Q. Please provide copies of customer research or customer satisfaction surveys and data collection materials and resulting reports, presentations and communications for all research conducted in 2013 and 2014 YTD.

A. Please refer to PUB-NLH-194 Attachment 1 and Attachment 2 for copies of customer research conducted in 2013 and 2014. Resulting from recommendation number 38 of the Supply Issues and Power Outages Review Island Interconnected System Interim Report, April 24, 2014 by the Liberty Consulting Group, additional customer research is presently being conducted by MQO Research on behalf of both Hydro and Newfoundland Power. This research is to help the utilities better understand customer outage related information needs and expectations, and customer attitudes and perceptions to requests for conservation. The results of this research are not yet available, however a summary of focus group work is provided in PUB-NLH-194 Attachment 3. The final reporting is anticipated by July 31, 2014.

Newfoundland and Labrador Hydro Image Think

December 2013

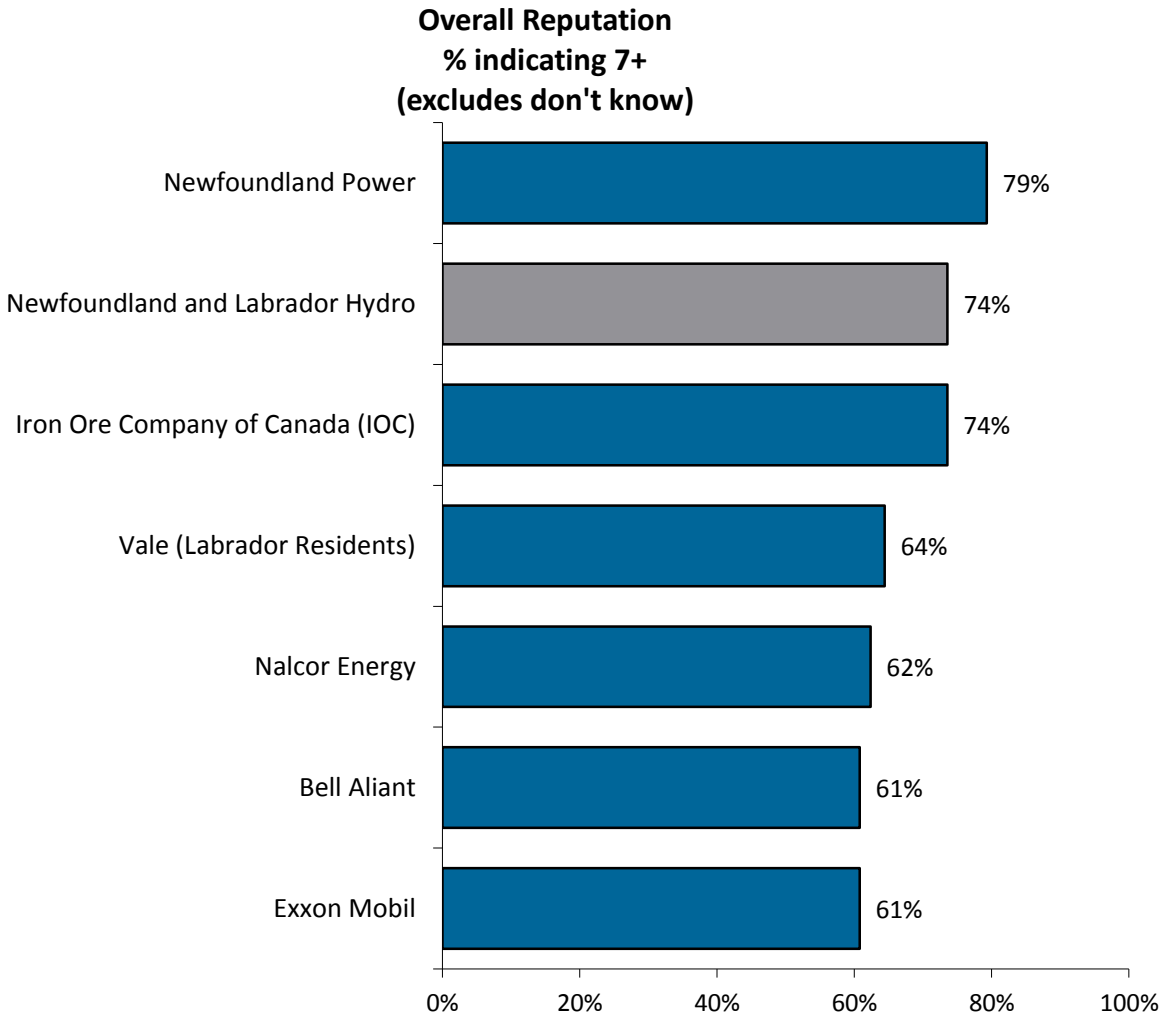
RESEARCH RECHERCHE
a group m5 company

Background and Methodology

- This project is based on telephone interviews completed with randomly selected individuals, 18 years of age and older, throughout Newfoundland and Labrador.
- Data collection took place from mid December to January 3rd 2014. Of note, data collection ended just before the major storm that caused wide spread planned and unplanned power outages.
- A total of 700 interviews were completed, which gives a margin of error of ± 3.6%, 19 times out of 20 or at the 95% confidence level.
- The following report includes graphics that show the percent of don't know responses and other graphs that exclude them, but in all cases they are clearly marked. We feel it is important to show the percent of don't know responses because at times this is the main point (i.e.. a high percentage cant offer an opinion). At other times, the clarity of knowing the reaction from those who did offer an opinion is more important.
- In general, removing the don't know responses increases the proportion of 7+ ratings, which indicates those who do rate have a positive reaction.

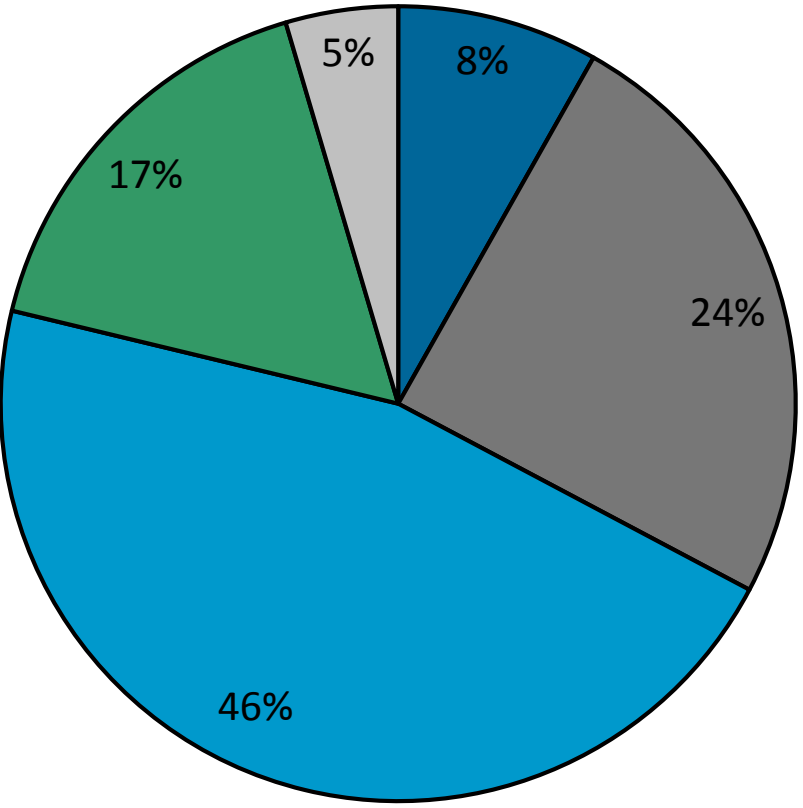
Benchmark Measures

- The survey began by asking respondents to assess the overall reputation of several prominent companies
- A scale of 1 to 10 was used, where 1 is “a very bad reputation” and 10 is “a very good reputation”.
- The % indicating 7+ are shown. Hydro maintains its relative position and generally positive reaction.



Knowledge of Hydro

Chart 2
Level of Knowledge

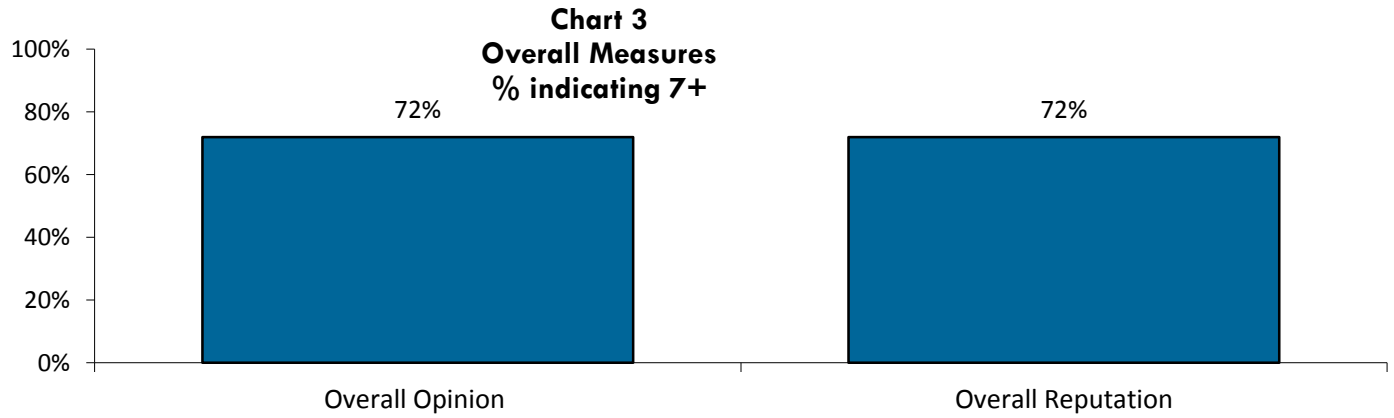


There is clearly confusion between Newfoundland Hydro and Newfoundland Power. Approximately 50% of those in St. John's and the remainder of the Island incorrectly identified Newfoundland Power as the producer of their power.

There has been a small increase in awareness. 36% (+4) say they are at least reasonably familiar and 46% (+8) say they have some sense of what Hydro does.

Overall Measures

- The survey included two overall measures of Hydro – overall opinion and overall reputation.
- These overall impressions precede any detailed questions about Hydro, but follow the questions about the benchmark companies.
- For both measures, ratings of 7+ are shown and don't know responses have been excluded.

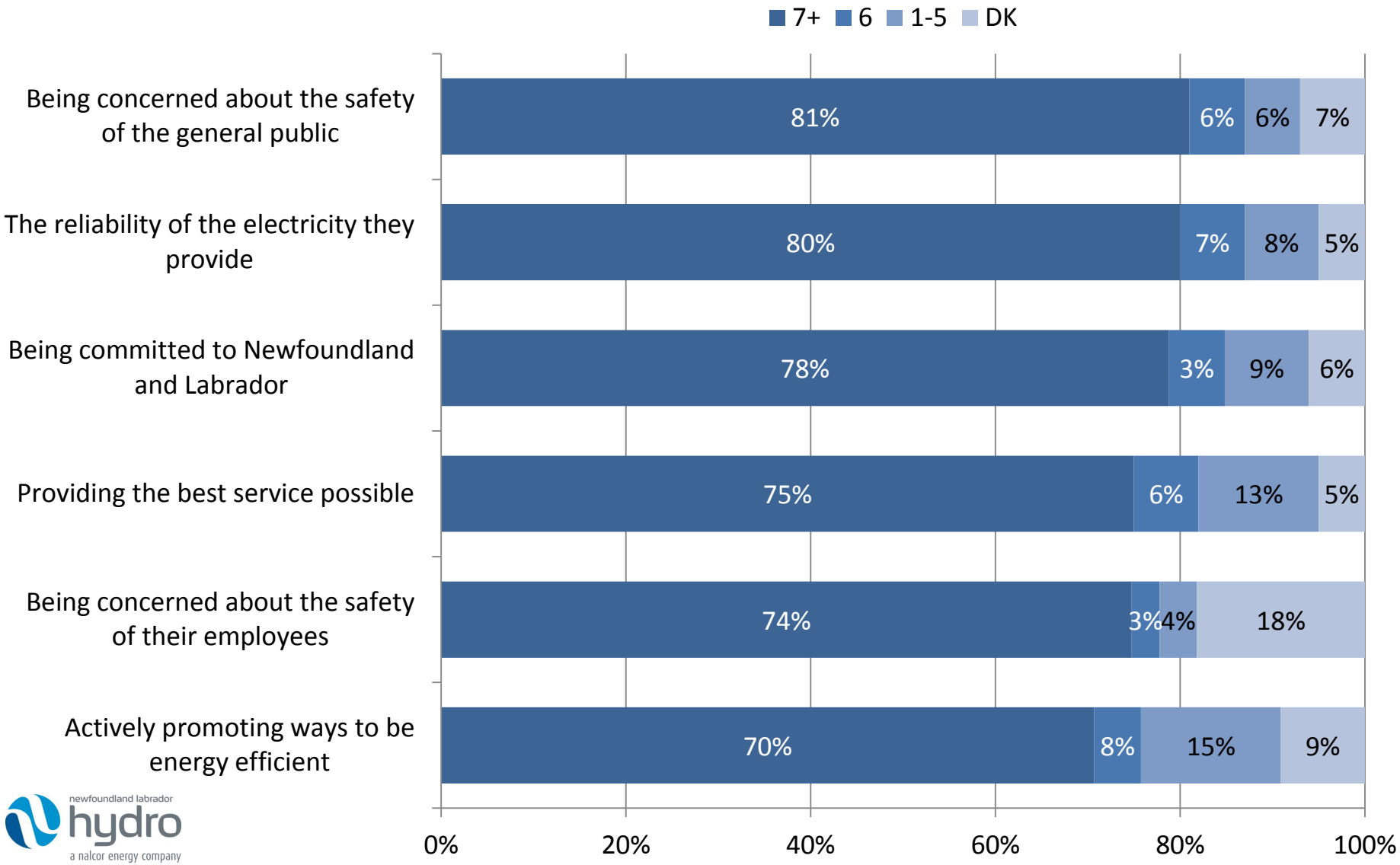


Excludes "Don't Know"

Highest Rated Elements (7+)

- The following ratings are similar to the previous wave of data collection. Graphs are shown with all responses including don't know.
- Highest ratings are given for reliability of electricity, service, safety, being committed to the province and promoting ways to be energy efficient.
- These all relate to the provision of your core service and two things are immediately evident; one, you are perceived positively in these areas and except for being concerned about the safety of your employees where 18% don't know, for the other statements, the percent of don't know is quite low.
- Throughout, the percent of people giving a rating of 7+ is approximately 5% or more lower in Labrador than in the island portion of the province.

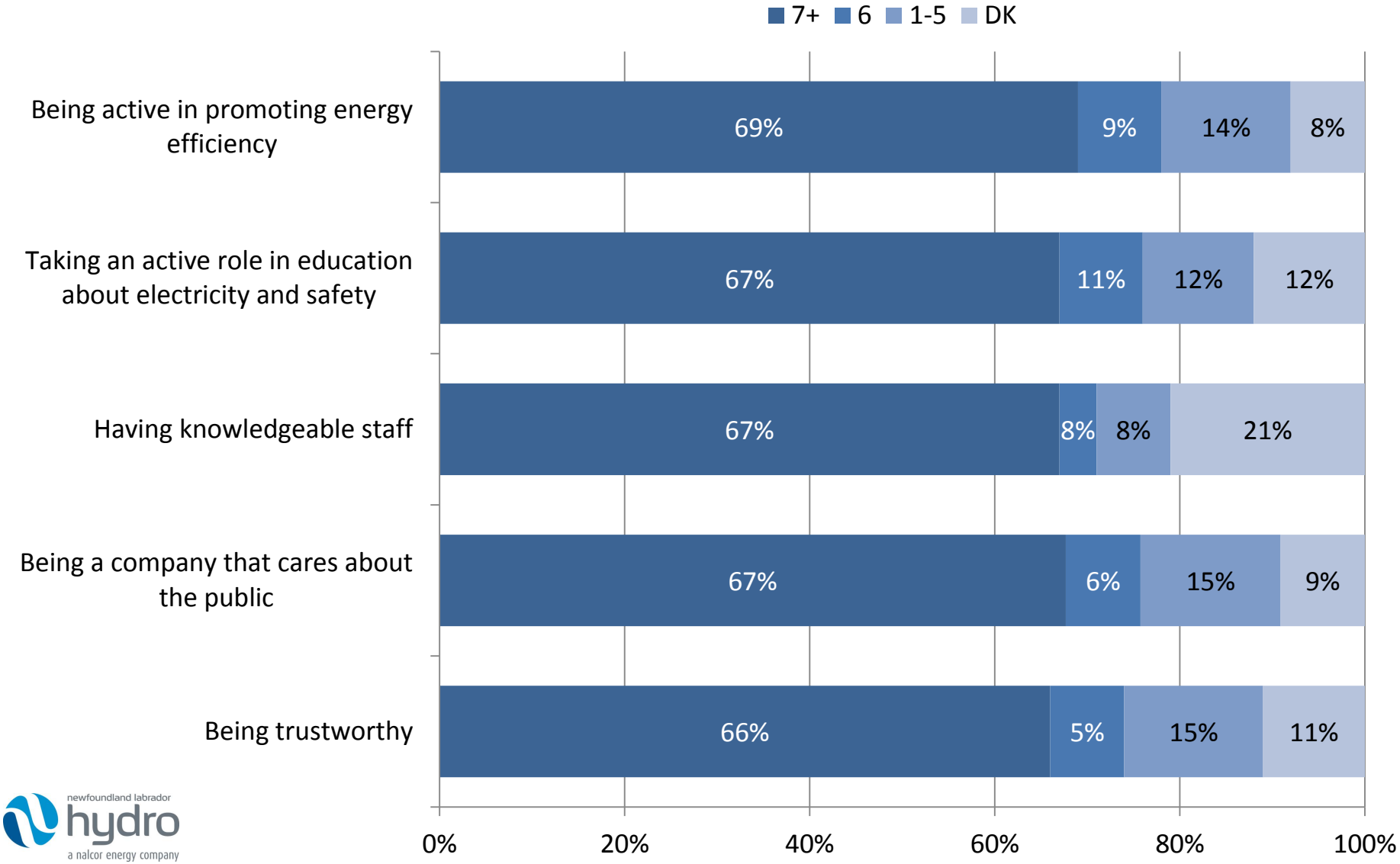
Highest Rated Elements Giving 7+



Ratings with 60% - 69% Giving 7+

- The elements on the following chart have between 60 and 69% giving a rating of 7 or higher which is still reasonably positive.
- Also, for most of these statements the percent of don't know responses has moved from the 5% level to approximately 10%, which partly explains the drop in the 7+ ratings.
- Hydro does receive reasonably high ratings for education and promoting energy efficiency as well as some of the more emotional evaluations such as caring about the public and being trustworthy.

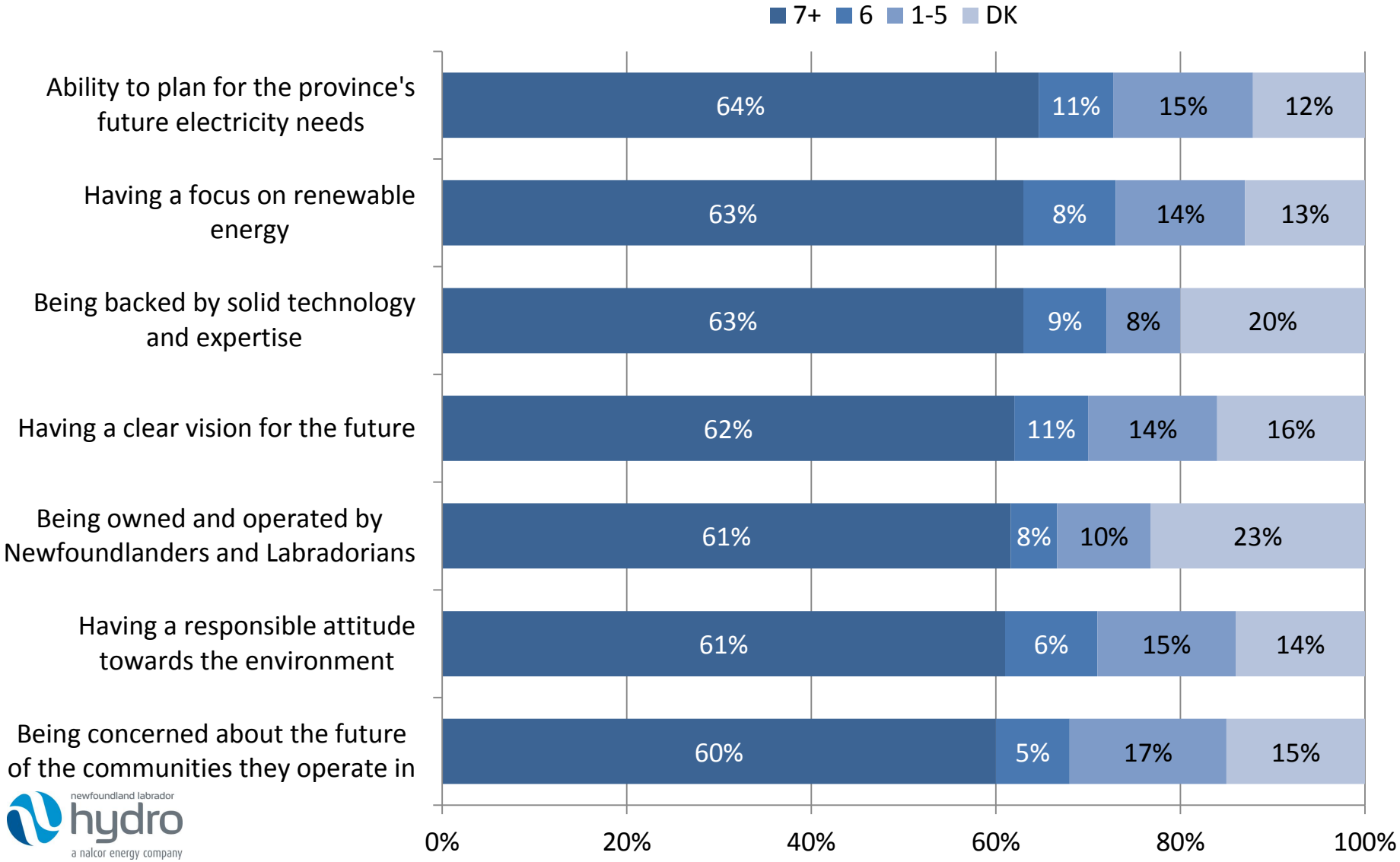
Ratings with 65% - 69% Giving 7+



Ratings with 60% - 69% Giving 7+

- The elements on the following chart have between 60 and 69% giving a rating of 7 or higher. Again, the lower ratings seem more the result of don't know responses going up rather than ratings dropping.
- These statements are also starting to focus more on the philosophy of how you conduct business so it is not surprising that more people would respond with don't know.

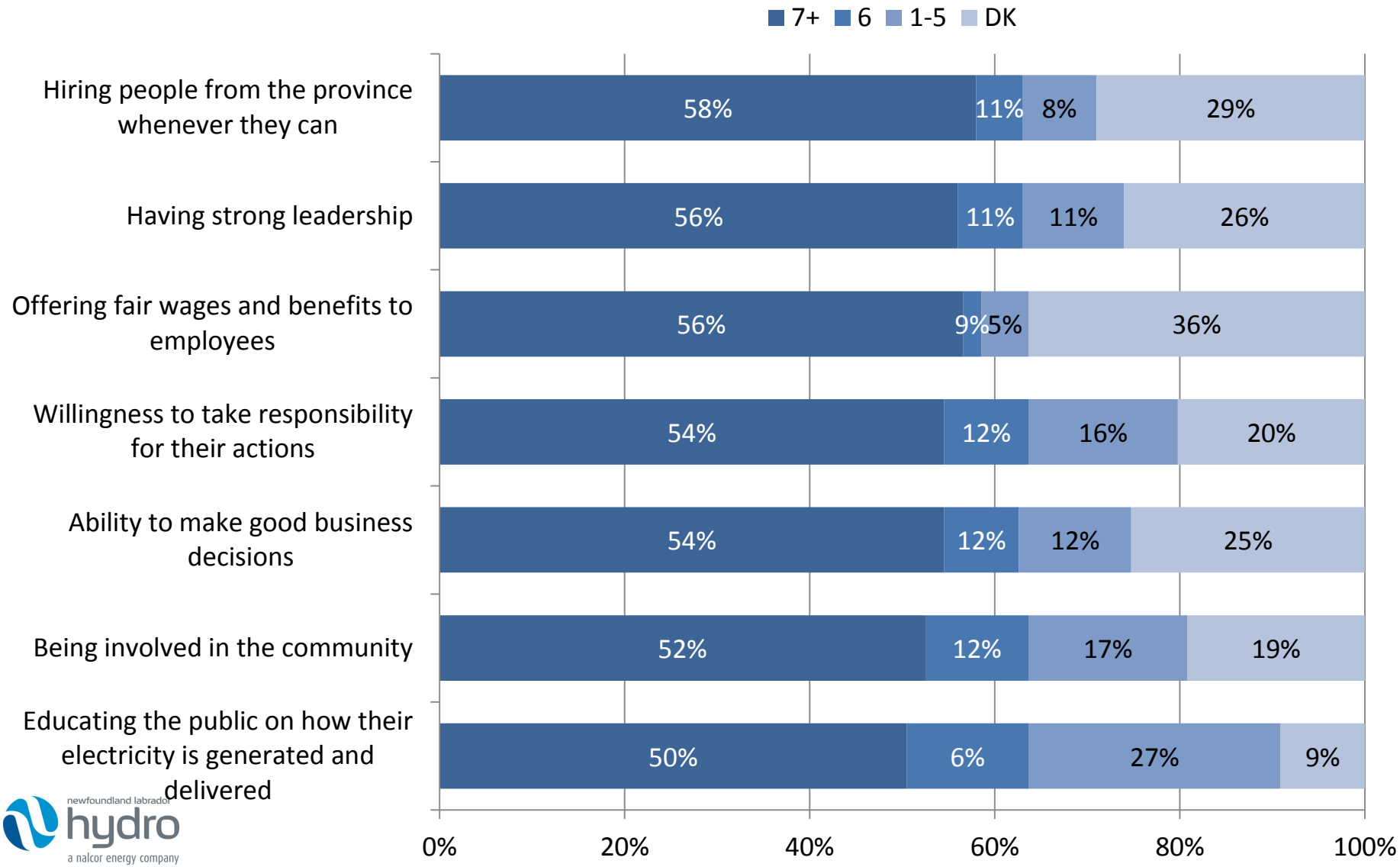
Ratings with 65% - 69% Giving 7+



Ratings with 50% - 59% Giving 7+

- The statements on the following chart continue to receive more don't know responses which also pulls the higher ratings down.
- Again, these statements tend to deal with business philosophy and how you operate.
- Interestingly, education in the sense of energy efficiency received high ratings, but education in terms of generating and delivering electricity was a relatively low rating.

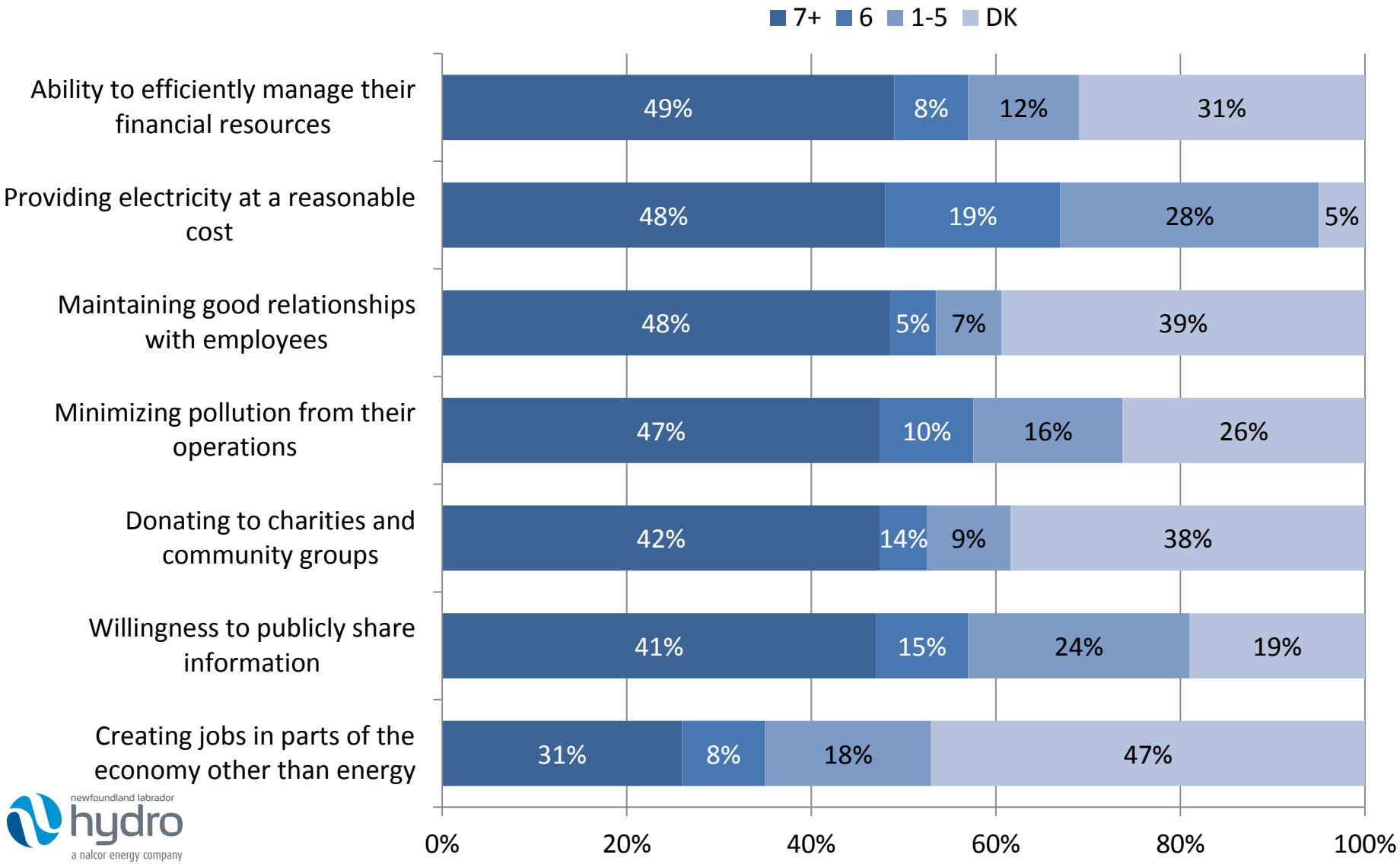
Ratings with 50% - 59% Giving 7+



Lowest Rated Elements Giving 7+

- The lowest rated elements are displayed in the following chart; these are ratings below 50%. *Providing electricity at a reasonable cost* is one of the lowest as is *creating jobs in parts of the economy other than energy*.
- The two statements are quite different though as to whether people have an opinion or not. Very few say they don't know for the cost of electricity, but for creating jobs in other parts of the economy, almost half could not offer an opinion.

Lowest Rated Elements Giving 7+



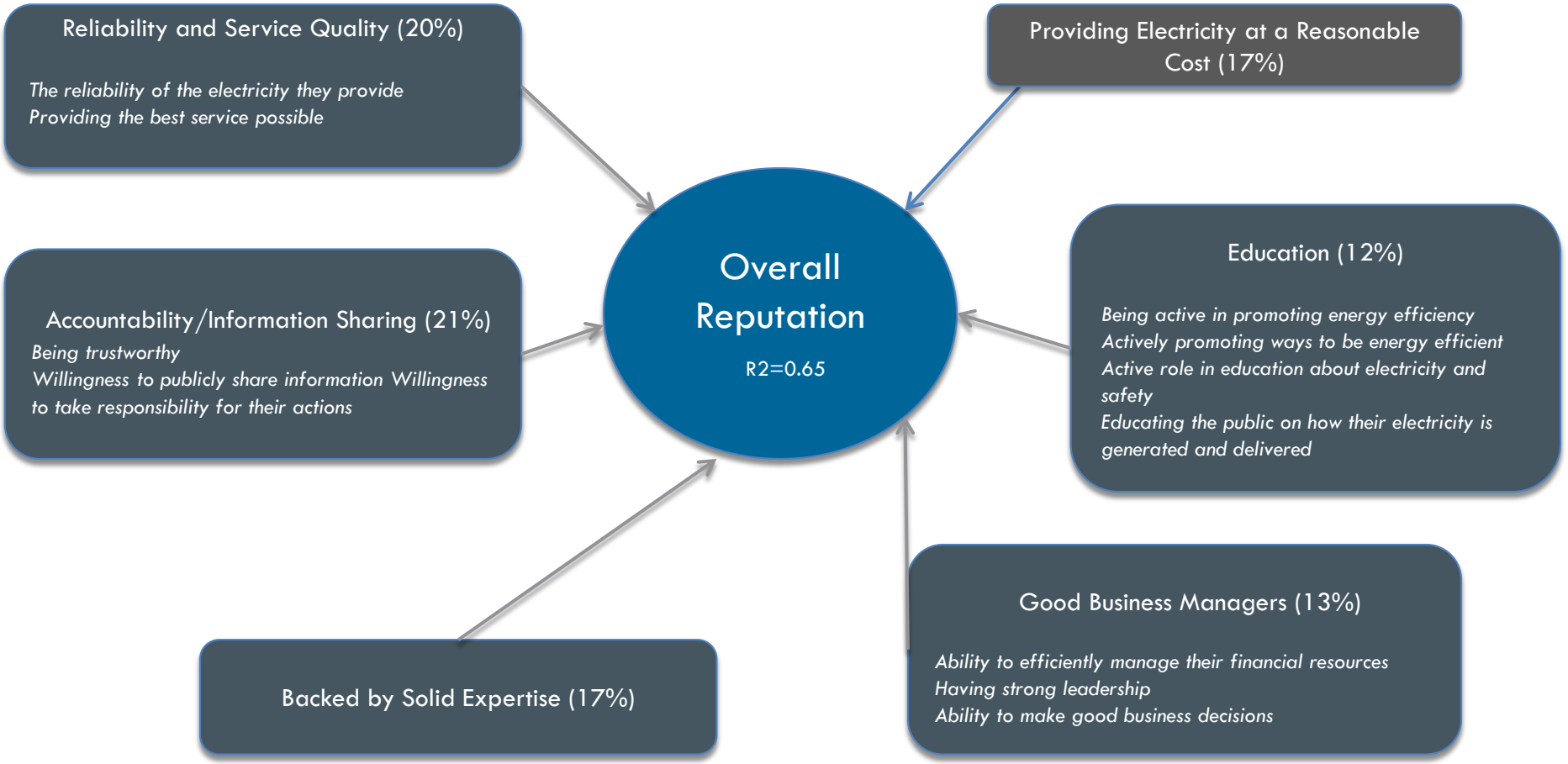
Factor Analysis

- A Factor Analysis is a statistical technique where all of the statements are compared and then the ones that are most similar (in that people have answered them in a similar manner) are grouped.
- The questions are grouped by the way in which people respond to them, but the name of the factor is applied so that you can easily remember the types of questions that went into the grouping.
- Even though the factors “replace” all the individual questions for analysis and reporting, it is always possible to move back to the root questions.
- There were two new statements added to the survey for this wave, both dealing with your promotion of energy efficiency. They both fit very well in the factor called education and otherwise there were no changes to the factors this year.
- All the statements in each of the factors are included in Appendix A.

Drivers of Opinion, Image, and Reputation

- Overall Measures
  - The following graphic shows the key drivers of overall opinion and overall reputation.
  - The percentages show the relative contribution of each factor with higher numbers meaning there is more influence on the overall measures.
  - However, these percentages should not be considered too literally.
  - Although there were fourteen groupings, only six significantly contribute to the overall opinion and overall reputation of Hydro.
  - There are some differences in this year's model compared to the previous wave. Knowledgeable Staff and Future Planning were both drivers before and have now dropped out of the model to be replaced by Education and being backed by solid expertise.
  - The remaining four factors are in the model and at relatively the same strength of driver except that providing electricity at a reasonable cost has increased in strength as an influencer of reputation.

Key Drivers of Opinion and Reputation



Performance on Key Drivers

- This table indicates how Hydro is performing on each driver as well as a score for the elements which make up the key drivers.
- Top 4 scores (% indicating 7 or higher on a 10-point scale) are shown.

Performance on Key Drivers (Don't Know Removed)

	Top 4 Scores
Accountability/Information Sharing (High Driver 21%)	
Willingness to take responsibility for their actions	68%
Being trustworthy	74%
Willingness to publicly share information	58%
Reliability and Service Quality (High Driver 20%)	
The reliability of the electricity they provide	84%
Providing the best service possible	79%
Backed by Solid Expertise (Medium Driver 17%)	
Being backed by solid technology and expertise	74%
Providing Electricity at a Reasonable Cost (Medium Driver 17%)	
Providing electricity at a reasonable cost	59%
Good Business Managers (Medium Driver 13%)	
Ability to efficiently manage their financial resources	70%
Having strong leadership	72%
Ability to make good business decisions	69%
Education (Medium Driver 12%)	
Being active in promoting energy efficiency.	72%
Actively promoting ways to be energy efficient	73%
Taking an active role in education about electricity and safety	72%
Educating the public on how their electricity is generated and delivered	62%

Legend			
80+	70-79	60-69	Less than 60

Conclusions and Implications

- The overall reputation rating for Hydro is reasonably strong at over 70% giving a rating of 7 or higher, but there is clearly confusion with Newfoundland Power as approximately half of the people in St. John's and the rest of the Island incorrectly identify Newfoundland Power as the producer of their electricity.
- As was found in 2011, only a small proportion of respondents have *a strong sense of Newfoundland and Labrador Hydro and what they do*. There has been some improvement, but knowledge levels are not strong.
- A review of where Hydro tends to be rated well and where people are less able to comment is helpful. Hydro is rated highly on questions that are really core to your service offering; reliability, providing good service, being concerned about safety , promoting energy efficiency, caring and being trustworthy.
- In many cases, the proportion of higher ratings drops as more people say they don't know enough to provide an answer. This is not the case with "providing electricity at a reasonable cost," "publicly sharing information" and "educating about the generation and delivery of electricity" where approximately 25% give low ratings.

Conclusions and Implications

- The reputation model is based on a number of statistical analyses including a factor analysis and a driver analysis to isolate the factors with the greatest impact on the reputation and overall scores. This analysis has a R^2 value of 0.65 – which is strong and means that we have a model that includes variables that explain 65% of the variance in the overall measure of reputation and opinion.
- Three of the drivers are the same as was seen in 2011 and at the same level of strength. These were Accountability and Information Sharing, Reliability and Service Quality and Being Good Business Managers. A fourth element, Providing Electricity at a Reasonable Cost is still in the model and is more of a driver than it was in the past.
- Two drivers, Future Planning and Knowledgeable Staff have dropped out of the model to be replaced by Backed by Solid Technology and Expertise (which is in the same “space” as Knowledgeable Staff, but is more encompassing) and Education.
- Education is synonymous with energy efficiency.

Conclusions and Implications

- The model identifies those factors (and the statements that make them up) that most influence reputation. All things being equal, you would focus your attention on the elements that are most important to people and where your performance is weakest. Addressing these areas will improve the ratings for those question and ultimately perceptions of your reputation. Of course things are never equal and you need to decide which elements you can most easily influence to noticeably change perceptions. One should also remember that it is possible to influence more than one element with a single strategy and benefit from the positive movement in more than one factor.
- The current model has a decidedly “core service” tone to it; reliability, cost, information sharing and education. Most of these have reasonably high ratings, but willingness to publicly share information and reasonable cost stand out as weaker areas.

Conclusions and Implications

- The other factors that are included in the model all have a reasonable level of importance and relatively similar performance ratings. There is room for improvement, but none are particularly weak. As in the past, the important thing is to think of the model as a framework for action. In any communication, you should which elements are being influenced and which you have an opportunity to include.

Appendix

Factor Analysis - Factors & Questions

- **Employee Benefits and Relations**
  - Offering fair wages and benefits to employees
  - Maintaining good relationships with employees

- **Accountability/Information Sharing**
  - Willingness to take responsibility for their actions
  - Being trustworthy
  - Willingness to publicly share information

Factor Analysis - Factors & Questions

- **Good Business Managers**
  - Ability to efficiently manage their financial resources
  - Having strong leadership
  - Ability to make good business decisions

- **Future Planning**
  - Having a clear vision for the future
  - Ability to plan for the province's future electricity needs
  - Having a focus on renewable energy
  - Being concerned about the future of the communities they operate in

Factor Analysis - Factors & Questions

- **Reliability and Service Quality**
  - The reliability of the electricity they provide
  - Providing the best service possible
- **Education**
  - Being active in promoting energy efficiency
  - Actively promoting ways to be energy efficient
  - Taking an active role in education about electricity and safety
  - Educating the public on how their electricity is generated and delivered
- **Community Investment/Involvement**
  - Being involved in the community
  - Donating to charities and community groups
  - Being a company that cares about the public

Factor Analysis - Factors & Questions

- **Safety**
  - Being concerned about the safety of their employees
  - Being concerned about the safety of the general public
- **Environmental Responsibility**
  - Minimizing pollution from their operations
  - Having a responsible attitude towards the environment
- **Commitment to Newfoundland and Labrador**
  - Hiring people from the province whenever they can
  - Being owned and operated by Newfoundlanders and Labradorians
  - Being committed to Newfoundland and Labrador

Factor Analysis - Factors & Questions

- **Knowledgeable Staff**
  - Having knowledgeable staff
- **Backed by Solid Expertise**
  - Being backed by solid technology and expertise
- **Providing Electricity at a Reasonable Cost**
  - Providing electricity at a reasonable cost
- **Spin-off Benefits**
  - Creating jobs in parts of the economy other than energy

newfoundland labrador hydro
a nalcor energy company

Newfoundland and Labrador Hydro
Power Outage Follow Up February 2014

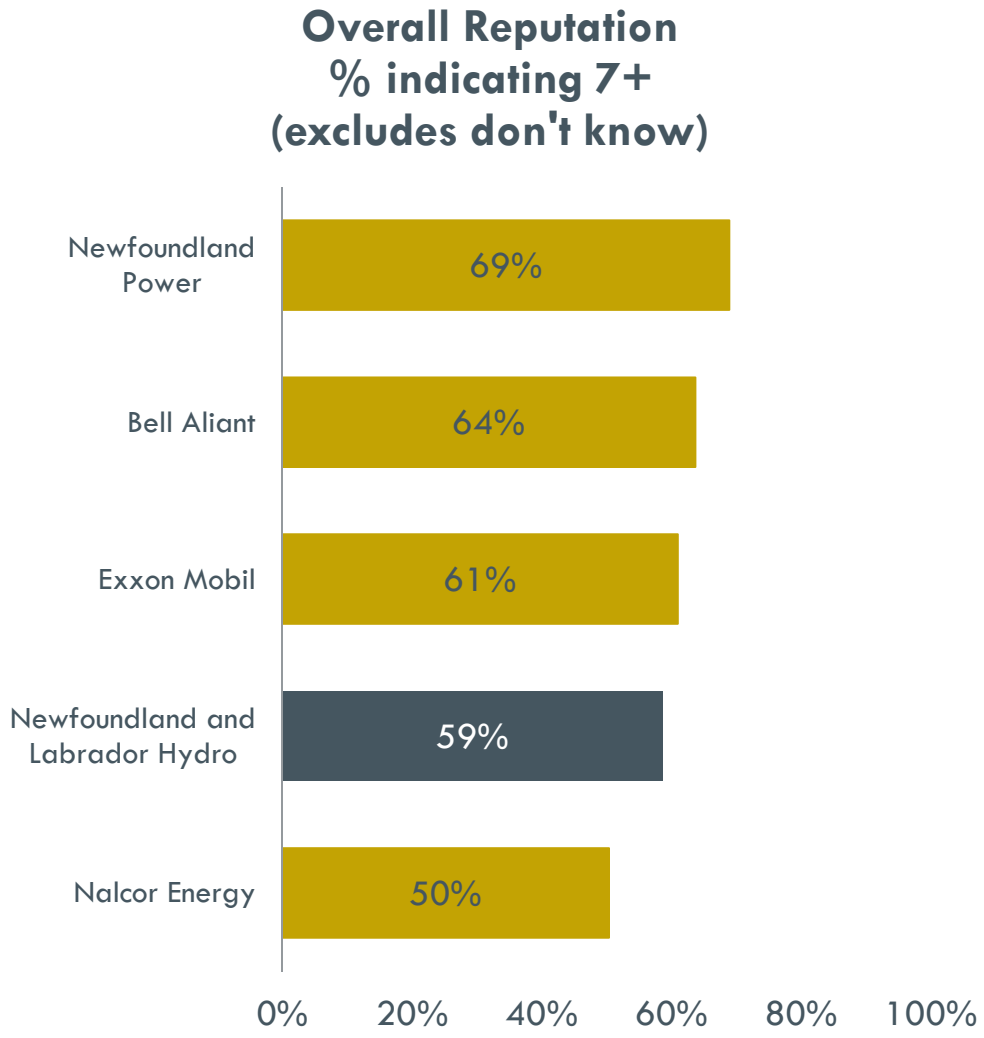
MQO RESEARCH RECHERCHE
a group m5 company

Background and Methodology

- This project is based on telephone interviews completed with randomly selected individuals, 18 years of age and older, throughout Newfoundland and Labrador.
- Data collection took place from Jan 29th to Feb 4th 2014. Of note, data collection was taken after the major storm that caused wide spread planned and unplanned power outages.
- A total of 400 interviews were completed, which gives a margin of error of ± 4.9%, at the 95% confidence level.

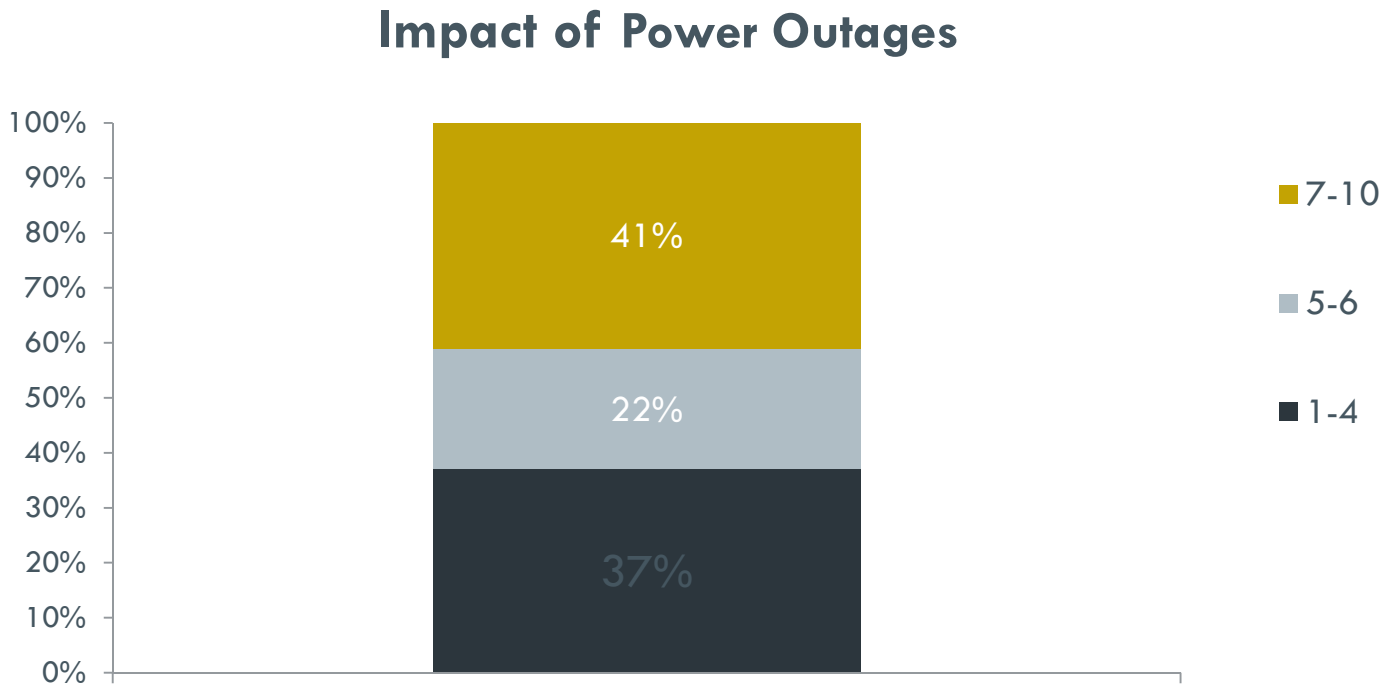
Benchmark Measures

- The survey began by asking respondents to assess the overall reputation of several prominent companies.
- A scale of 1 to 10 was used, where 1 is “a very bad reputation” and 10 is “a very good reputation”.
- The % indicating 7+ are shown. 59% gave Newfoundland and Labrador Hydro a score of 7 or higher.



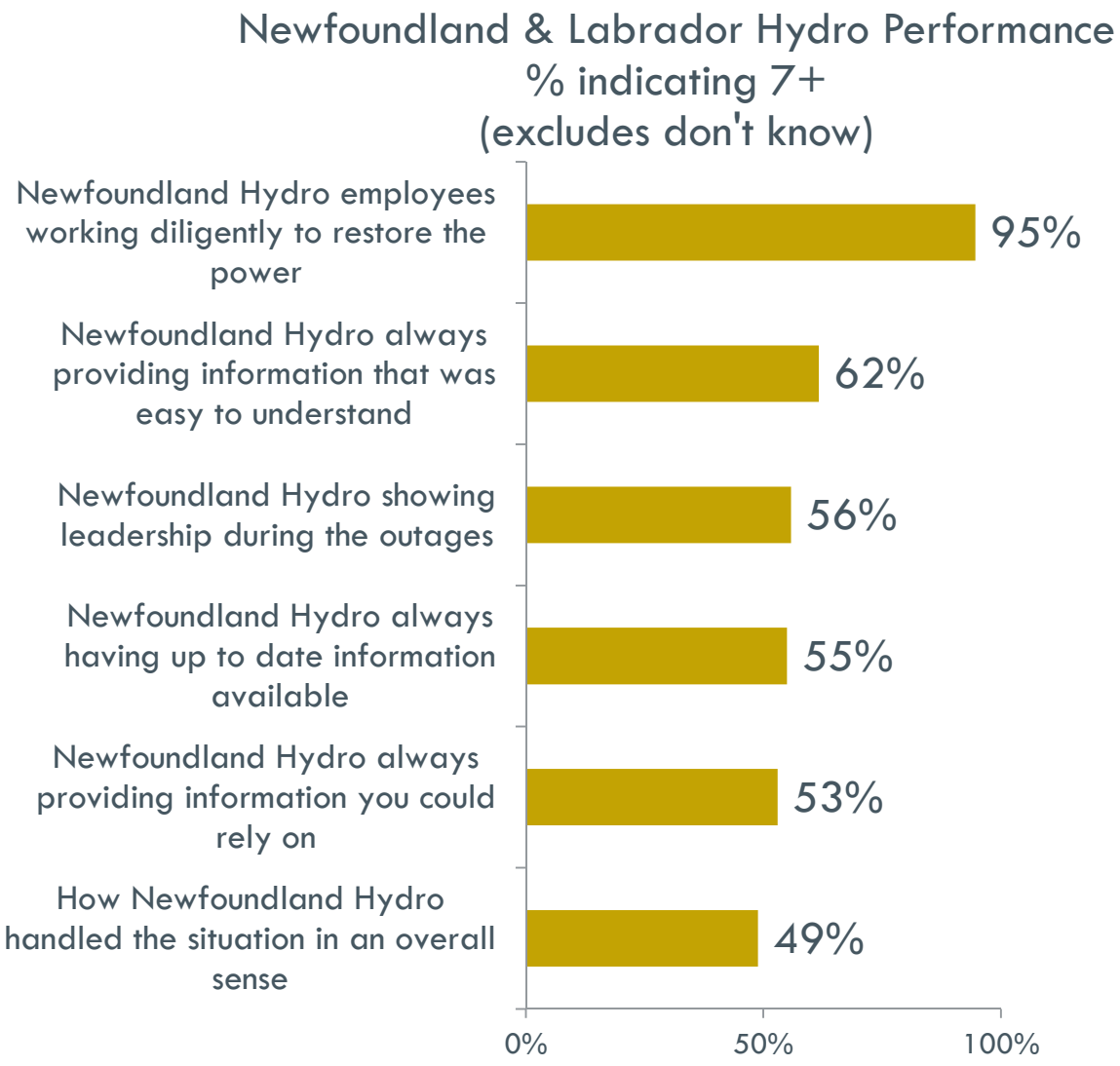
Impact of Recent Power Outages

- Respondents were asked to rate from a scale of 1 to 10, where 1 is "no impact at all" and 10 is "a very serious impact", the impact that the recent power outages had on them.
- For only 13%, the recent power outages had no impact at all (score of 1) on them.



NL Hydro Performance

- There is no negative perception of the employees trying to restore power. 95% gave a rating of 7 or higher and only 1% gave a 4 or less.
- Almost 50% gave a rating of 7 or higher on Hydro's overall handling of the situation.



Excludes "Don't Know"

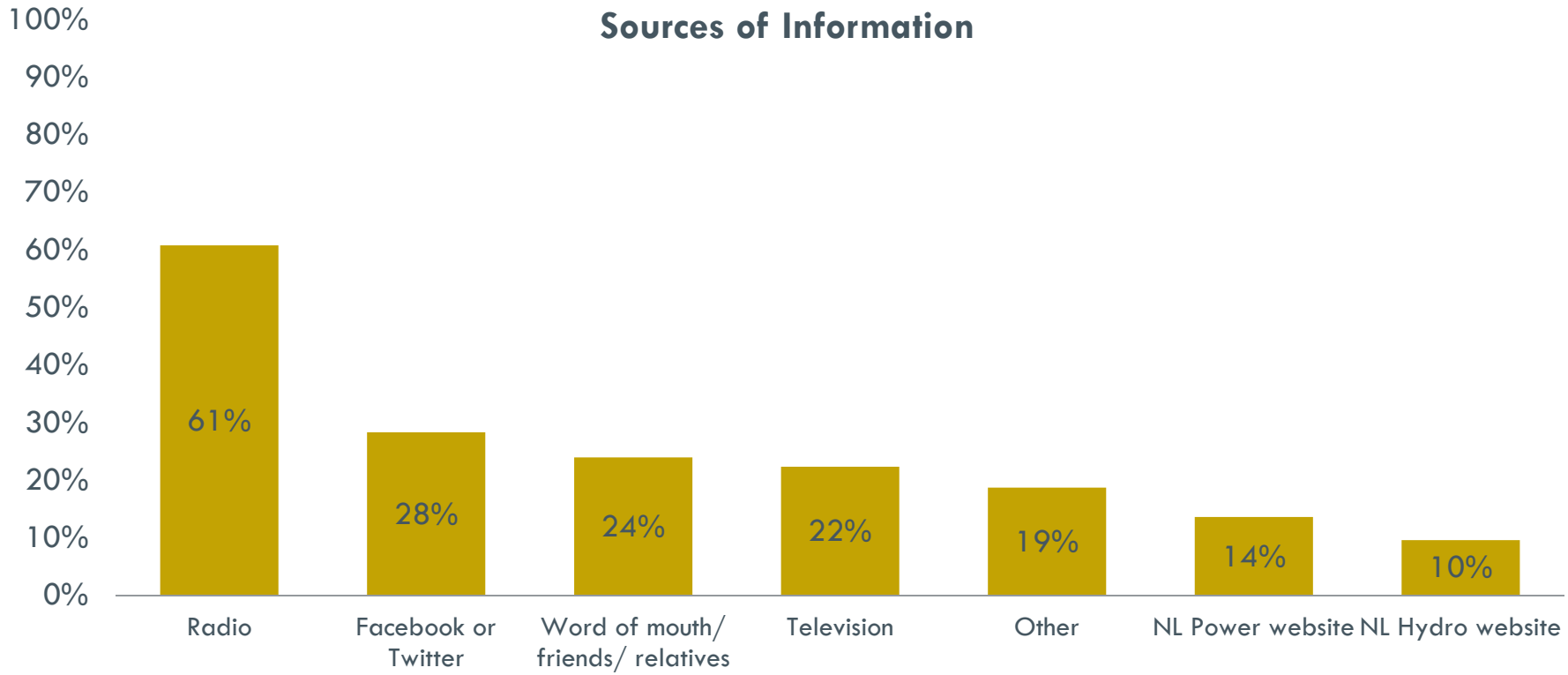
Open-ended questions

- Respondents were asked what they think Newfoundland & Labrador Hydro could have done better during the power outages. The top mentions were:
  - To be better prepared for power outages
  - To give more information/updates during the power outages

- Respondents were asked what were the specific things they felt Newfoundland & Labrador Hydro did well during the outages. The top mentions are below and the apparent contradiction between information and updates being on both lists can be explained by the comments coming from two different groups of people:
  - The dedication of the workers
  - They tried their best to get the power back as quickly as possible
  - Communication delivered to the public

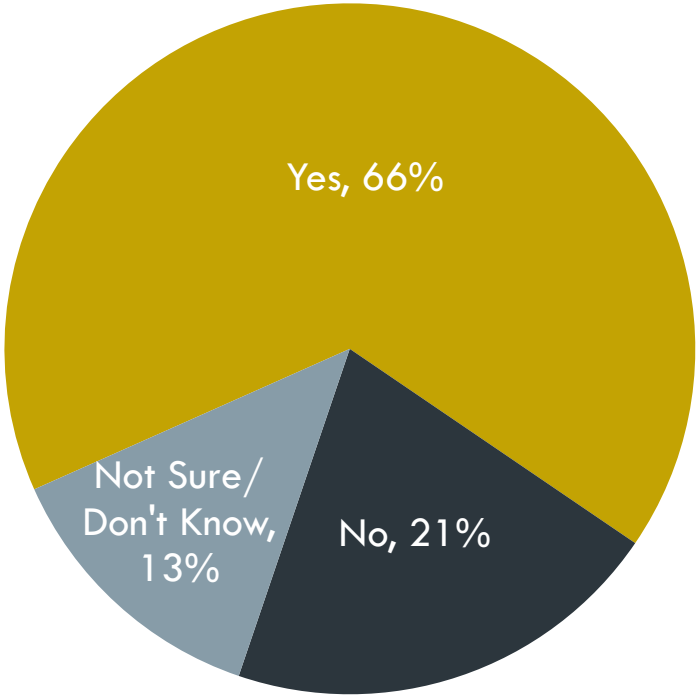
Sources of Information

- The respondents were asked what sources of information did they rely on the most during the power outages.
- The most common is radio at 61%



Information Available

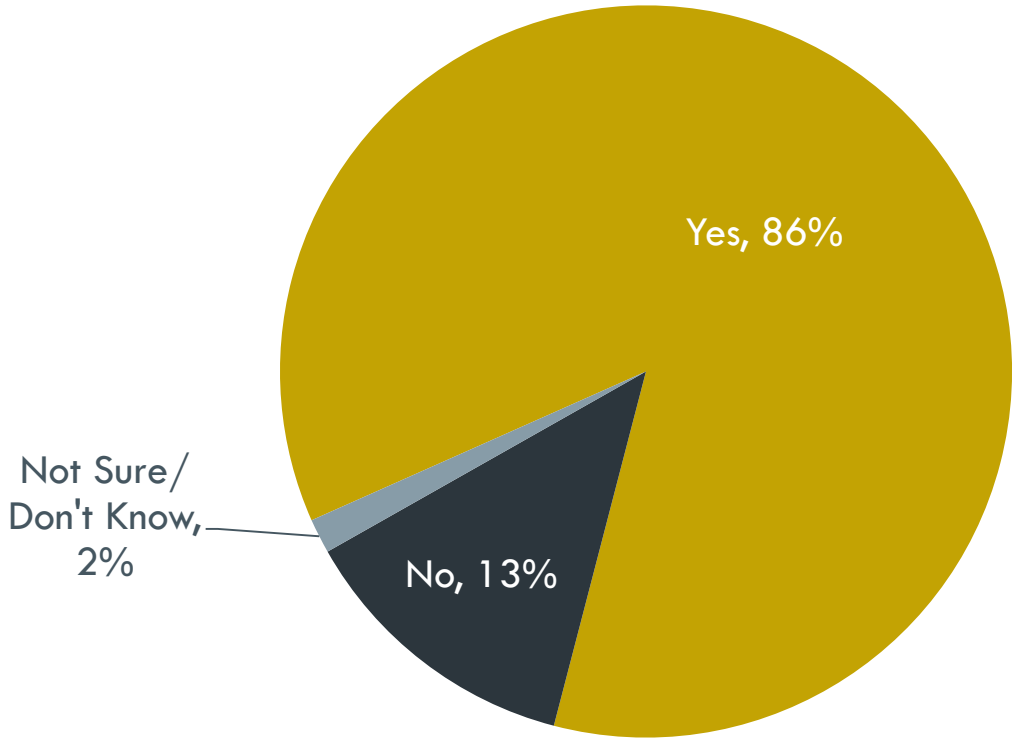
Did you feel that Newfoundland & Labrador Hydro provided information in enough places?



- Those that answered no were asked where else should the information have been. Most answered that they wanted more information available on the radio and that they wanted information available on the telephone (hotline).

Energy Conservation Measures

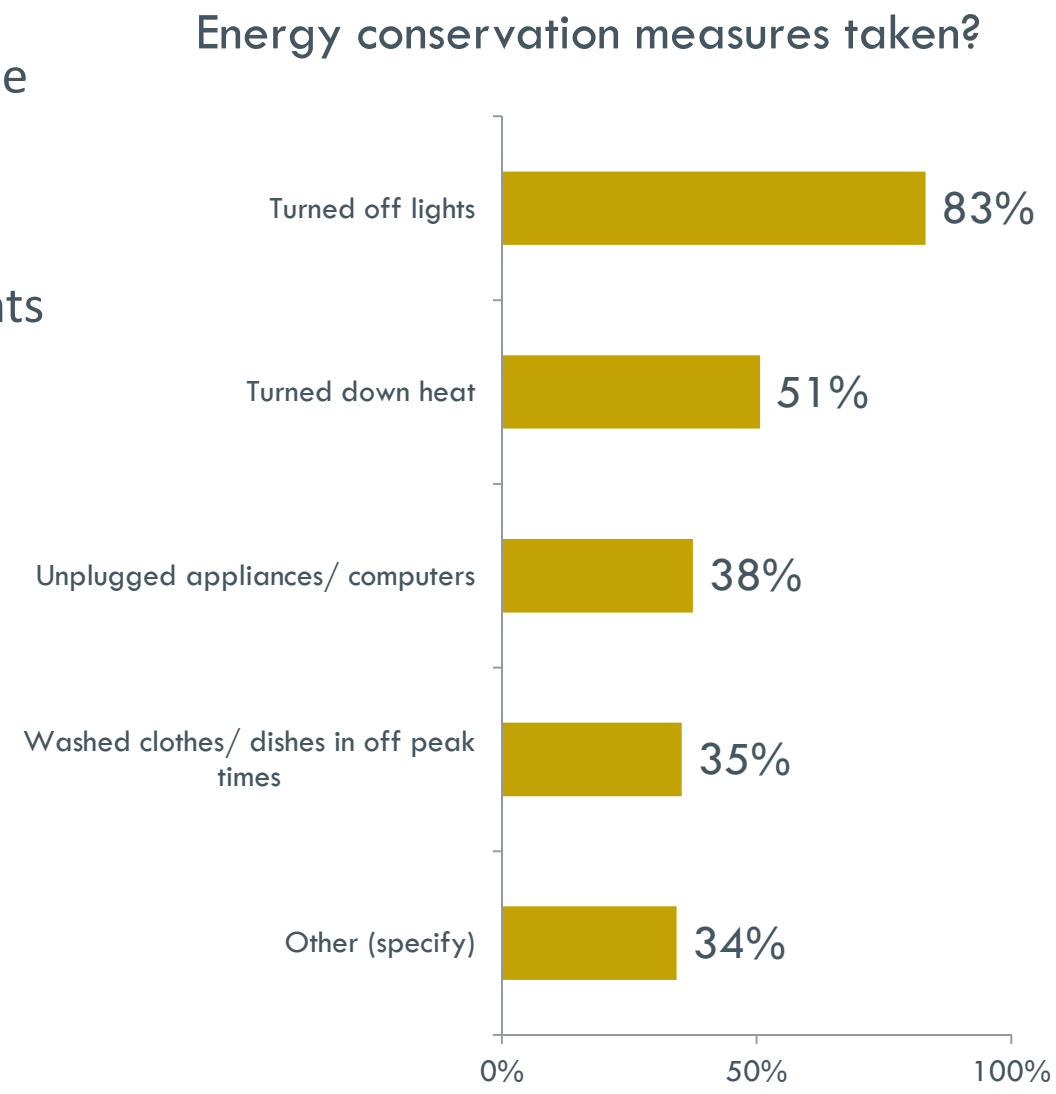
Did you and your family practice any energy conservation measures around the time of the outages that you would not normally have done?



Energy Conservation Measures

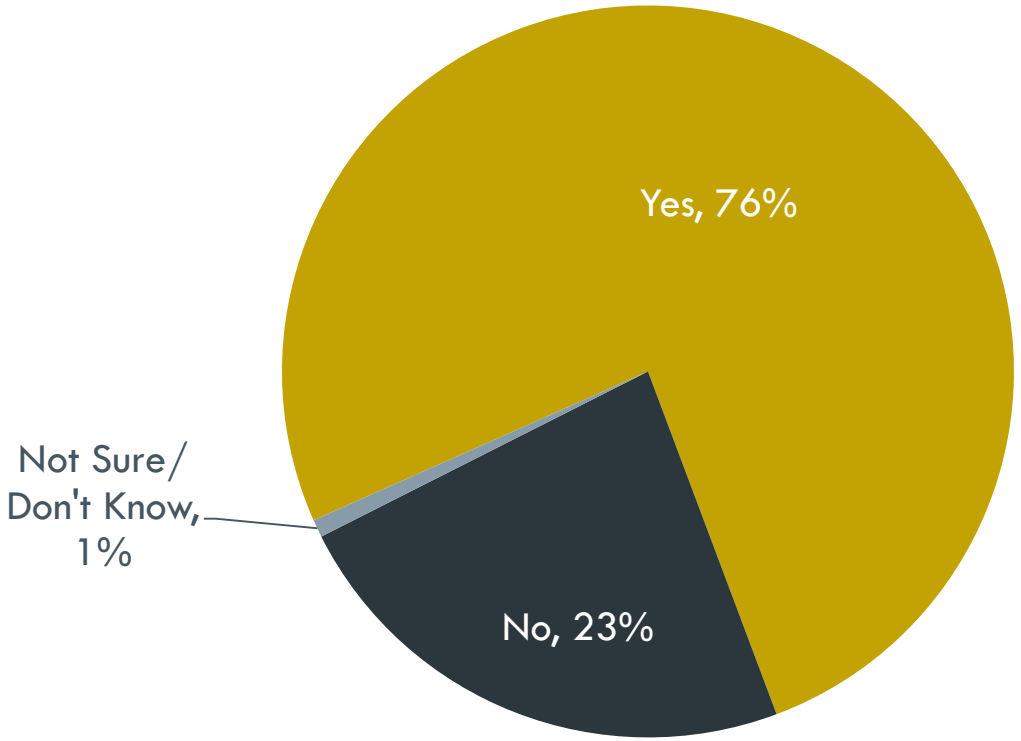
For those who answered other, the most common mentions were:

- Did not wash clothes
- Turn off outside/Christmas lights
- Used wood stove



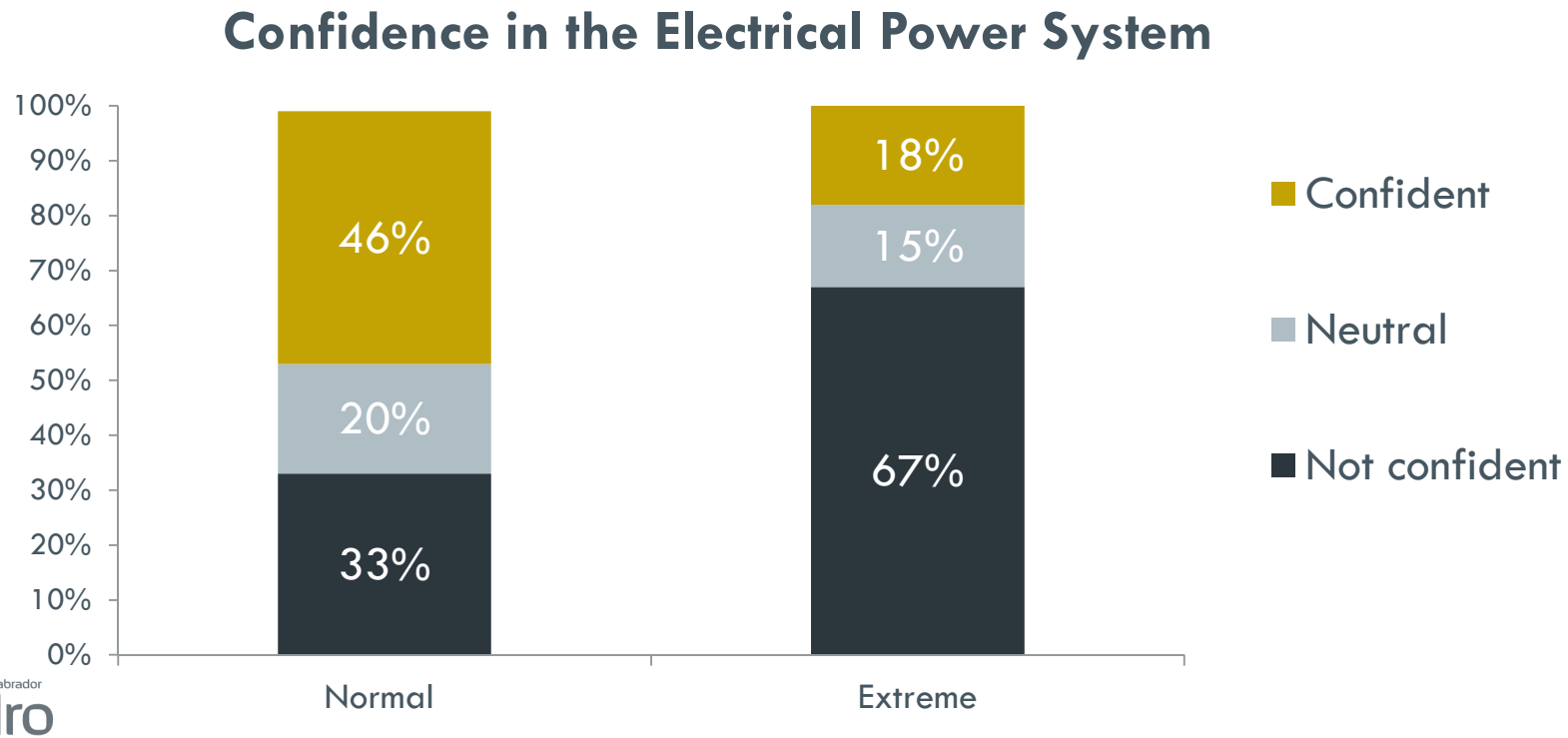
Energy Conservation Measures

Have you continued with these energy conservation measures?



Confidence in the Electrical Power System

- Confidence in the electrical power system is not great, particularly in extreme weather situations. Interestingly, younger respondents are less confident in both normal and extreme weather situations.

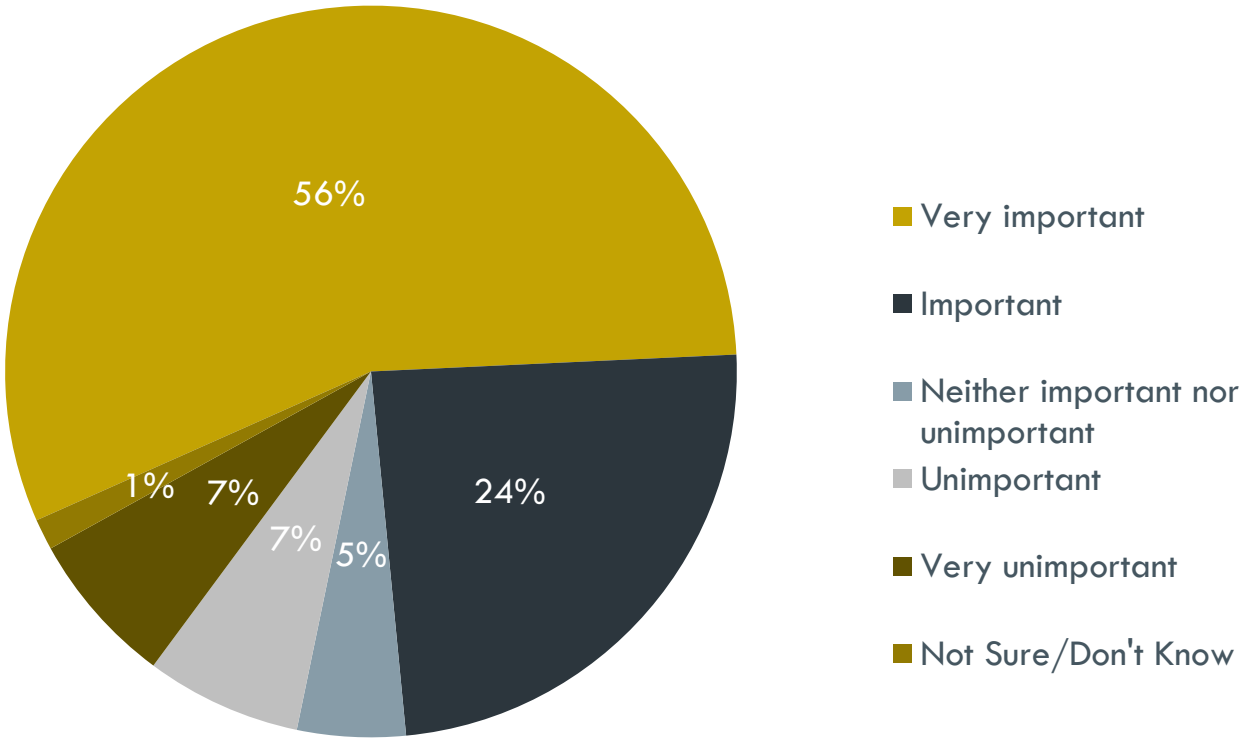


What would restore confidence?

- When asked what would restore their confidence in the electrical system, most people mentioned upgrading equipment and stations, more maintenance and more backup.
- Others took the question more as a when would they be confident rather than what would have to be done. These people tended to mention that one or more storms would have to happen without serious power loss before they would be confident again.
- Of interest is the fact that virtually nobody mentioned anything the general public should be doing to decrease the demand for power.

Review Causes of Outages

How important do you think it is that an independent review of the causes of the outages take place?



Key Findings

- The suggestions for how confidence can be restored places the responsibility squarely with the main players in the system. Respondents mostly suggested infrastructure improvements, upgrades, maintenance and backups.
- There is a strong sentiment that an independent review of the causes of the outages should take place.
- Hydro's performance during the outages were rated reasonably well. The efforts of the employees to restore power are certainly recognized.
- The tone of these findings seems to be more about taking steps to ensure it doesn't happen again rather than how Hydro did during the event.
- The majority of the respondents (86%) practiced energy conservation measures around the time of the outages and most have continued with these measures since.

Customer Service Research

Summary Report Focus Groups

June 2014

NEWFOUNDLAND POWER
A FORTIS COMPANY

newfoundland labrador hydro
a nalcor energy company

MQO RESEARCH RECHERCHE

Introduction

This research summary is based on the findings of six focus groups conducted on behalf of Newfoundland Power (NP) and Newfoundland Labrador Hydro (NLH) during the first week of June, 2014. The groups are the first phase of a qualitative and quantitative research program designed to provide insights into the communications needs of electricity customers across the province: specifically as they relate to power outages. Sessions were held with customers from across the province as follows:

- June 4th – 2 Sessions St. John's.
- June 5th – 1 Session Sunnyside and 1 Session Clarenville.
- June 6th – 1 Session Triton and 1 Session Rocky Harbour.

A copy of the discussion guide used for the sessions is included as Appendix A. The discussion was designed to explore information requirements under different outage circumstances; planned outages to storms of normal durations to multi-day events with rolling outages. The topic of energy conservation was also included in the overall discussion. In the first two sessions, the discussion sequence flowed from planned outages, to normal duration storm-based outages, and finally, multi-day events. However, throughout these first two sessions, the strength of desire to express opinions on the events from last January was so significant that is caused people to refer to them immediately. As a result, (and to facilitate a smoother flow of discussion in the final four groups), the discussion order was reversed to deal with the prolonged outage and rolling outages first. This enabled us to more seamlessly move onto the communications needs related to other outage types.

This report is meant to be a "highlights summary" of key findings from the six sessions. These outcomes will also be used to guide develop the upcoming telephone survey, and then will be blended with the quantitative survey results in the final report.

Information Needs during Outages

What are the burning questions?

Regardless of the type of outage, when the power goes off, people need information. This message was consistent and clear though all six groups. In fact, there were three very consistent core questions that surfaced through these discussions:

> **How long will the power be off?** This is universally the most critical question that people need answered. In terms of "acceptable duration", participants indicated that up to approximately two hours was considered a reasonable and manageable inconvenience. Up to this length people are not overly concerned, as their homes will stay warm and they can manage with meals and water etc. If it's expected to be more than two hours, they may need to find alternate solutions to keep

their homes warm, prepare food and possibly keep food from spoiling. At that point, they might even have to consider leaving their home to find shelter elsewhere.

What caused it? Aside from the practical need to find out when the power will be restored, the experience of losing power to one's home (particularly after dark), can be a disturbing experience. As a result, the conversations also indicated a clear level of worry about "what might be going on." Once people know what happened, they seemed to gain some comfort in the knowledge. It also provided important context for people to be able to act/react/plan. The cause of the outage was felt to provide additional insight into the possible duration and overall impact (i.e. were schools, work likely to be closed, hospitals impacted etc.).

How extensive is the outage? Building on the "cause" theme, this question also seemed to provide important context in the decision making process. Essentially, it was felt to be an important factor by many participants in deciding what actions to take. For example, If they feel there may be a need to go to another place for warmth or food, they can decide if there is somewhere outside the outage area that they can go. And once again, it was noted that knowing the extent of the outage helps in accessing the number one question: how long is the outage likely to continue.

Assessing the Situation

People seem to understand that it takes time to assess the situation. As a result, in an outage, they don't expect a time estimate immediately. However, they do expect some information, even if that's just an acknowledgement that the situation is being assessed and more news will be available at a specific time. **On that basis, it was felt that providing an actual time estimate within an hour is acceptable.** Once the situation has been assessed, people want a reasonably accurate "power back on" estimate and then regular updates on progress (this was particularly important if the original estimate is extended).

How Much Detail is Required?

In most planned and unplanned outages, the discussions indicated that people really tend to focus on the moment. They have no light, no heat, no hot water, and limited control of the situation. And they have to deal with this major disruption in their lives while they keep themselves and their families safe and warm.

Concise and accurate is the objective here. As clearly as can be stated, people want to know when **their** power is going to be back on. Any information beyond or around the edges of this point can be marginally helpful (as it may provide additional context), but knowing when the power will be back on, and getting regular updates to support this need should be considered an essential communication goal. Beyond this, knowing when others will be restored or the number of poles that are down may add some perspective and a sense of progress, but in the moment, people really need to know how long they will be affected.

Sources of Information

Beyond the type of information people are looking for, understanding the sources people use to get their outage news is critically important in the communication process. And depending on the type of information people are looking for, it appears the source can change.

Sources of Information "In The Moment"

During outages, radio was most often considered the main source of information. It continues to be the most common source, and it does so for one very specific reason: Because it can provide regular updates when the power is off. Many people in the groups talked about having battery-powered radios that they immediately turned to when they lost power. And there was a universal understanding that radio stations offer "on the spot" news updates that happen at regular intervals, regardless of the time of day or night. For customers, this helped answer the all-important question: when will the power be back on?

In addition to radio for the essential updates, there was an emerging trend noted in smaller numbers in all groups (including rural areas). Increasingly, with greater penetration of smart phones, more and more people feel they have other (and better) options that work when the power is off. Today, more and more people are turning to their provider's website and to social media for these all-important updates (twitter and facebook). And while the incidence was modest in the groups, those that used these sources seemed to turn to them even more frequently, as information seemed to continuously trickle in. However, the themes were the same: When is the power going to be back? What caused it? What is the extent of the outage?

Other options mentioned included automated email messages and automated phone messages.

Where do Television and Print Fit?

Conversely, television news broadcasts were considered less useful for those experiencing an outage for the obvious reason that most won't be able to turn their televisions on. This means that for most unplanned outages (where people were reacting in the moment) television was considered more useful to "hear the full story after the fact." Newspaper would be in a similar category, however a few people did mention the use of newspaper websites for more timely updates.

Sources of Information for Rolling Outages

In the case of rolling blackouts, the need for information changed in that people were tuning in to find out when the next blackout might occur (and if there would be more). In this case, television and print played a greater role, since they were both available and provided good insight and detail on the "bigger picture" of hat was happening.

However once the rolling outages occurred, radio and social media were more often used to check the duration.

Unplanned Outages

Throughout the groups, there was consensus that the most common cause of unplanned outages was weather related. Most often this was snow or ice storms, but could also be wind. As a result, the number one trigger that people watched for in advance of potential outages was the weather forecast. Storm advisories for many people represented a cue to go into outage preparedness mode: Ensuring they have sufficient food and water, batteries (for flashlights and radios) and if they have generators that they have gas for them.

They rely on weather forecasts and their normal news sources for this information and did not see a role for NL Power or NL Hydro in the days immediately before a weather event/unplanned outage. However, reminding people to be prepared and providing information on where to get updates (company website, twitter etc.) could be seen as helping in the preparedness process.

Avoidable Outages

Outside of weather related outages, participants spoke on multiple occasions about the possibility of unplanned, yet avoidable outages. The most common (and least acceptable) cause being: failure to properly maintain power generation equipment. Largely driven by the events of January, participants demonstrated a complete lack of tolerance of this kind of outage, and often felt that, given the traumatic impact on their lives, this should not be tolerated. In fact in such cases, it was generally felt that a high level of accountability should be offered by the organization that caused the outage to occur.

Planned Outages

There was one key difference between planned and unplanned outages information requirements. Because it is planned, notice can be given beforehand and people expect consideration to be given to when the outage takes place (avoid winter and times in the morning when people are trying to get ready for work and school). Otherwise, they only want to know if they are affected and they want to know how long it will be and the reason for the outage.

A printed copy of the standard planned outage notice was distributed in each session and participants felt it contained all of the information that people would need. A few days to a week's notice are appreciated for residential customers who simply want the opportunity to plan so that meals and daily routines are disrupted as little as possible.

Who Should Deliver The Message?

Understanding the potential for confusion in the overall roles of Newfoundland Power and Newfoundland Labrador Hydro, and further to this, confusion as to who may be responsible for outages (cause and repair), we discussed the question of who people want to hear from leading up to and during outages.

Universally, residential customers expect to hear from their main supplier in all communications. This was quite clear in all groups. The first four groups were conducted with NL Power customers. Within these groups, people

expected any communications about power outages to come from NL Power. The one exception to this is when there is an extended outage and generation is the cause. In this case, NL Hydro also communicating with them using public mediums (radio rather than emails and phone messages) is acceptable in the interest of hearing what is happening first hand. In most typical outage circumstances all communication was expected to come from NL Power as they spoke to customers supplied by NL Power.

The final two groups were with NL Hydro supplied customers and the same perspective was provided by those participants. Hydro customers expect their communications on outages to come from Hydro. In this case they couldn't see any situation where they should also be hearing from NL Power.

Requests to Conserve

During each of the sessions, a specific discussion was undertaken around the subject of energy conservation. While the conversation started in a general context, participants quickly gravitated to rotating outages and the events of January 2014. As a result, most of the conversation on this topic spoke to conservation in response to inadequate energy supply (versus the general notion of energy conservation).

First and foremost, the vast majority of participants felt they would be willing to comply with a request to conserve electricity. They also seemed to generally know what to do; not use dryers and dishwashers, turn down the heat, turn off lights, etc. However, throughout the conservation, it became clearer that this was the "good conscience" response that was easy to say, but harder to live up to. From a communications point of view, this presents a daunting challenge: If people feel they are already complying (or are doing more than they really are), then who's listening to the message?

The most disturbing (yet helpful) finding from this discussion is if people are given advance notice that there is a risk of an outage, they will often use more electricity than they would have prior to the announcement. For example, if there was a notice provided that the power might be turned off in two hours it was common for people to consider warming their house in advance (so it will be warmer as it cools) and they might do all their meal preparation in advance to ensure they have hot food for the family. In this sense they might inadvertently cause the outage to happen earlier. This suggests that only giving a short pre-notice (i.e. 1-2 hours) might actually cause people to use more electricity as they scramble to prepare for it whereas a longer notice might reduce this negative impact.

What Happens if the Outage does not Occur?

It appears that warnings of outages (caused by insufficient supply) that do not occur, do not concern or annoy people as long as they are told after the fact why the outage did not happen or was no longer necessary. Specifically, it was felt that an acknowledgement that conservation efforts helped avoid the outage would reinforce the positive impact of conservation.

When is Conservation A Reasonable Request?

People are more willing to participate in conservation when they feel there is a real or legitimate reason for the request (storm has knocked out supply) and are less willing when they feel the reason is related to neglected

maintenance or poor planning on their supplier's part. Many of the people in the sessions were personally quite prepared for outages with food, batteries etc. in place and felt their electricity supplier had at least an equal responsibility to make sure equipment is also in working condition.

Additionally, when people feel they are "doing their bit" to conserve energy, they get particularly annoyed when they see what they consider to be wasteful behaviour in the businesses and neighbours around them. When they see an empty building "all lit up" at night they question the impact of their own efforts and why they are participating.

Specific Communications Examples

Two recorded examples of communications and one example from a radio interview were played/read in each session so that people could react to specific examples. The Sunnyside Update was one minute in length and the Energy Conservation Request was two. There were a number of consistent comments that should inform the content of future communications:

1. **Short regular updates are key:** Many people felt the one-minute update was too long and the two-minute was too long for most. It clearly appeared that long messages with multiple topics tended to lose people who struggled to keep all of the information straight.
2. **Be as specific as you can:** Providing broader information that people had trouble relating to their own situations was often felt to be distracting and confusing. Their primary concern is when their power will be back on, and anything that doesn't help clarify this is not all that helpful. So while it shows progress to say something like 10,000 customers on the Avalon have had power restored, peoples' real interest is when the power will be back on in their community or area. (On that note, it was considered acceptable to direct people to a website for detailed information on a community level as long as it was up to date).
3. **Range is fine, vague is not:** People know that suppliers don't know exactly when their power will be restored so some range of timing is acceptable, but vague references to time (like "some time this evening" or "hoping to be able to" rather than the more precise; by 6:00 or 6:30) should be avoided.
4. **People want detail, but not technical detail:** Most people don't really know what capacity in MW means and describing demand and supply that way often appeared to speak over peoples' heads. Using more layperson's terms like: we are at 96% percent of capacity, or approaching 100% may have more meaning.

Other Opportunities for Communication

The notion of NL Power and NL Hydro communicating with their respective customers at the beginning of the winter season was met positively. It was generally felt that communication in the form of encouraging people to be prepared for possible outages by having flashlights or a battery powered radio etc. would be a positive initiative. The general sentiment was this would show caring for customers.

Urban and Rural Differences

The main practical difference between urban and rural customers is that rural customers seem to be better prepared for an outage and seem to be more likely to have resources such as a woodstove or a generator to assist with heat

and lights. As a result, they often appeared less adversely impacted by outages. In a few cases the more resourceful nature of many rural participants suggested a (short) outage was an adventure as much as an inconvenience.

The main emotional difference between urban and rural respondents was far more dramatic, as rural customers were extremely critical of NL Hydro in particular for what was seen as negligence in maintaining equipment that caused the January capacity issues. The level of anger and the need to vent in the sessions about the rolling outages was strong. Words as strong as "feeling betrayed" were used to describe their emotions.

In rural groups, there was an expressed need to vent at the "big salaries" in St. John's who were seen as having so much, yet no one listened to the "little guy" in smaller communities. While this may be a general cultural difference that could be applied to many situations, it is an important insight in developing effective communications plans and messages for rural audiences.

Acknowledging the Balance

By contrast, in Triton, where customers were supplied by NL Hydro and people did not experience rolling outages, the comments about NL Hydro were quite positive. In that case, comments were comparable to comments about NL Power in areas served by that supplier.

A Word About Business Customers

While these sessions were held with residential customers, the participants coincidentally included a small number of small business owners. And while there is a separate exercise planned to gather information from this important audience, it is worth noting two relevant comments:

1. When it comes to information related to outages, those who commented did not feel a need for different information, but they did appreciate more notice when it can be given – such as with planned outages. A week or even two weeks' notice would be appreciated. Some noted they were scheduling staff and clients and with more notice they could minimize the impact on their business and revenues.
2. Money was the other big difference between residential and business customers, in the sense that residential customers are primarily dealing with inconvenience in an outage while business customers are also dealing with lost income.

Appendix A Discussion Guide

Discussion Guide

Outage Communications

1. Introduction

- Let me first thank you for agreeing to participate. The session will last an hour and a half or a little bit more and that generally people enjoy themselves and find the process interesting.
- In a few minutes I will be taking you through different scenarios and I am looking for the information you need in each circumstance and how you would like to get that information. First, let me tell you a little bit about the room you are in.
- Explain the mirror (as appropriate)/presence of the client and the taping.
- Get a brief introduction from each participant that includes their first name and a little about themselves – the type of work they do and how long – that kind of thing. Also ask them to identify how they heat their home?

2. Disruptive Events

- I would like to start off really generally and get you all to think of a day when everything just went completely differently than you planned and I want you to think of what caused that. Just to put a few parameters around that – I am not meaning anything personal like someone walked out on you or that kind of thing.
- What did people think of? What are the emotions attached to the various disruptions mentioned? Is there fear, annoyance, anger?
- Probe for the various types. The objective is to see where power outages fit and how often they are mentioned? Also probe for clarity – is it the outage or the weather event or the fact that people can't do what they want to do?
- Are power outages relatively minor or more serious in the whole scheme of things that happen to you and your family?
- What could you do to make this better? Who or what other organizations could also make these outage situations better for you? What could they do? Probe for information, but also activities like warming centres?
- If it is winter and you know that a storm is coming, what are you thinking about and what are you concerned about? Is it that the power might go out? Is it that people might have trouble getting home? What do you do? Are people prepared all the time or really not very much?

- Would you say you are monitoring the situation very closely? If you are, who are you relying on for information? Who is reliable and trusted?
- You all have a sheet of paper in front of you and I would like you to jot your first name on the top and I would also like you to think of the number of power outages that you have had over the past year and jot that number down too. For power outages I would like you to include major ones and more minor ones and just write the total number down.
- Get an idea of how many people have said and understand what the range is.
- Is this an expected number or a reasonable number? Is it reasonable to expect that almost anything, including your electricity, will not be working a certain number of times each year? Do you think that 100% reliability or very close to 100% is reasonably achievable or even expected?
- What are the circumstances or situations that make an outage more or less acceptable or understandable? Probe for weather conditions, length of outage, time of year.

3. Scenarios

- Unless the earlier conversation suggests a need to add something to this portion, we would discuss three types of outages – planned, unplanned winter outage lasting less than a day and major storm multi day outages including rolling outages. In each case we will probe for how people are feeling? What their major concerns are and what NL Power, Hydro and others including media can and should do?

- A planned outage in the winter that is necessary to do some maintenance in your area. What information would you want to be told? How much time before the actual outage? Do you need to know why? How should that information actually be communicated? How should the message be sent to make sure that most people get it? How much updating?

- Let me play (or read) an example of how this might be communicated. Once it is presented; how good a job does this do? Does it have the information you need? What is the sense that you get – is the tone correct? How are you feeling having heard this? What would improve it? Is this the right source of information? How else should I present this information so that people get it? Should I be leaving automated phone messages as an example, social media, twitter? What should I have on our own website? Do people understand that both Newfoundland Labrador Hydro and Newfoundland Power are involved in this? Should I be hearing from both? Should I be hearing from my main supplier only?

- My next one is not a planned outage. Imagine there is a winter storm coming that is expected to last a day and will probably be enough to take buses off the road and have the RCMP warn people to stay off roads. Before the storm actually comes is there anything that needs to be done or communicated from a power perspective? What are you thinking about and doing 2 – 3 days before the storm? The day before the storm? The day of the storm?

- Let me again play you or read an example that deals with this situation. How good a job does this one do? Explore positive and negative comments. How could this one be improved? When it is an unplanned outage? Who should be communicating with you?

4. Prolonged Outage

- Now I would like you to think of a situation where there is a prolonged period of outages. Similar to what some of you experienced this past January. Take me through what is on your mind in this case – on the first day of the storm? On subsequent days? What information do you need at each stage? How should you get this information? Is there more of a need for updates? Who should the communications come from? What is the role of NL Power, Hydro, the media. Is there anyone else that you need to hear from?
- When there is a more major event similar to what happened in January, is there any need for communications once the whole thing is over and everything is back to normal. Who should this come from and where should it be?
- Again play a communications example and evaluate.

5. Conserving

- If there is a need to conserve electricity in that there is not enough electricity for everyone at particular times, what do you need to know? How long before it is likely to happen do you need to know? Again, how should you be advised and who is actually advising you?
- If you are asked to conserve the electricity that you are using, do you know what to do? What would you do first? Do you feel you are making a difference?
- For those of you who experienced rolling outages, what was that like? Did you do anything to prepare? How soon before do you need to know about these? How best to get this message to you?

6. Reporting Outages

- Imagine that you are sitting at home and the power suddenly goes off. First of all, what would you do? How many would call to report the outage? How long would you wait? Would you call or would you want to let them know some other way? What do I want to know in this case?

7. Conclusion

- Thank participants and answer any of their questions. We really appreciate your time today. Also a reminder to keep the conversation today confidential.