

1    Q.    Hydro states in its Reliability and Resource Adequacy Study – 2019 Update (Volume I, pages iii  
2                  and iv) "*Hydro remains committed to working with the Board and stakeholders to help ensure an*  
3                  *appropriate balance of cost and reliability for the provincial future electrical system.*"  
4                  Specifically, what steps has Hydro taken, and is planning to take, to meet this commitment?

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7    A.    Newfoundland and Labrador Hydro ("Hydro") is committed to working with stakeholders, the  
8                  Board of Commissioners of Public Utilities ("Board"), provincial electricity customers and other  
9                  interested parties throughout the entirety of its Reliability & Resource Adequacy ("RRA") Study  
10                 with the ultimate goal of striking the appropriate balance of cost and reliability. In support of  
11                 that commitment, in 2018 Hydro conducted customer and stakeholder engagement with the  
12                 intent of beginning a dialogue regarding electricity in the province. This initiative began with a  
13                 two pronged approach; a digital engagement with residential and small commercial customers<sup>1</sup>  
14                 as well as one-on-one consultation with key stakeholders including Island Industrial Customers,  
15                 Newfoundland Power and the Consumer Advocate.

16                 At the same time in 2018, Hydro initiated an online Electricity Feedback Panel. This panel was  
17                 developed so that Hydro would have an ongoing means to engage with customers how best to  
18                 communicate with customers, types of information customers are interested in, and customer  
19                 interest in electric vehicles. Information on the panel can be found at  
20                 <https://electricityfeedbacknl.com/>.

21                 Through the ongoing regulatory proceeding, Hydro presented key topics and considerations in a  
22                 technical conference with the goal of ensuring that all parties have adequate information and  
23                 understanding of Hydro's RRA study, Hydro's approach to decision making thus far, and the key  
24                 system reliability related decisions which will impact the level of future investment required.

25                 Hydro will continue to engage with customer and key stakeholders through both the Regulatory  
26                 proceeding and its normal business interactions to ensure future system requirements are

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<sup>1</sup> In total 2,070 digital surveys were completed. Attached as CA-NLH-005, Attachment 1 is the summary report and attached as CA-NLH-005, Attachment 2 is the What We Heard document.

1 clearly understood and appropriately balanced with customer and stakeholder expectations for  
2 the delivery of safe, reliable, least-cost service. Hydro will continue to seek customer input,  
3 which combined with analysis and evidence, will help to inform future decisions regarding the  
4 provincial electrical system.



## Background & Objectives

Newfoundland and Labrador Hydro (NL Hydro) is a provincial Crown corporation that is the primary generator of electricity for Newfoundland and Labrador (NL). In addition, the Company distributes electricity to rural communities in the province, as well as in Labrador. The Company is a subsidiary of Nalcor Energy.

The primary objective of this digital engagement initiative was to provide an opportunity for NL residents and businesses to become actively engaged in the conversation on electricity in the province. In particular, the online study provided an avenue for input and feedback on various topics related to the future NL's electricity system and:

- ⌚ Assessed overall perceptions regarding the reliability of Hydro's current system among residents across Newfoundland & Labrador;
- ⌚ Explored opinions regarding the appropriate balance between reliability and the cost of those investments for customers;
- ⌚ Evaluated residents' interest in taking a more active role in managing their electricity consumption; and
- ⌚ Assessed residents' level of interest in engagement with Hydro on a go forward basis.

To meet study objectives, NL Hydro and its agency of record (NATIONAL) commissioned Corporate Research Associates to implement a **Digital Engagement Study**. In particular, through various digital engagement strategies, residents were encouraged to visit a website and share their thoughts by reviewing short information videos and completing an online survey. In total, 2,070 surveys were completed between August 28 and September 20, 2018. When residents were unable to complete the survey online, the opportunity was provided to complete the study by phone. This study was not intended to provide results to which a margin of error can be applied (given that it is not a probability sample), but rather was conducted to actively engage residents in the discussion. That said, overall results were weighted by region to reflect the actual population distribution.

The following summary report presents an overview of the **2018 Digital Engagement Study** and includes an executive summary of results and an analysis of findings. For questions that include regional comparisons, results have been broken out by St. John's/Avalon, East and West. Note, while Labrador is included as part of West regional results, results from Labrador have also been presented separately, where relevant. Appended to this report is a copy of the questionnaire (Appendix A).

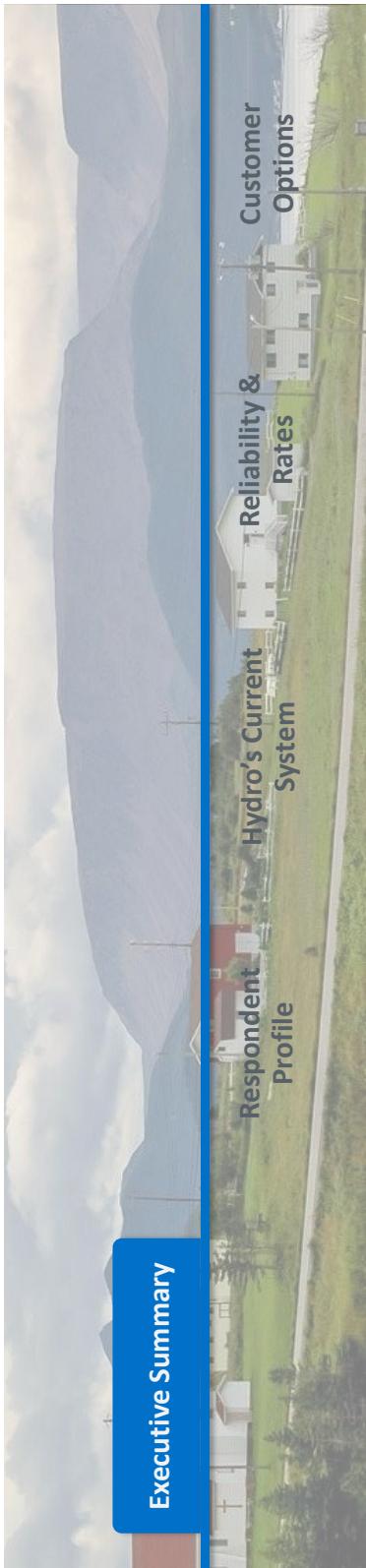




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## Executive Summary



## Executive Summary

Results of the **2018 Digital Engagement Initiative** show that while there are some key differences across regions and customer type, respondents are generally content with the current state of Newfoundland and Labrador's power system. Respondents consider their electricity service to be highly reliable, with a sizable minority reporting that their power reliability has improved since DarkNL. Furthermore, respondents are clearly cost-sensitive when it comes to energy upgrading, expressing willingness to accept a risk of longer outages, in favour of minimal rate increases.

Overall, the majority of respondents are comfortable with the level of reliability offered by the current power system, and as such, prefer additional investments be made cautiously. Indeed, while some think the Province needs a more reliable system than it has currently, when asked their preferred approach towards balancing investment and electricity cost, a clear majority of respondents are in favour of Hydro having some back up generation to partially reduce the impact of a sudden loss of power supply, as it would have a lower impact on electricity costs.

Interestingly, despite cost-sensitivity and apparent willingness to accept longer outages, results suggest respondents would be reluctant to accept an increased frequency of outages. On average, respondents reportedly experienced three outages in the past 12 months. However, regardless of their preferred balance of reliability and impact on electricity cost, few consider more than three outages to be acceptable.

Respondents readily acknowledge that consumers have a role to play in actively managing electricity consumption, and are keenly interested in learning more about their own electricity usage, in real-time. Moreover, the vast majority of respondents would like to have more customer rate options available. Despite interest however, respondents offer limited suggestions as to what options could be offered by Hydro, outside of Time-of-Use rates. That said, interest in Time-of-Use rates is strong, with the vast majority of respondents expressing some level of interest in signing up.

Overall, results reveal limited awareness of Hydro's Net Metering program, suggesting that additional efforts may be required to build customer awareness, even among Hydro's own customer base.

Finally, while respondents are unsure how Hydro can improve customer engagement, there is clear interest in engaging with the Utility. Indeed, the majority of respondents expressed interest in joining Hydro's Electricity Feedback Panel.

\* The infographic on the following page offers a one-page visual summary of key findings from the 2018 Digital Engagement Initiative.

# 2018 Digital Engagement Study

## Key Highlights



Methodology: 2,070 online surveys with NL residents  
Data Collection: August 28 – September 20, 2018

### Current System

**63%**

Of respondents are highly interested in signing up for **Time-of-Use Rates** (Scores 7-10; 10-pt. scale)

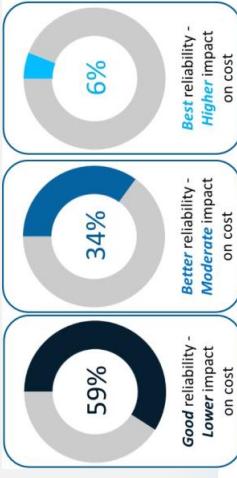
**82%**

Believe they receive **highly reliable** electricity (scores 7-10; 10-pt. scale)

### Looking to the Future...



### Preferred Balance: Reliability vs. Impact on Cost



**57%**

Are interested in joining Hydro's Electric Feedback Panel

**hydro**  
newfoundland labrador  
a noltor energy company

### Opinions Regarding Electricity Usage & Customer Rate Options...

(% offering high levels of agreement: scores 7-10; 10-pt. scale)

- Customers should take an active role in managing their electricity consumption **81%**
- I would like to better understand my electricity usage any time of day, in real time **77%**
- There should be more customer rate options so I can better manage my monthly electricity cost **73%**
- There should be more customer rate options for business owners, so I can better manage my monthly electricity cost **73%**

### Opinions Regarding Current System and Future Investment...

(% offering high levels of agreement: scores 7-10; 10-pt. scale)

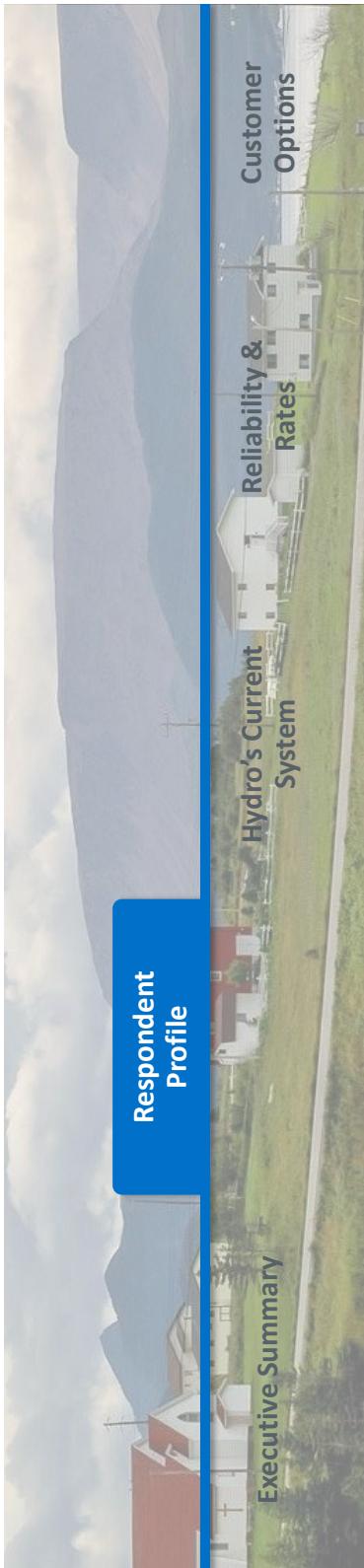
- My power reliability has improved since DarkNL **57%**
- NL needs a more reliable system than it has right now **47%**
- I am comfortable with our power system's current level of reliability (and) prefer additional investment be made cautiously **71%**
- Hydro should invest in more generation to further reduce the impact of power supply interruptions during extreme events **31%**



**Only 30%**

Of residents are aware of Hydro's Net Metering Program

**CRA**  
CORPORATE RESEARCH ASSOCIATES



*The following visual depicts the profile of overall survey respondents, including gender, age, household income, home ownership, regional breakdown, and customer type. A comparison to the NL population is also shown for key characteristics.*

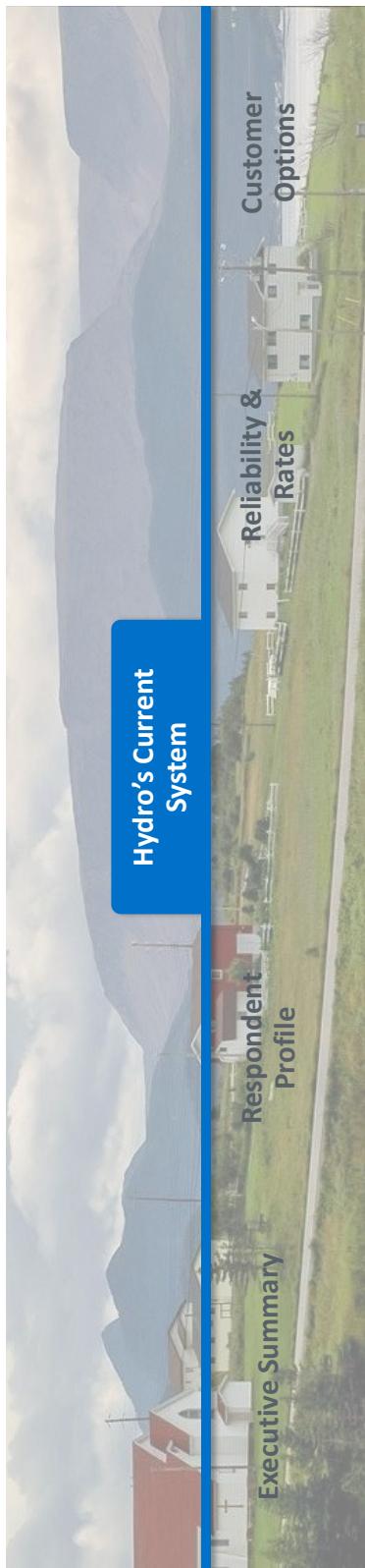
# Respondent Profile

- The online study included a robust sample of **2,070** NL respondents. While quotas were not put in place given the mode of data collection (i.e. all residents were invited to visit the site), it is important to note that the actual breakdown of respondents is closely aligned with the true population distribution. As outlined in the following table, the vast majority of survey respondents reside in the eastern region, and most are customers of Newfoundland Power.
- Reflective of the actual demographics in the province, respondents are most likely to be 55 years of age or older. Moreover, the vast majority of respondents overall were home owners. Few businesses were included. (Tables 2, 20-25)

## Demographic Characteristics

	2018 Digital Engagement Study (n=2,070)	Actual Population (n=428,955)
<b>Gender</b>	(% Among valid ) (n=1,876)	
Male	54%	48%
Female	46%	52%
<b>Age</b>	(% Among valid ) (n=1,789)	
18 to 24	2%	9%
25 to 34	17%	13%
35 to 44	18%	15%
45 to 54	20%	19%
55 to 64	24%	20%
65 years or over	20%	24%
<b>Region</b>	(% Among valid) (n=2,011)	
St. Johns/Avalon	59%	52%
East	13%	18%
West	28%	31%

Q.20: [IF NL RESIDENT IN Q.2] In what year were you born? (Recoded into age categories)  
Q.24: [IF NL RESIDENT IN Q.2] What is your gender identity?



*At the start of the survey, respondents were presented with the first of three informational videos. This initial video provided a brief explanation of the survey's purpose, and overview of the current state of Hydro's electricity system. Note, each video was just over one minute in length.*



# Electricity Reliability

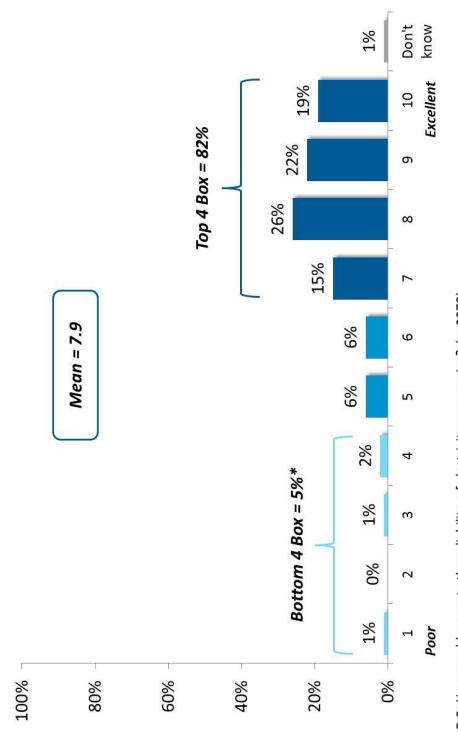
**Overall, NL respondents consider their electricity service to be highly reliable.**

After viewing the first video, to better understand perceptions regarding overall reliability of NL's electricity system, respondents were asked to rate the reliability of electricity they received using a 10-point scale, whereby '1' means poor and '10' means excellent.

- **More than eight in ten respondents report to receive highly reliable electricity service** (scores of 7-10), while just over one in ten rate give more **moderate** reliability scores (scores of 5-6). Conversely, only five percent of respondents consider their electricity reliability to be **poor** (scores 1-4).
- Across regions, those residing in Labrador are notably more likely to provide **moderate scores**, with the average score in Labrador being 6.4 (versus 7.9, overall). (Table 3)

## Reliability of Electricity Received

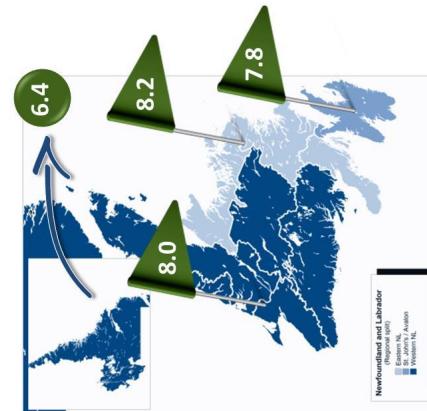
Rating on 10-pt Scale: 1=Poor, 10=Excellent



Q.3: How would you rate the reliability of electricity you receive? (n=2070)

\*Due to rounding, Responses of 'Don't know' have been excluded from the calculation of the mean.

## Mean Reliability Score by Region



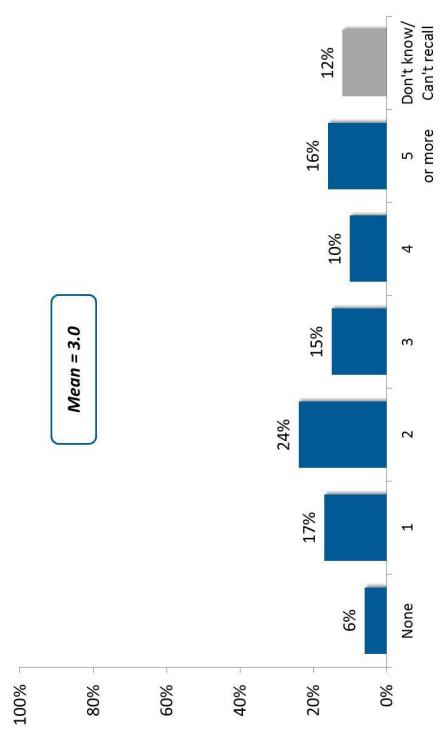
# Number of Outages Experienced

## *On average, respondents report experiencing 3 outages a year.*

Respondents were asked to indicate the approximate number of outages they experienced within the past 12 months.

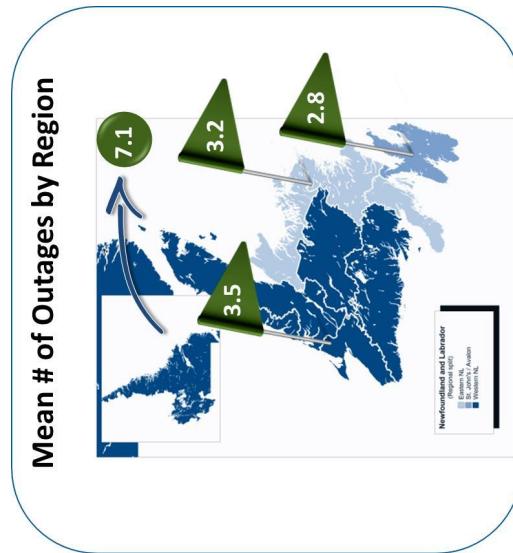
- While few (6%) report having experienced no outages in the past 12 months, more than one-half (56%) of respondents state they experienced one to three outages during this timeframe. At the same time, fewer than two in ten (16%) reportedly experienced five or more outages in the past year. Interestingly, one in ten respondents were unsure or unable to estimate the number of outages they experienced.
- Perhaps unsurprising given noted differences in perceptions related to electricity reliability, there are key differences regarding the frequency of outages based on region and customer type. Indeed, across regions, respondents living in Labrador were notably more likely than respondents overall to have experienced a high number of outages (5+ outages) in the last year (58% vs. 16%), with an average of 7.1 outages being experienced.
- Moreover, Hydro customers experienced a notably higher number of outages on average than NF Power customers (5.1 vs. 2.7 outages). (Table 4)

## **Number of Outages Experienced Within Past 12 Months**



Q.4: Approximately how many outages have you experienced within the past 12 months? (n=2070)  
Responses of 'Don't know/Can't recall' have been excluded from the calculation of the mean.

## **Mean # of Outages by Region**

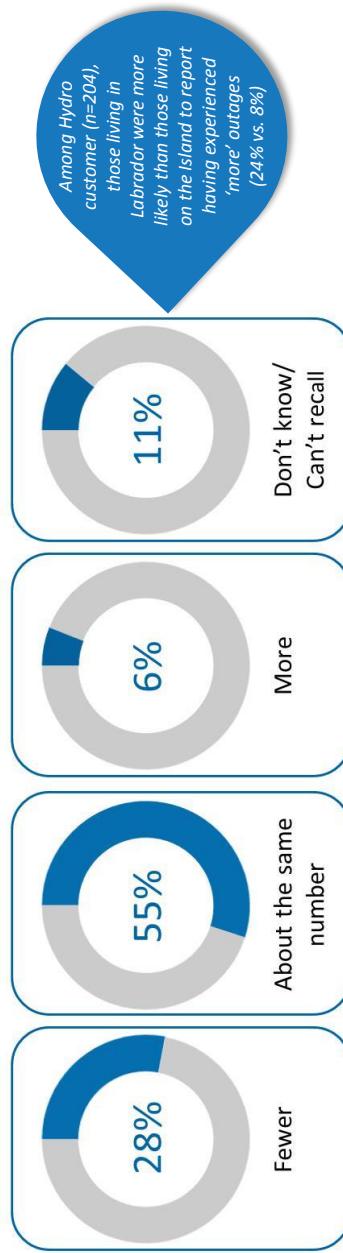


## Number of Outages Experienced (cont.)

### *The prevalence of outages experienced is generally perceived to be consistent with previous years.*

- When asked to compare the prevalence of outages experienced to previous years, more than one-half of respondents believe the number of outages was in keeping with the past, while more than one-quarter believe they actually experienced **fewer outages** this year. Few believe they experienced **more outages**.
- Across regions, those living in Labrador are more likely to have experienced **more outages** (22%) than those living elsewhere in the province.
- At the same time, NF Power customers are more likely than Hydro customers to report experiencing **fewer outages** this year (29% vs. 19%).  
(Table 5)

### Outages Experienced Compared to Previous Years



Q. 5: Was this fewer, about the same, or more outages than you experienced in previous years? (n=2070)

# Duration of Outages

## Duration of last outage varies notably.

Regardless of when their last outage was, all respondents were asked to approximate the duration of their last outage.

- Overall, the reported outage length varied notably, with the average overall reported length being **2.9 hours**. That said, it warrants mention that one-quarter of respondents were unable to estimate the length of their last outage.
- Two in ten respondents reported their last outage being **less than 30 minutes** in duration, while marginally fewer reported a slightly longer duration of **30 minutes to up to 2 hours**. Less than two in ten reported their last outage being **4 hours or more**.

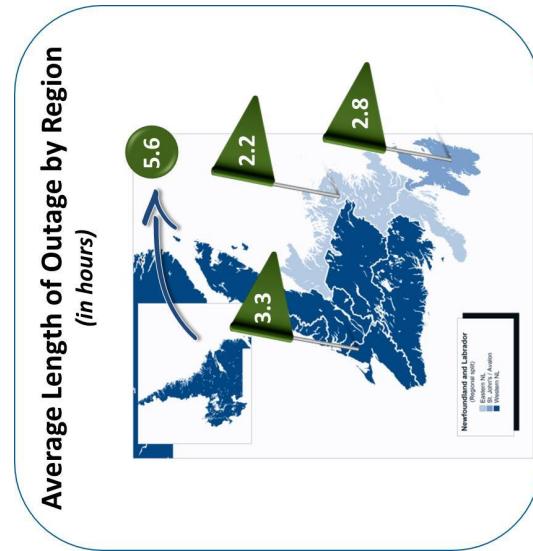
- Across regions, Labradorians reported the longest outages, with the last outage lasting an average of **5.6 hours**. Moreover, across utilities, Hydro customers reported their last outage was notably longer than NF Power customers' (4.1 hours vs. 2.7 hours). (Table 6)

## Length of Last Outage



Q.6: On average, how long was your last outage? (n=2070)  
Responses of **more than 96 hours** and **'Don't know/Can't recall'** are excluded from the calculation of the mean.

## Average Length of Outage by Region (in hours)



# Perceptions of Electricity Reliability

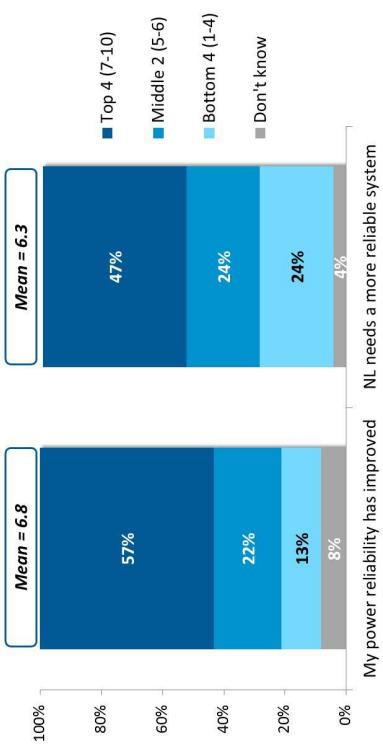
**While there is a general perception that power reliability has improved since DarkNL, there are mixed opinions as to whether there is a need for a more reliable system.**

In order to further gauge perceptions regarding reliability of NL's current power system, respondents were asked to rate their level of agreement on two separate statements, again using a 10-point scale, whereby '1' is *completely disagree*, and '10' is *completely agree*.

- More than one-half of respondents report high levels of agreement (scores 7-10) that their **power reliability has improved over the past few years, since DarkNL**, while just over one in ten disagree with this statement.
- At the same time, opinions are mixed as to whether **NL needs a more reliable system than it has right now**. Indeed, while just under one-half of respondents offer high levels of agreement that **NL needs a more reliable system than it has right now**, one-quarter do not agree that a more reliable system is warranted.
- Labrador respondents are least likely to offer high levels of agreement that their power reliability has improved in recent years (27%), and more likely to offer high agreement that the Province is in need of a more reliable system (65%).
- Interestingly, those employed within the Utilities sector are less likely to highly agree that NL needs a more reliable system (34% vs. 48%). (Tables 7-a-b)

## Opinion of Statements About Power Reliability

Rating on 10-pt Scale: 1=Completely Disagree, 10=Completely Agree

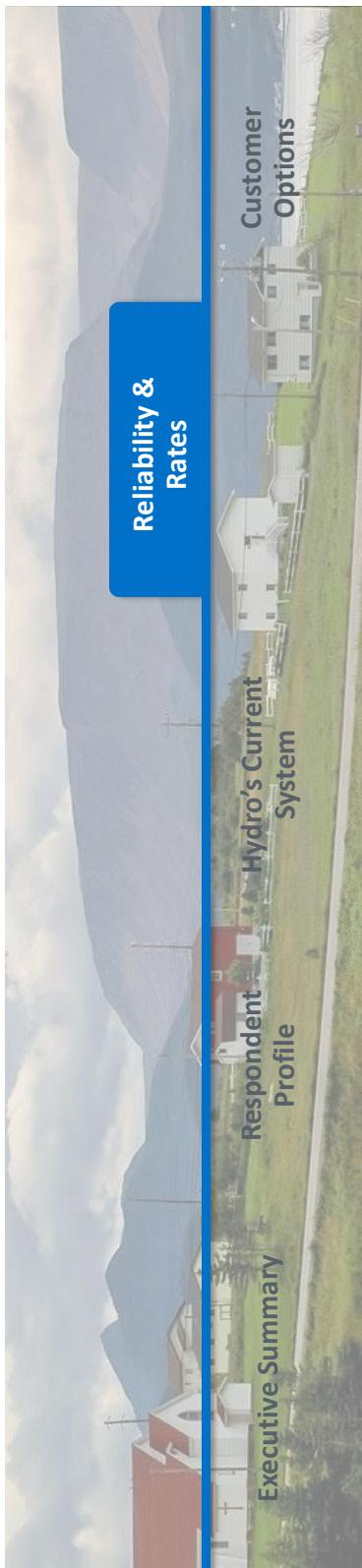


Q7a-b: Please indicate to what extent you agree or disagree with each of the following statements. (n=2070)  
Responses of 'Don't know' have been excluded from the calculation of the mean.

NL needs a more reliable system than it has right now

My power reliability has improved over the past few years, since DarkNL

Younger respondents are more likely to agree that a more reliable system is needed (18-34: 56% vs. 34-54, 55+: 46%)



## Reliability & Rates

## Hydro's Current System

## Respondent Profile

## Executive Summary

## Customer Options

*Respondents were then asked to view a second video which noted Hydro's ongoing commitment to provide reliable electricity, the impact of weather on power supply, and Hydro's desire to consult with customers regarding the appropriate balance of costs related to investment and electricity rates.*



13

# Perceptions of Investment

**Respondents are generally comfortable with NL's current power system and are reluctant to support additional generation investments.**

After gauging perceptions regarding the current state of NL's power system, respondents were then asked to rate their level of agreement concerning statements related to future investment, again using the same 10-point agreement scale.

- Overall, the majority of respondents offer high levels of agreement (scores 7-10) that they are **comfortable with NL's power system's current level of reliability, and as such, would prefer additional investment be made cautiously.** Conversely, only one in ten disagree (scores 1-4) with this statement.
- At the same time, nearly four in ten (37%) respondents disagree (scores 1-4) that **Hydro should invest in more generation to further reduce the impact of power supply interruptions during extreme events**, while fewer (31%) agree (scores 8-10) that such investment should be made.

- Findings are generally consistent across audience segments, although Labrador respondents are slightly less likely to agree that they are comfortable with the current system, and slightly more likely to agree that Hydro should invest more. (Tables 8A-B)

## Opinion of Statements About Investment

Rating on 10-pt Scale: 1=Completely Disagree, 10=Completely Agree



Q8a-b: Please indicate to what extent you agree or disagree with each of the following statements. (n=2070)  
**Responses of 'Don't know/Not sure' have been excluded from the calculation of the mean.**

I am comfortable with our power system's current level of reliability, so I would prefer that additional investment be made cautiously

Hydro should invest in more generation to further reduce the impact of power supply interruptions during extreme events

Males and higher income earners (\$100K+) are slightly/less likely to agree that investment is needed

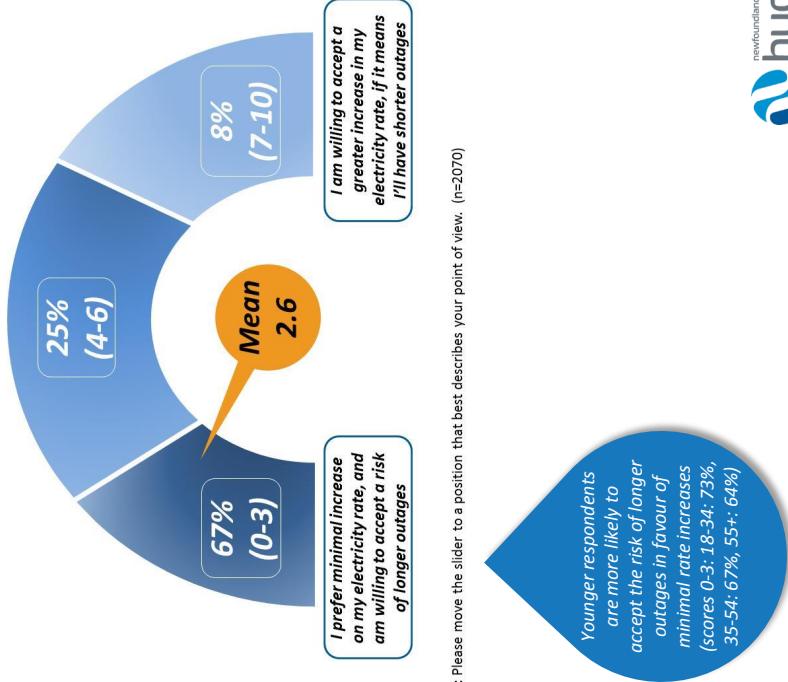
# Electricity Rate Increases vs. Outage Duration

*Overall, respondents are willing to accept a risk of longer outages, in favour of a minimal rate increase.*

Respondents were presented with two opposing statements related to electricity rate increases and outage durations, and asked to position a slider between the two statements to indicate the position that best reflects their personal point of view. *Of note, while the slider was designed similar to an 11-point scale with a mid-point, the related scores (0-10) were not visible to respondents, and are only used in the graph to right to provide a more precise visual of how opinions varied across respondents.*

- Overall, the vast majority of respondents prefer a **minimal increase on their electricity rates, and are willing to accept a risk of longer outages**. Indeed, two-thirds of respondents indicated that this statement best reflected their point of view (scores 0-3).
- Few (8%; scores 7-10) reported a **willingness to accept a greater increase in their electricity rate, if it means they'll have shorter outages**, while one-quarter of respondents did not feel highly committed to either statement (scores 4-6).
- Across regions, Labrador respondents are more likely to indicate that their point of view falls in between the two statements (scores 4-6: 32%), although the majority still report favouring a minimal increase, and are willing to accept the associated risk (scores 0-3: 58%). (Table 9)

## Electricity Rate Increases vs. Length of Outages



Q.9: Please move the slider to a position that best describes your point of view. (n=2070)

# Desired Reliability & Impact on Electricity

*There is a clear cost sensitivity when it comes to energy upgrading.*

## Preference: Reliability of Electricity vs. Impact on Cost

Following a statement regarding the general high cost of upgrading or adding to its supply of power, and the corresponding impact on the price of electricity, respondents were asked to select which of the three alternatives that best describes their preference

- Overall, most respondents favour an approach that involves 'good reliability, with a lower impact on cost'. Indeed, six in ten respondents expressed preference for an investment plan that involves **good reliability, with a lower impact on electricity cost**.

- Just over one-third of respondents stated they prefer a plan that would provide **better reliability, with a moderate impact on electricity cost**. Across regions, Labrador respondents were most likely to favour '**better reliability, moderate impact on cost**' (47%).
- Very few respondents are in favour of an investment strategy that, while offering the **best reliability**, would mean a **higher impact on electricity cost**. While those living in Labrador are more likely than respondents overall to prefer this type of approach (13% vs. 6%), it is still the preferred approach by only a minority of those respondents. (Table 10)



Q10: Please select the alternative that best describes your preference. (n=2070)

**Best Reliability, Higher Impact on Electricity Cost:**  
Hydro should plan to have enough back up generation to significantly reduce the impact of a sudden loss of power supply.

**Better Reliability, Moderate Impact on Electricity Cost:**  
Hydro should plan to have additional back up generation to moderately reduce the impact of a sudden loss of power supply.

**Good Reliability, Lower Impact on Electricity Cost:**  
Hydro should plan to have some back up generation to partially reduce the impact of a sudden loss of power supply.

**While older respondents (55+) were more likely than their younger counterparts to express openness to paying more for greater reliability, the majority (53%) still favour 'good reliability, lower impact on cost'.**



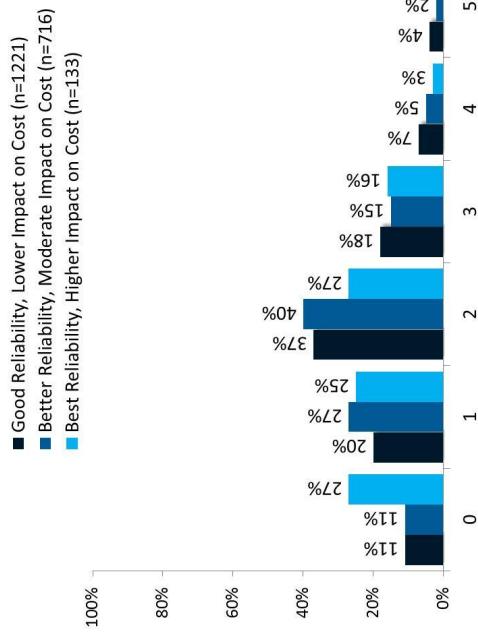
# Acceptable Number of Outages

*There is a decreased tolerance for outages among those favouring greater investment at a higher impact to cost.*

Following respondents preferred selection, they were asked to indicate the number of outages in a given year they would consider acceptable.

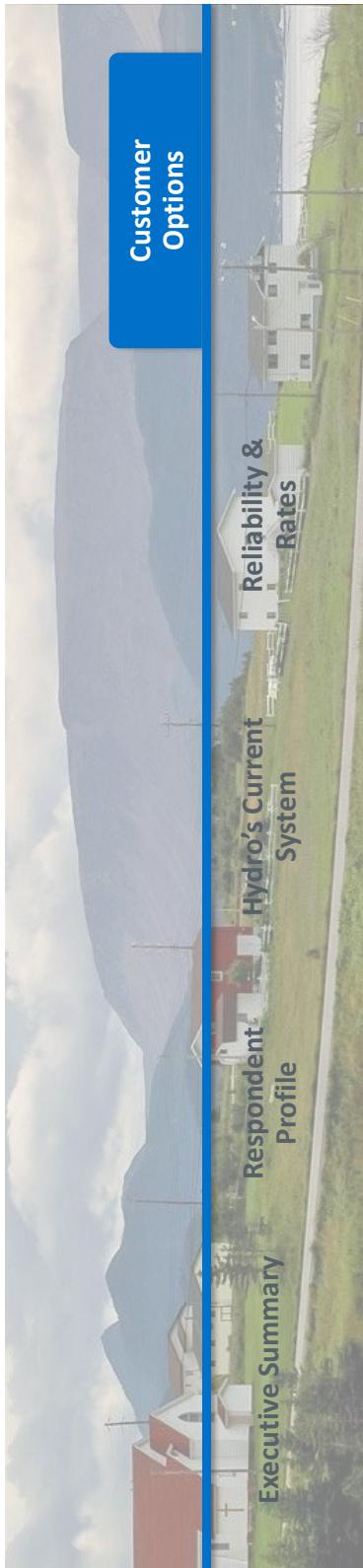
- Results show a decreased tolerance for outages with better reliability. As may be expected, those in favour of an investment approach offering the **best reliability, but with a higher impact on cost** (n=133) are most likely to consider no amount of outages to be acceptable.
- That said, regardless of respondents' preferred approach, the majority of respondents deem one to two outages to be acceptable, and very few deem more than three outages a year to be acceptable. (Tables 11: Good Reliability, Lower Impact; Better Reliability, Moderate Impact; Best Reliability, Higher Impact)

## Acceptable Number of Outages



Q.11: Given an outage caused by loss of supply could last approximately 4-8 hours, how many outages in a given year would you consider acceptable?

17



The third and final video shown to respondents noted Hydro's efforts to explore different options to help Newfoundlanders and Labradorians manage their future electricity costs (such as Time-of-Use rates), and asked for their opinions and suggestions on ways they can help customers manage the impact of rising electricity costs.



# Electricity Usage

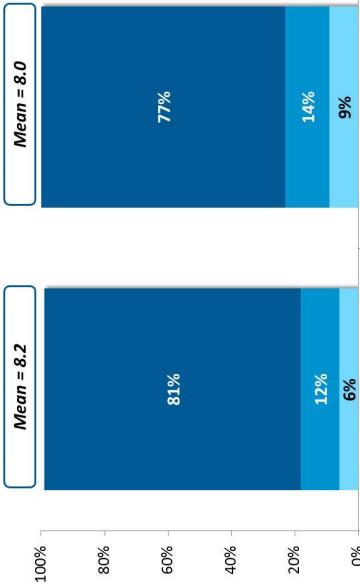
**Respondents believe consumers should have an active role in managing their electricity consumption and have a clear desire for better understanding their electricity usage.**

To better gauge consumer interest in various options aimed at giving customers more choice and control over their electricity consumption, and ultimately how much they pay for it, respondents were asked to rate their level of agreement to two statements, again using the same 10-point agreement scale.

- Eight in ten respondents highly agree (scores 7-10) that **customers should take an active role in managing their electricity consumption**. Conversely, few disagree with this statement. Of note, those living in Labrador provided a slightly lower score to this statement (average: 7.4).
- Respondents are keenly interested in learning more about their electricity usage, with just over three-quarters of respondents highly agreeing that they would like to **better understand their electricity usage any time of day, in real time**. (Tables 12A-B)

## Opinion of Statements About Electricity Usage

Rating on 10-pt Scale: 1=Completely Disagree, 10=Completely Agree



I would like to better understand my electricity usage any time of day, in real time  
Q.12a-b: Please indicate to what extent you agree or disagree with each of the following statements. (n=2070)

Agreement that customers should play an active role in managing electricity consumption increases with age and household income

# Customer Rate Options

*There is a clear interest in having more customer rate options.*

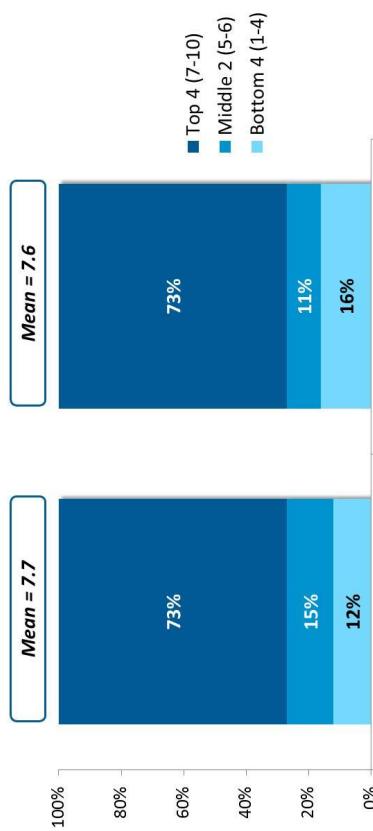
Respondents were asked to rate their level of agreement regarding one or two statements concerning their interest in customer rate options, again using the same 10-point agreement scale.

- Overall, nearly three-quarters of respondents offer high levels of agreement (scores 7-10) that there should be **more customer rate options so they can better manage their monthly electricity costs**. Conversely, just over one in ten respondents disagree (scores 1-4) with this statement. Overall, interest is generally consistent across audience segments.

- Interest is also strong among NL business owners/operators (n=97). Indeed, as with respondents overall, nearly three-quarters of owners/operators highly agree that **there should be more customer rate options for business owners, so they can better manage their monthly electricity cost**. Again, only a minority disagree with this statement. (Tables 13A-B)

## Opinion of Statements About Customer Rate Options

Rating on 10-pt Scale: 1=Completely Disagree, 10=Completely Agree



There should be more customer rate options for business owners, so I can better manage my monthly cost of electricity (n=2070)  
[Among Business Owners n=97]

Q.13a-b: Please indicate the extent to which you agree or disagree with the following statement(s) on various options that could be available.

## Customer Rate Options (cont.)

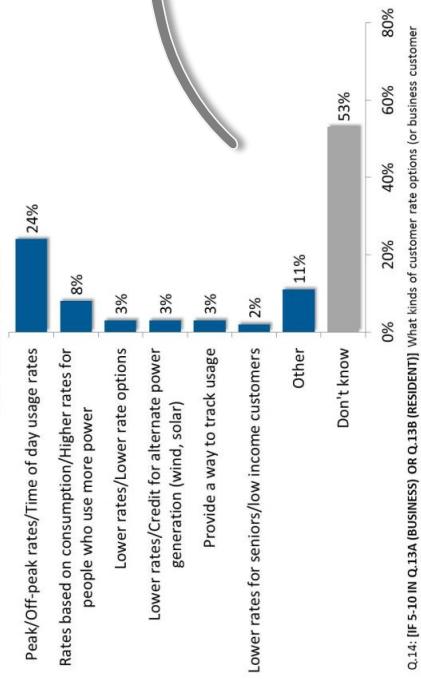
**Despite apparent interest in having a more active role in managing their electricity usage, respondents offer limited suggestions as to customer rate options they would like to see offered by Hydro.**

Those expressing some level of agreement (scores 5-10) with statements regarding customer rate options (as noted on the previous page), were then asked, unaided, what kinds of customer rate options (or business customer options) they would like to see offered by Hydro.

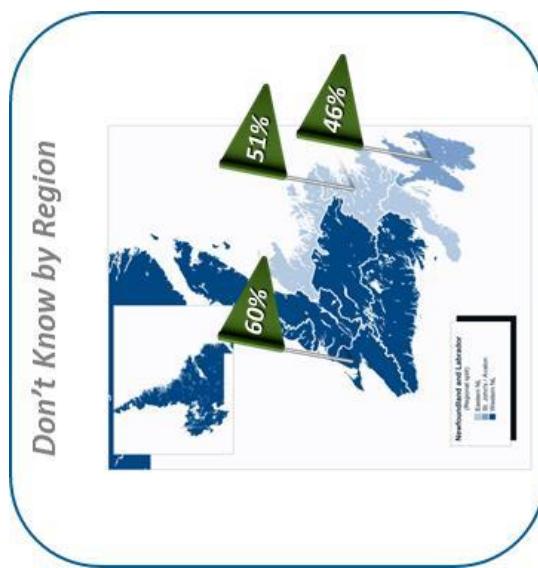
- Just over one-half of respondents were unable to offer any specific suggestions as to the customer rate options / business customer options they would like to see offered. Of the suggestions that were given, **Time-of-Day usage rates** was most popular, with one-quarter of respondents stating they would like to see this added to Hydro's current offerings. At the same time, nearly one in ten suggested **rates based on consumption, with higher rates for higher users**. Few alternative suggestions were offered.
- As noted in the below map, those living in the St. John's / Avalon region were most likely to offer some form of suggestion as to the kinds of customer rate options they would like to see added, and were most likely to suggest **Time-of-Day usage rates** (St. John's / Avalon: 31% vs. East: 21%, West: 16%). (Table 14)

### Customer Rate Options Would Like to See Offered

Among Business Owner/Operators or Residents Who Gave a Rating of 5-10 in Q.13A/Q.13B  
Total Unaided Mentions



Q.14: [IF 5-10 IN Q.13A (BUSINESS) OR Q.13B (RESIDENT)] What kinds of customer rate options (or business customer options) would you like to see offered by NL Hydro? (n=500) Note: Random 500 responses selected for coding.





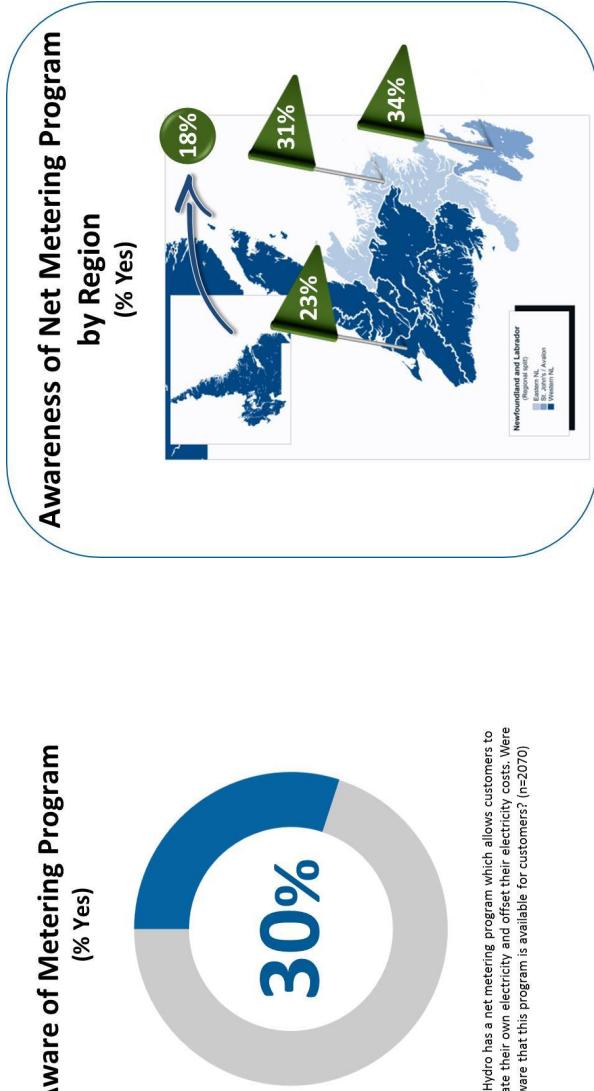
# Net Metering Program

## *There is limited awareness of Hydro's Net Metering Program.*

To gauge awareness of Hydro's Net Metering Program, respondents were asked, aided, whether they were aware of the program prior to the survey.

- Fewer than one-third of respondents were aware of the program. As noted in the below map, those residing in Labrador were least likely to be familiar with the program. This finding suggests additional efforts may be required to build customer awareness.
- Men, higher income earners (\$100k+), and those under the age of 55 were more likely than their respective counterparts to be familiar with the program.

- As would be expected, those working for a utility were more likely to be aware of the program (67%). (Table 15)



Q.15: Hydro has a net metering program which allows customers to generate their own electricity and offset their electricity costs. Were you aware that this program is available for customers? (n=2070)

# Interest in Time-of-Use Rates

*Interest in Time-of-Use Rates is generally strong.*

After receiving a brief overview of Time-of-Use rates (as outlined in the video), respondents were asked to rate their level of interest in signing up for Time-of-Use rates and shifting their usage outside of peak morning and evening times in order to reduce their electricity bill. Again, respondents were asked to use a 10-point scale, whereby '1' means *not at all interested* and '10' means *extremely interested*.

- Results show respondents have a clear interest in signing up for Time-of-Use Rates, with nearly two-thirds expressing high levels of interest (scores 7-10). At the same time, just under two in ten express only moderate interest, while a similar portion are uninterested.

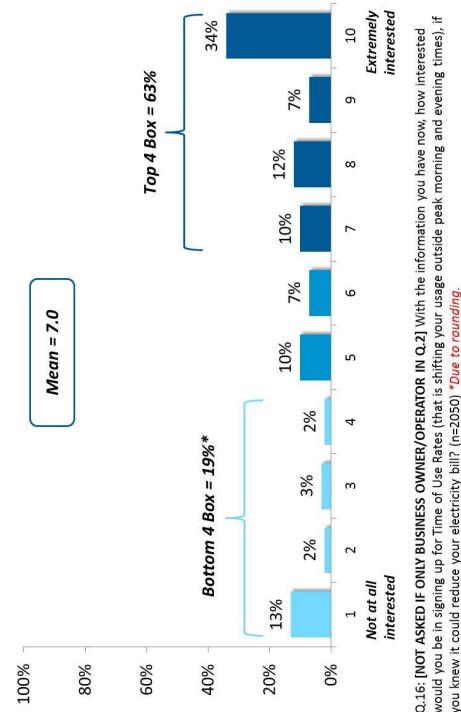
Interest varies across regions, with those living in St. John's / Avalon being most likely to be highly interested (67%), while those living in Labrador are least likely to express this level of interest (55%).

Of note, Hydro customers are less likely than NF Power customers to express a high level of interest in Time-of-Use rates (51% vs. 65%).

- Finally, it is interesting to note that those with household incomes of less than \$50,000 are less likely than more affluent respondents to be highly interested in shifting their usage in order to lower their electricity bill (<\$50K: 59% vs. \$50-100K: 68% and \$100K+: 71%). (Table 16)

## Level of Interest in Signing Up for Time of Use Rates

Rating on 10-pt Scale: 1=Not at all Interested, 10=Extremely Interested



Q.16 [NOT ASKED IF ONLY BUSINESS OWNER/OPERATOR IN Q.2] With the information you have now, how interested would you be in signing up for Time of Use Rates (that is shifting your usage outside peak morning and evening times), if you knew it could reduce your electricity bill? (n=250) \*Due to rounding.

# Suggestions on How to Improve Customer Engagement

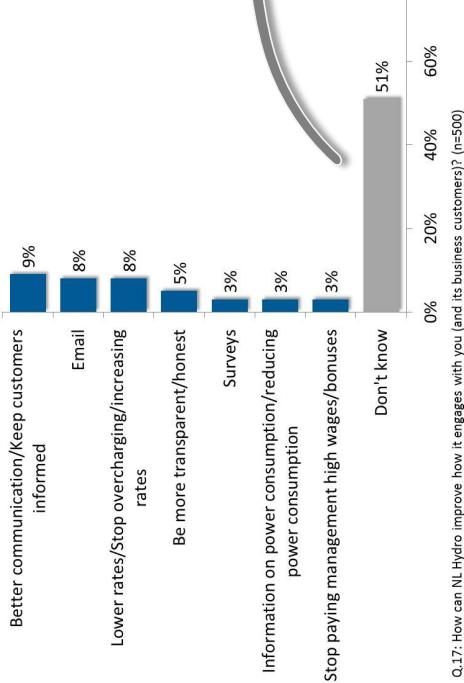
## *Ways Hydro can improve customer engagement are not readily evident to respondents.*

- When asked what Hydro could do to improve customer engagement one-half of respondents were able to provide a response. Of the suggestions that were given, **better communication/keeping customers informed, lower rates, and email communication** were each suggested by just under one in ten respondents, while fewer suggested **being more transparent, providing information on ways to reduce power consumption, surveys, stop paying management high wages/bonuses, and social media**.
- As noted in the below map, those living in the Western and Eastern regions are most likely to be uncertain as to how Hydro can improve customer engagement. (Table 17)



## How Hydro Can Improve Customer Engagement

Key, Unaided Mentions



# Interest in Joining Hydro's Electricity Feedback Panel

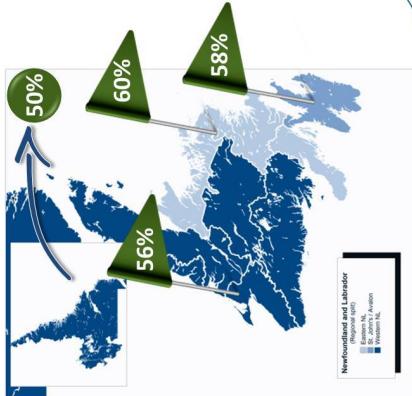
## *Respondents are generally interested in engaging with the Utility in the future.*

- More than one-half (57% - n=2,070) expressed interest in joining Hydro's electricity feedback panel, and providing feedback via online on various topics or issues.
- Respondents 35 years of age and older are slightly more likely than their younger counterparts to be interest in becoming a panel member (35-54: 63% and 55+: 62% vs. 18-34: 55%).
- Those working within the Utility sector are least likely to want to join the panel (35%).
- Finally, as shown in the regional map, interest in joining the panel is strong across the province. (Table 18)

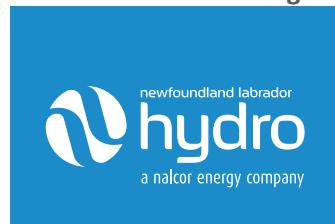
**Interested in Joining Hydro's Electricity Feedback Panel**  
(% Yes)



**Interest in Joining Panel Region**  
(% Yes)



Q18: As NL Hydro continues to plan for the future to continue to meet its mandate of providing safe, reliable and least cost electricity to the province, it's interested in getting continued feedback from consumers. Hydro is building a feedback panel, where you could have the opportunity to provide feedback via online surveys on various topics of issues. Would you be interested in joining Hydro's electricity feedback panel? (n=2070)



ELECTRICITY FEEDBACK NL

# WHAT WE HEARD.



# CUSTOMER & STAKEHOLDER ENGAGEMENT

## METHODOLOGY & SCOPE

The intent of the engagement was to start a dialogue regarding electricity in the province with our customers and stakeholders—and the conversation is far from over. We used practices consistent with engagement activities used by other utilities across Canada.

Our approach used public engagement principles and an opt-in approach, allowing all residents in the province to join the conversation and, therefore, quotas for data collection were not put in place. However, it should be noted, the actual breakdown of respondents closely aligns with the true population distribution in the province.

A two-pronged approach for customer engagement was implemented—digital engagement with residential and small commercial customers along with one-on-one consultation with key stakeholders including: the Consumer Advocate, Industrial Customers, and Newfoundland Power.

## CUSTOMER ENGAGEMENT

Our customer engagement offered two participation opportunities—a digital engagement along with an option to join a longer-term customer panel. Input was gathered from 2,070 provincial electricity customers in August and September of 2018.

Through our customer engagement initiative, expectations for reliability, cost, customer options, and rate design were gathered and will be used to inform our recommendations.

We value the importance of seeking customer input for consideration and decision making purposes. Customer input, along with analysis and evidence, help us make informed decisions about the future of electricity in our province.

ENGAGEMENT TYPE	ONLINE
DATES	AUG 28 – SEPT 20, 2018
NUMBER OF COMPLETES	2,070
AVERAGE ENGAGEMENT LENGTH	16 MINUTES

## WHAT WE HEARD

### Reliability:

We asked customers how they feel about the current reliability of their power supply as analysis is happening now to determine the amount and type of investments we make for the future of energy in our province.

While the engagement results showed differences among regions and customer type, overall respondents indicated they believe NL's power system to be reliable. However, they do not want an increased frequency of outages.

Any proposed plan for future investment will meet reliability standards, good utility practice, and Hydro's commitment to continue to meet customer's expectations.



### Balance between reliability and cost:

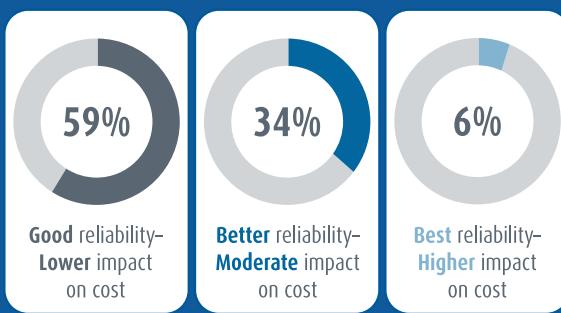
Electricity rates are a concern for Newfoundlanders and Labradorians, which is why we asked for input to determine the right balance between reliability and the cost of those investments for customers.

Customers demonstrated they are cost-sensitive and would prefer investments in the system be made cautiously. Overall, most respondents favour an approach that involves good reliability with a lower impact on cost.

Very few respondents were in favour of an investment strategy that, while offering the best reliability, would mean a higher impact on electricity costs.

With the majority of customers noting a preference for cautious investment, it's our responsibility to ensure that any recommended resource plan ultimately balances cost with reliability.

## PREFERRED BALANCE: RELIABILITY VS. IMPACT ON COST



### OPINIONS REGARDING CURRENT SYSTEM AND FUTURE INVESTMENT

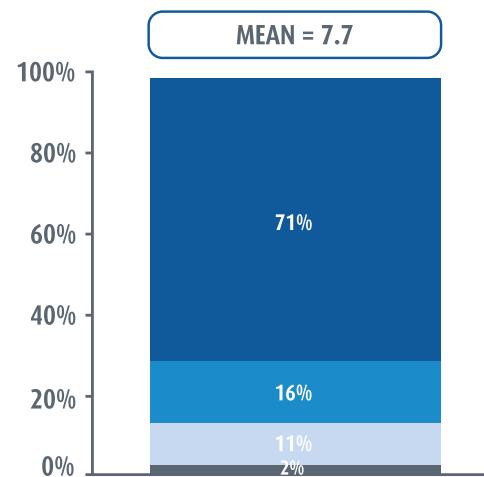
(% offering high levels of agreement: scores 7-10; 10-pt. scale)

My power reliability has improved since DarkNL.	57%
NL needs a more reliable system than it has right now.	47%
I am comfortable with our power system's current level of reliability and prefer additional investment be made cautiously.	71%
Hydro should invest in more generation to further reduce the impact of power supply interruptions during extreme events.	31%

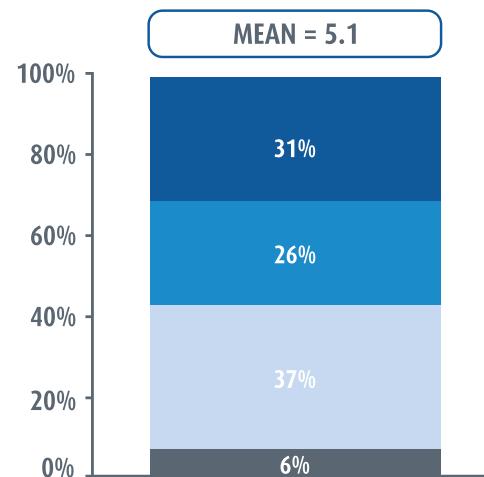


## OPINION OF STATEMENTS ABOUT INVESTMENT

Rating on 10-pt Scale: 1=Completely Disagree, 10=Completely Agree



I am comfortable with our power system's current level of reliability, so I would prefer that additional investments be made cautiously.



Hydro should invest in more generation to further reduce the impact of power supply interruptions during extreme events.

- Top 4 (7-10)
- Middle 2 (5-6)
- Bottom 1 (1-4)
- Don't know/Not sure

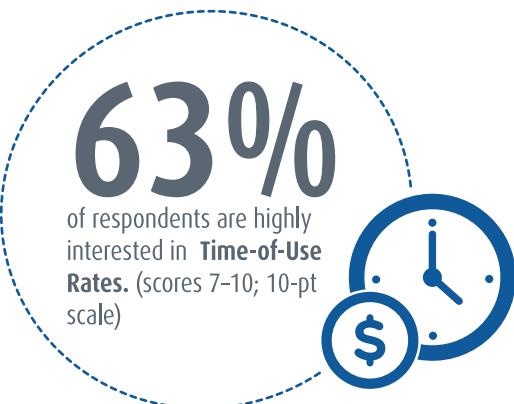
Q. 8a-b: Please indicate to what extent you agree or disagree with each other of the following statements. (n=2070)

Responses of 'Don't know/Not sure' have been excluded from the calculation of the mean.

## CUSTOMER OPTIONS

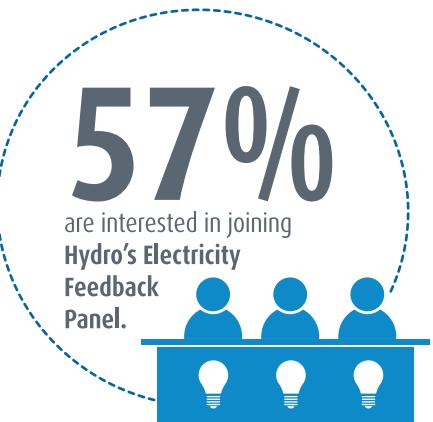
Respondents readily acknowledge that customers have a role to play in actively managing electricity consumption and are keenly interested in learning more about their own electricity usage.

Moreover, the vast majority of respondents would like Hydro to explore more customer rate options and demonstrate a high level of interest in Time-of-Use Rates.



## CONTINUED ENGAGEMENT

There is clear interest in continued engagement with Hydro. Although many respondents were unsure of how Hydro could do a better job of this, the majority of respondents did express interest in joining Hydro's Electricity Feedback Panel. To date, we have approximately 630 electricity customers registered to the panel.



## NEWFOUNDLAND POWER

Hydro met with Newfoundland Power executive and engaged staff throughout the course of its study to provide opportunities for input and questions. Various departments also provided assistance in the development of modelling assumptions and study components.

## INDUSTRIAL CUSTOMERS

Hydro met with each of its industrial customers to give an overview of the study and provide an opportunity for input, questions, and feedback. Overall, industrial customers generally agreed with the proposed approach for study execution, with many commenting on the comprehensiveness of the presented project scope.

## CONSUMER ADVOCATE

The Consumer Advocate remarked on the inclusion of Customer Demand Management as a resource option as a positive step forward, noting that customers continue to be concerned about future electricity costs and would likely benefit from additional flexibility and options.

