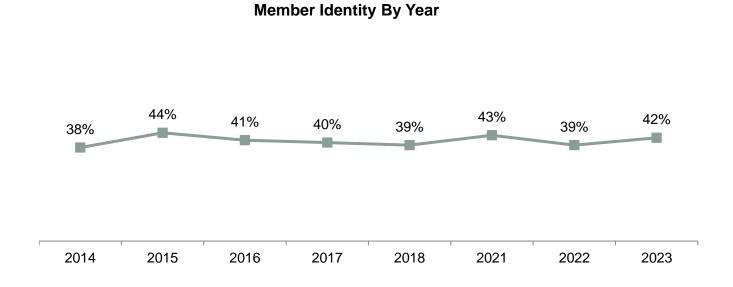
Member identity is important because those with member identity are more satisfied with the co-op and give higher ratings on all of the performance attributes. They are also more likely to:

- Find VEC's office hours convenient.
- Read the newsletters and bill inserts and read them more frequently.
- Prefer more frequent email communications from VEC (monthly as opposed to less often than quarterly)
- Own a standby back up generator to power home or business.
- Feel it is important for utilities to provide power from wind, solar, hydro, bio-mass, and nuclear.
- Feel it is important to receive renewable and carbon free energy that is generated in-state.
- Be aware they may receive a member capital allocation.

Conversely, "customers" give higher ratings for the importance of low-cost energy.



As mentioned previously, overall member identity is consistent with all of the previous studies since 2014. As in 2021 and 2022, the proportion of members who say they don't know how they view themselves or did not answer the question is higher than in most of the studies between 2014 and 2018 although not all of the differences are statistically significant.



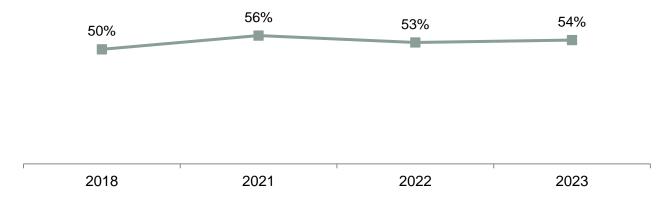
Just over half of the members are aware they may receive a member capital allocation as a member of

- This is similar to previous studies.
- Member segments that are more likely than their counterparts to be aware include:
  - Those more satisfied with VEC.
  - Those with member identity.
  - Longer-tenured members.
  - Older members.

VEC nonprofit cooperative.

- Those paying lower monthly electric bills.
- Those with more formal education.
- Retired members.
- Those who are married.
- Those living in a rural area.

#### Awareness By Year



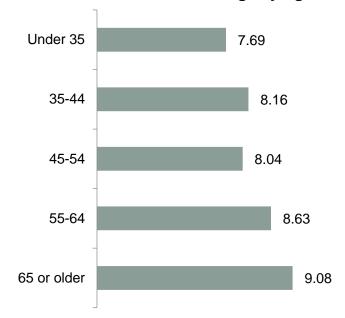
#### Member Demographics and Segmentation

On average, VEC members are approximately 58 years of age\* and have household income of approximately \$72,000. The vast majority own their home and 52% are married. While most of the members have lived in their home for at least 10 years, 18% have been in their home for 2 years or less. Almost six in ten have not pursued additional education after high school\*. (Asterisked items are based on the head of household.) Appendix A contains tables that break down all of the information obtained in the demographic data append.

Those who are more satisfied with VEC than are their counterparts include:

- Those with member identity.
- Older members.
- Those paying lower monthly electric bills.
- Those with more formal education.
- Those who are retired.
- Those with higher household income.

With the exception of those with more formal education and those with higher household income, these segments also tend to give higher ratings on the service performance attributes, with most of the differences being statistically significant.



#### Satisfaction Mean Ratings by Age

In addition to giving higher satisfaction and attribute ratings, older members are significantly more likely than younger members to:

- Say VEC's office hours are convenient.
- Read *Co-op Life* and bill inserts and to read them more frequently.
- Receive a hard copy of their electric bill in the mail.
- Use a secondary heat source in their home.
- Have a back up generator.
- Believe it is important for VEC to provide energy from wind, solar, hydro, bio-mass, and natural gas.
- Have member identity and be aware that as a member, they may receive a member capital allocation.

Conversely, younger members are significantly more likely to:

- Want less frequent email communications from VEC.
- Use SmartHub.
- To own or lease on-site back up battery storage in the next 5 years.
- Pay higher monthly electric bills.

With the smaller number of non-residential responses, there are not a lot of statistically significant differences between residential and non-residential members. Therefore, the statements below do not always reflect a significant difference, but are more focused on those differences that may be of interest to the co-op.

- The mean rating for *keeping members informed on the status of outages* is higher among non-residential members although the rating for *the restoration of power after an outage* is higher among residential members.
- Non-residential members are more likely to say they always read *Co-op Life*.
- Non-residential members are more likely to receive a printed hard copy of their electric bill in the mail.
- Non-residential members are more likely to use a secondary heat source.
- Non-residential members are more likely to say they will own or lease on-site back up battery storage in the next 5 years and are more likely to currently have a back up generator.
- Non-residential members are more likely to say they feel like a member of the co-op while residential members are more likely to say they feel like a customer or were unable to answer the question.

Members in Districts 3 and 7 give the highest satisfaction ratings (8.86 and 8.89, respectively), significantly higher than those in District 6 (8.25).

Significant differences in the performance attributes ratings are shown in the table below. In general, those in District 7 tend to give the highest ratings while those in Districts 5 and 6 tend to give the lowest ratings. Although not all of the differences are significant, those in Districts 2, 3, and 7 consistently give higher scores than do those in the other districts for the attributes related to electric service.

Significant Differences in Performance Attributes by District	Highest Ratings	Lowest Ratings
Resolving any issues or problems	3	4, 5, 6
Demonstrating concern for customers' best interests	4	6
Communicating with members and keeping them informed	1, 3, 4	6
Supporting the local community	3, 4	6
The speed and efficiency of responding to customers	7	5
Keeping blinks, momentary outages to a minimum	3, 7	1, 4, 5, 6
Keeping number of longer outages to a minimum	2, 3, 7	1, 4, 5, 6
Reliability of service, frequency of interruptions	2, 3, 7	1, 4, 5, 6
Restoration of power after an outage	2, 3, 7	1, 4, 5, 6
Keeping members informed on the status of outages	3	5, 6
Providing consistent voltage without surges or brownouts	2, 3	1, 4, 5, 6
Charging reasonable rates	3, 4, 5	6
The monthly service fees	4	6
The accuracy of meter reading and billing	1, 3, 4, 7	2
Helping members to be more efficient in their use of electricity	7	5, 6

Other significant differences between the districts are shown in the table on the following page.

Other Significant Differences by District	Most Likely	Least Likely
Always read Co-op Life	3	6, 7
Always read bill inserts	3	1, 2, 4, 5, 7
Receive printed hard copy of VEC bill	1	4
How often would members like to receive email communications Weekly Every-other-week Monthly Less often than 4 times/year	2, 7 2, 3 3 4, 7	4 4 4, 7 1
Use SmartHub	4, 5	6
Currently own/lease plug-in electric vehicle Likely to own/lease plug-in electric vehicle in next 5 years	3, 5, 7 4, 5, 7	1 1, 2, 6
Primary heat source (top two responses): Oil Propane Uses secondary heat source	2 7 1, 3, 4, 5	4-7 1-3, 6 2
Use heat pump for heating home	5, 7	1-4
Currently own/lease on-site back up battery storage Likely to own/lease battery storage next 5 years	5 5, 7	1, 2, 4, 6 1, 2
Own backup generator: Standby generator Portable generator	4, 5 4	2 2, 7
Importance of providing green power from: Wind Solar Natural gas	5 5 6	1, 3 1, 3 4, 5
Importance of receiving: Low-cost energy Renewable energy regardless of where generated Carbon free energy regardless of where generated	1, 2, 6 5 5	4, 5 1-4 1-4, 6
Aware may receive member capital allocation	5	1, 2, 7
Age 65 or older	1, 7	4
Employment status: Work full-time Retired	4, 5 1, 7	1, 2, 7 4, 5
Rent home	2	All others
Average monthly electric bill \$100 or less	1, 2	4, 7

It is interesting to note that there are no significant differences between districts in overall member identity. However, those in District 2 are most likely to feel like a customer of VEC, significantly more likely than those in District 1.

# Verbatim Comments

# At the conclusion of the survey, members were given the opportunity to share any comments, concerns, or questions they had. Twenty-nine percent of the respondents offered input.

Among those who commented, the following table provides a breakdown of the subjects mentioned and the number of comments that were positive, negative, or neutral. A full listing of comments can be found in Appendix C.

Subject/Topic	Total # Comments	Positive	Negative	Neutral
Operations/Engineering	96	61	21	14
Renewable Energy/Climate Change	85	9	30	46
Rates/Fees	78	14	49	15
Member Service/Communication	44	31	9	4
Management/Board	33	10	16	7
Overall Satisfaction	26	25	0	1
Additional Services	21	0	6	15
Newsletter/Electronic Media	15	8	3	4
Co-op Membership/Member Identity	15	5	8	2
Energy Efficiency/Energy Audits	15	2	4	9
Billing/Finance	10	1	6	3
Outage Information/Reporting	9	5	2	2
Efficiency Vermont	2	0	2	0
Community Support	1	1	0	0

# **APPENDIX A: Member Demographics**

Head of Household Age Ranges	%
18 to 35	10%
36 to 45	14%
46 to 55	19%
56 to 65	24%
66 or Older	34%
Total	100%
Estimated Avg. Age	58.2
Head of Household Gender	%
Male	59%
Female	33%
Not defined	8%
Total	100%
Head of Household Occupation	%
Professional	30%
White Collar	9%
Blue Collar	11%
Self Employed	3%
Retired	4%
Other	8%
Not available	35%
Total	100%
Dwelling Type	%
Single Family	89%
Multi Family	7%
Unknown	4%
Total	100%
Home Value	%
Less than \$200,000	16%
\$200,000 - \$299,999	13%
\$300,000 - \$399,999	13%
\$400,000 - \$499,999	11%
\$500,000 or more	19%
Unkown	28%
Total	100%
Estimated Avg. Home Value	\$286,600
Population Density	%
Rural	84%
Towns & Suburbs	12%
City & Urban	4%
Total	100%

Demographics	
Estimated Household Income	%
Less than \$30,000	18%
\$30,000 - \$49,999	21%
\$50,000 - \$74,999	24%
\$75,000 - \$99,999	15%
\$100,000 or more	24%
Total	100%
Estimated Avg. Income	\$72,000
Head of Household Education Level	%
High School	58%
College	25%
Graduate School	17%
Total	100%
Marital Status	%
Married	52%
Not Married	48%
Total	100%
Home Ownership	%
Own	86%
Rent	14%
Total	100%
Year Home was Built	%
1980 or earlier	25%
1981 - 2000	17%
After 2000	10%
Unknown	48%
Total	100%
Years at Residence	%
2 years or less	18%
3 to 5 years	12%
6 to 9 years	14%
10 to 14 years	15%
To to TT youro	1070
15 years or more	41%

Estimated Avg. Residency

13.7

Household Size	%
1 person	25%
2 people	39%
3 to 4 people	27%
5 people or more	9%
Total	100%
Estimated Avg. Household Size	2.4

Adults in the Home	%
1 adult	32%
2 adults	54%
3 adults	11%
4 or more adults	4%
Total	100%

Estimated Avg. No. of Adults in the Home 1.9

Edimated Arg. No. of officiation in the field	Estimated Avg.	No. of Children in the	Home 0.6
---	----------------	------------------------	----------

Children in the Home

Two or more children

None

Total

One child

Age Ranges Present in the Household (multiples possible)

%

67%

19%

14%

100%

Age Present in Household	%	Oldest Ad
Adults 18-24	4%	Adults 18-2
Adults 25-34	11%	Adults 25-3
Adults 35-44	17%	Adults 35-4
Adults 45-54	21%	Adults 45-
Adults 55-64	29%	Adults 55-6
Adults 65-74	27%	Adults 65-7
Adults 75 or Older	21%	Adults 75 d
Addits 75 of Older	2170	/ laanto / o l
Youngest Adult Age Present	%	
Youngest Adult Age Present	%	
Youngest Adult Age Present Adults 18-24	% 4%	
Youngest Adult Age Present Adults 18-24 Adults 25-34	% 4% 11%	, date re v
Youngest Adult Age Present Adults 18-24 Adults 25-34 Adults 35-44	<mark>%</mark> 4% 11% 15%	, datio ro
Youngest Adult Age Present Adults 18-24 Adults 25-34 Adults 35-44 Adults 45-54	<mark>%</mark> 4% 11% 15% 17%	

Oldest Adult Age Present	%
Adults 18-24	1%
Adults 25-34	6%
Adults 35-44	11%
Adults 45-54	15%
Adults 55-64	22%
Adults 65-74	23%
Adults 75 or Older	21%

Personix Lifestage Segments	%
Rural Community	10%
Country Comfort	5%
Rural Parents	6%
Country Enthusiasts	5%
Top Professionals	5%
Country Ways	4%
Rural & Mobile	4%
Corporate Connected	4%
Busy Schedules	5%
Established Elite	5%
Persistent & Productive	4%
Active & Involved	3%
Summit Estates	4%
Farm & Home	3%
Work & Outdoors	3%
Great Outdoors	3%
Active Lifestyles	2%
Personix Lifestage Group	%
Starting Out	1%
Taking Hold	1%
Settling Down	4%
Social Connectors	1%
Busy Households	1%
Working & Studying	0%
Career Oriented	2%
Large Households	6%
Comfortable Independence	0%
Rural-Metro Mix	10%
Affluent Households	11%
Comfortable Households	2%
Working Households	4%
Diverging Paths	6%
Top Wealth	9%
Living Well	5%
Bargain Hunters	1%
Thrifty and Active	16%
Solid Prestige	10%
Community Minded	6%
Leisure Seekers	5%
Total	100%

Personix Lifestage Segments	%
Practical & Careful	3%
Solid Surroundings	3%
Rural Adventure	2%
Outward Bound	1%
Casual Comfort	1%
Outdoor Fervor	1%
Clubs & Causes	1%
Community Pillars	1%
Work & Play	1%
Firmly Established	1%
Urban Diversity	1%
Movies & Sports	1%
Career Building	1%
On the Go	0%
Occupational Mix	1%
Other	8%
Other Total	8% 101%
Total	101%
Total Personix Insurance Group	101% %
Total Personix Insurance Group Secured Prosperity	101% % 15%
Total Personix Insurance Group Secured Prosperity Stable Independence	101% % 15% 1%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities	101% % 15% 1% 0%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners	101% % 15% 1% 0% 1%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities	101% % 15% 1% 0% 1% 2%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters	101% % 15% 1% 0% 1% 2% 2%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters Careful Planners	101% % 15% 1% 0% 1% 2% 2% 2% 10%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters Careful Planners Prosperous Households	101% % 15% 1% 0% 1% 2% 2% 2% 10% 13%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters Careful Planners Prosperous Households Personal Focus	101% % 15% 1% 0% 1% 2% 2% 2% 10% 13% 12%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters Careful Planners Prosperous Households Personal Focus Modest Restraint	101% % 15% 1% 0% 1% 2% 2% 10% 13% 12% 20%
Total Personix Insurance Group Secured Prosperity Stable Independence Establishing Priorities Thrifty Homeowners Thrifty Priorities Comfortable Renters Careful Planners Prosperous Households Personal Focus Modest Restraint Modest Country	101% % 15% 1% 0% 1% 2% 2% 10% 13% 12% 20% 16%

# **APPENDIX B: Key Driver/Factor Explanation**

# **Factor Analysis**

Factor analysis was used to reduce the many service attributes rated in the survey to a core set of issues. This analysis shows how consumers subconsciously think about or group the many different performance attributes. Four factors were found and named Member Service, Electric Service, Electric Rates, and Payments and Bills.

The performance quality attributes that make up each factor are listed below in order of the performance attribute most related to the factor down to the attribute least related to the factor.

## **Member Service Factor**

- The courtesy, understanding and helpfulness of employees to your inquiries or problems
- The overall customer service they provide
- Having professional employees
- Resolving any issues or problems
- Communicating with members and keeping them informed
- Demonstrating concern for customers' best interests
- The speed and efficiency of responding to customers
- Supporting the local community
- Operating with concern for the environment

#### **Electric Service Factor**

- Keeping the number of longer outages to a minimum
- Keeping blinks and momentary outages to a minimum
- The reliability of service and frequency of interruptions
- The restoration of power after an outage
- Providing consistent voltage without surges or brownouts
- Keeping members informed on the status of outages

#### **Electric Rates Factor**

- Charging reasonable rates
- Helping customers keep bills as low as possible
- Their monthly service fees
- Helping members to be more efficient in their use of electricity

#### **Payments and Bills Factor**

- Having convenient payment options
- Providing accurate and easy to understand bills
- The accuracy of meter reading and billing

# Key Driver Analysis

To help determine where expectations are and are not being met for co-op members, we calculate importance scores for the factors and attributes. The importance scores were derived using the beta scores from a regression of the factors and attributes on overall satisfaction. What we are looking for is significance. If a factor or attribute is positively significant, it has a positive relationship with satisfaction. If the factor/attribute receives a high rating, overall satisfaction also receives a high rating. That is, the more a factor or attribute influences overall satisfaction, the higher its importance score. Factors and attributes that are found to be significant in the regression are labeled as key drivers of overall satisfaction and shown in the figure.

A separate analysis was done to find the key drivers of value among residential members of Vermont Electric Cooperative. Rather than regressing the factors and attributes on overall satisfaction, they were regressed on the attribute "delivering good value for the money." The key drivers of value are shown in a separate figure.

**APPENDIX D: Questionnaire** 

#### 2023 VERMONT ELECTRIC COOPERATIVE SATISFACTION AND CO-OP COMMITMENT SURVEY

FINAL 5/23/23

Sample Size 1000 online (50 non-residential) Sample: connect date/district Non-residential – random sample

#### **INTRODUCTION**

#### WELCOME!

To begin -- click on the Next button below.

To indicate your answer -- click on the button or box next to the response you want to select, or fill in the text box.

To go back -- click on the Previous button at the bottom of the screen.

If you need to exit the survey before it is complete, your responses will be saved up through the

last Next button you clicked. You may re-enter the survey using the same link.

- 1. How long have you received your electric service from Vermont Electric Cooperative? (tenure1)
  - []1 Less than 1 year
  - []2 1 to 2 years
  - []3 3 to 5 years
  - []4 6 to 9 years
  - [ ]5 10 to 14 years
  - []6 15 to 19 years
  - []7 20 years or more
  - []8 Not sure

## SATISFACTION AND PERFORMANCE ATTRIBUTES

2. Please consider all your experiences to date with Vermont Electric. Overall, how satisfied are you with Vermont Electric Cooperative? (*satis*)

Very dissatisfied 1 2 3 4 5 6 7 8 9 10 Very satisfied

#### 3. How would you rate Vermont Electric Co-op's performance on the following? [RANDOMIZE AFTER B]

		Very Poor			Excellent	DK	
a.	The overall customer service they provide ( <i>cust_svc</i> )	1	2	3	4	5	6
b.	Delivering good value for the money (value)	1	2	3	4	5	6
с.	Resolving any issues or problems (resolve)	1	2	3	4	5	6
d.	Having professional employees (htemp)	1	2	3	4	5	6
e.	Demonstrating concern for customers' best interests ( <i>best_int</i> )	1	2	3	4	5	6
f.	Communicating with you and keeping you informed (communic)	1	2	3	4	5	6
g.	Operating with concern for the environment (environ)	1	2	3	4	5	6
h.	Supporting the local community (community)	1	2	3	4	5	6
i.	The speed and efficiency of responding to customers ( <i>respond2</i> )	1	2	3	4	5	6
j.	The courtesy, understanding and helpfulness of employees to your inquiries or problems ( <i>courtesy</i> )	1	2	3	4	5	6

# ELECTRIC SERVICE

4. How would you rate Vermont Electric Co-op's performance on the following? [RANDOMIZE AFTER B]

		Very Poor			Excellent	DK	
a.	Keeping blinks and momentary outages to a minimum ( <i>limit_bl</i> )	1	2	3	4	5	6
b.	Keeping the number of longer outages to a minimum ( <i>limit_ou</i> )	1	2	3	4	5	6
c.	The reliability of service and frequency of interruptions ( <i>elec_svc</i> )	1	2	3	4	5	6
d.	The restoration of power after an outage (restore2)	1	2	3	4	5	6
e.	Keeping you informed on the status of outages (outinfo2)	1	2	3	4	5	6
f.	Providing consistent voltage without surges or brownouts ( <i>pwr_qal2</i> )	1	2	3	4	5	6

- 5. If you were to have an extended power outage, which would be your biggest concerns? From the list below, please rank the top three concerns that you would have with 1 being the highest concern followed by 2 then 3. *[RANDOMIZE]* 
  - []1 Keeping your food cold or frozen
  - []2 Running water
  - []3 Running medical equipment
  - []4 Staying warm
  - []5 Staying cool
  - []6 Working/being able to do your job
  - []7 Attending school
  - []8 Accessing entertainment
  - []9 Charging electric vehicle

## RATES AND FEES

7. How would you rate Vermont Electric Co-op's performance on the following? (Randomize)

		Very Poor				Excellent	DK
a.	Charging reasonable rates (reasrate)	1	2	3	4	5	6
b.	Their monthly service fees ( <i>svcfees</i> )	1	2	3	4	5	6
с.	Providing accurate and easy to understand bills (clearbil)	1	2	3	4	5	6
d.	Having convenient payment options (payoptn)	1	2	3	4	5	6
e.	Helping customers keep bills as low as possible	1	2	3	4	5	6
f.	The accuracy of meter reading and billing	1	2	3	4	5	6
g.	Helping you to be more efficient in your use of electricity <i>(efficien)</i>	1	2	3	4	5	6

8. [IF Q8F IS LESS THAN 4] Please explain your concerns about the accuracy of your bill.

## **COMMUNICATION**

- 9. How convenient are the current VEC office phone hours to you?
  - [ ]1 1 Very inconvenient [ ]2 2
  - []33
  - []44
  - []5 5 Very convenient

- 10. How often do you read "Co-op Life" in either printed or digital form?
  - []1 Always
  - []2 Usually
  - []3 Sometimes
  - []4 Rarely
  - []5 Never
  - []6 Not sure

11. How often do you read bill inserts in either printed or digital form?

- []1 Always
- []2 Usually
- []2 Obtaily []3 Sometimes
- []4 Rarely
- []4 Karery []5 Never
- []6 Not sure

12. How often would you like to receive email communications from VEC?

- []1 Weekly
- []2 Every-other-week
- []3 Monthly
- []4 Quarterly
- []5 Less often than 4 times/year
- []6 Not sure

#### PRODUCTS AND SERVICES

- 13. Do you receive a printed hard copy of your VEC bill in the mail?
  - []1 Yes
  - []2 No
  - []3 Not sure

14. **[IF Q13 = YES]** What are your reasons for not opting for paperless billing? (*Select all that apply*)

- []1 I like getting a paper copy
- []2 Don't trust email to get to me
- []3 Was unaware I could go paperless
- []4 Just haven't made the change

[ ]5 Other (please specify)

[]6 Not sure/No reason

15. Do you utilize VEC's SmartHub online tool for bill pay, usage information, or notifications?

- []1 Yes
- []2 No
- []3 Not sure

16. **[IF Q15 = NO]** What are your reasons for not using SmartHub? (*Select all that apply*)

[]1 Not worth my time to sign up

- []2 I don't have internet or reliable internet
- []3 I worry about privacy
- [ ]4 Not aware of SmartHub
- [ ]5 Other (please specify)

[ ]6 Not sure/No reason

17. How likely is it that you will own or lease a plug-in electric vehicle in the next 5 years?

- []1 Not at all likely
- []2 Somewhat unlikely
- []3 Somewhat likely
- []4 Very likely
- []5 Already have one
- []6 Not sure

# 18. **[IF DO NOT ALREADY HAVE EV]:** What is the biggest obstacle to you purchasing or leasing an electric vehicle? *(select all that apply)*

- []1 Cost of vehicle
- []2 Concerns about finding a charging station
- []3 Concerns about battery range
- []4 No need for new vehicle
- [ ]5 Just don't want one
- [ ]6 Other (please specify \_
- []7 Not sure

19. Do you use a heat pump for heating your home?

- [ ]1 Yes [**SKIP TO Q21**] [ ]2 No
- [ ]3 Not sure [SKIP TO Q21]
- 20. What is preventing you from using electric heat pumps? (Select all that apply)
  - []1 Cost to install
  - []2 Increase in my electric bill (cost to operate)
  - []3 Don't think they will work in colder temperatures
  - [ ]4 I like my current system for heating and cooling
  - []5 Just not interested
  - [ ]6 Other (please specify) \_\_\_\_\_
  - []7 Not sure

21. How do you primarily heat your home? Please select the one that you use the majority of the time to heat your home.

- []1 Wood
- []2 Oil
- []3 Propane
- []4 Natural gas
- []5 Electric heat pump
- []6 Electric resistant
- []7 Other (please specify)\_
- [ ]8 Not sure [SKIP TO Q23]
- 22. If you also use a secondary heat source, which one?
  - []10 Do not have secondary heat source
  - [ ]9 Use secondary heat source, unsure which one
  - []1 Wood
  - []2 Oil
  - []3 Propane
  - []4 Natural gas
  - []5 Electric heat pump
  - []6 Electric resistant

[]7 Other (please specify)\_

[]8 Not sure if I use a secondary heat source

23. How likely is it that you will own or lease on-site back up battery storage for your home in the next 5 years?

- []1 Not at all likely
- []2 Somewhat unlikely
- []3 Somewhat likely
- []4 Very likely
- []5 Already have one
- []6 Not sure
- 24. Do you currently own a back up generator to power your home or business if the power is out? If yes, is it a standby or portable generator?
  - []1 Yes, own standby generator
  - []2 Yes, own portable generator
  - []3 Do not own generator
  - []4 Not sure

## **POWER SOURCES**

25. How important is it to you for utilities to provide power from the following energy sources? (Randomize)

		Not at all important				Extremely important	DK
a.	Wind	1	2	3	4	5	6
b.	Solar	1	2	3	4	5	6
c.	Hydro	1	2	3	4	5	6
d.	Bio-mass	1	2	3	4	5	6
e.	Natural gas	1	2	3	4	5	6
f.	Nuclear	1	2	3	4	5	6

#### 26. How important is each of the following to you personally? (*Randomize*)

		Not at all important				Extremely important	DK
a.	Low cost energy	1	2	3	4	5	6
b.	Receiving power from renewable energy that is generated in-state	1	2	3	4	5	6
c.	Receiving power from renewable energy regardless of where generated	1	2	3	4	5	6
d.	Receiving carbon free energy that is generated in-state	1	2	3	4	5	6
e.	Receiving carbon free energy regardless of where generated	1	2	3	4	5	6

## **COOPERATIVE COMMITMENT**

27. Do you view yourself as a member-owner or as a customer of your electric co-op or both?

[]1 Member/owner

- []2 Customer
- []3 Both
- []4 Not sure

- 28. Are you aware that as a member-owner of the VEC nonprofit cooperative, you may receive a member capital allocation through an annual bill credit which is your share of the money that remains at the end of the year after VEC pays its operating expenses?
  - [ ]1 Yes [ ]2 No
  - []3 Not sure

## **DEMOGRAPHICS – RESIDENTIAL ONLY**

Thank you for your patience. There are just a few final questions that are used for <u>classification purposes only</u>. This information is <u>completely</u> confidential.

29. Into which category does your age fall?

- []1 Under 25
- []2 25 to 34
- []3 35 to 44
- []4 45 to 54
- [ ]5 55 to 64
- []6 65 or older

30. Do you rent or own your home?

- []2 Rent
- []1 Own
- 31. What is your current employment status?
  - []1 Work full-time
  - []2 Work part-time
  - []3 At home full-time family care giver
  - []4 Retired
  - [ ]5 Student
  - []6 Not employed, not looking
  - []7 Not employed, but looking
- 32. What is your average monthly electric bill?
  - [ ]1 \$50 or less [ ]2 \$51 - \$100 [ ]3 \$101 - \$150 [ ]4 \$151 - \$200 [ ]5 \$201 - \$250 [ ]6 \$251 - \$300 [ ]7 Over \$300 [ ]8 Not sure

33. Additional comments you would like to make about Vermont Electric Cooperative:

#### Thank you for your time and cooperation. It is very much appreciated.