## Performance Outcomes

### Performance Categories

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</thead>
<tbody>
<tr>
<td>New Residential/Small Business Services Connected on Time</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>90.00%</td>
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<td>Scheduled Appointments Met On Time</td>
<td>100.00%</td>
<td>99.90%</td>
<td>100.00%</td>
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<td>100.00%</td>
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<tr>
<td>Telephone Calls Answered On Time</td>
<td>82.10%</td>
<td>83.60%</td>
<td>86.56%</td>
<td>91.13%</td>
<td>95.65%</td>
<td>98.00%</td>
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<tr>
<td>First Contact Resolution</td>
<td>6%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>95.65%</td>
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<td>Billing Accuracy</td>
<td>99.88%</td>
<td>99.70%</td>
<td>99.74%</td>
<td>99.72%</td>
<td>99.87%</td>
<td>99.87%</td>
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<tr>
<td>Customer Satisfaction Survey Results</td>
<td>A</td>
<td>85%</td>
<td>85%</td>
<td>89%</td>
<td>89%</td>
<td>99.87%</td>
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<td>Level of Public Awareness</td>
<td>81.00%</td>
<td>81.00%</td>
<td>81.00%</td>
<td>81.00%</td>
<td>81.00%</td>
<td>99.87%</td>
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<tr>
<td>Level of Compliance with Ontario Regulation 22/04</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>99.87%</td>
<td>99.87%</td>
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<tr>
<td>Serious Electrical Incident Index</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>99.87%</td>
<td>99.87%</td>
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<tr>
<td>Average Number of Hours that Power to a Customer is Interrupted</td>
<td>1.10</td>
<td>2.29</td>
<td>1.11</td>
<td>1.95</td>
<td>1.16</td>
<td>2.10</td>
<td>2.10</td>
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<td>Average Number of Times that Power to a Customer is Interrupted</td>
<td>0.88</td>
<td>1.98</td>
<td>0.94</td>
<td>1.40</td>
<td>1.35</td>
<td>1.99</td>
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<tr>
<td>Distribution System Plan Implementation Progress</td>
<td>94%</td>
<td>106%</td>
<td>118%</td>
<td>112%</td>
<td>119%</td>
<td>99.87%</td>
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<td>Efficiency Assessment</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>99.87%</td>
<td>99.87%</td>
<td>99.87%</td>
</tr>
<tr>
<td>Total Cost per Customer</td>
<td>$675</td>
<td>$659</td>
<td>$672</td>
<td>$695</td>
<td>$732</td>
<td>99.87%</td>
<td>99.87%</td>
<td>99.87%</td>
</tr>
<tr>
<td>Total Cost per Km of Line</td>
<td>$28,297</td>
<td>$27,680</td>
<td>$28,233</td>
<td>$29,208</td>
<td>$30,928</td>
<td>99.87%</td>
<td>99.87%</td>
<td>99.87%</td>
</tr>
<tr>
<td>Net Cumulative Energy Savings</td>
<td>20.96%</td>
<td>102.04%</td>
<td>129.07%</td>
<td>146.00%</td>
<td>151.00%</td>
<td>151.00%</td>
<td>151.00%</td>
<td>151.00%</td>
</tr>
</tbody>
</table>

### Financial Ratios

| Liquidity: Current Ratio (Current Assets/Current Liabilities) | 2.07 | 2.09 | 1.92 | 1.84 | 1.69 | 90.00% | 90.00% | 90.00% |
| Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio | 0.94 | 0.95 | 1.01 | 1.00 | 1.03 | 90.00% | 90.00% | 90.00% |
| Profitability: Deemed (included in rates) | 9.30% | 9.30% | 9.30% | 9.30% | 9.30% | 90.00% | 90.00% | 90.00% |
| Return on Equity | 10.65% | 9.01% | 8.56% | 10.17% | 6.14% | 90.00% | 90.00% | 90.00% |

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).
2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
3. A benchmarking analysis determines the total cost figures from the distributor's reported information.
4. The CDM measure is based on the now discontinued 2015-2020 Conservation First Framework. 2019 results include savings reported to the IESO up until the end of February 2020.
2019 Scorecard Management Discussion and Analysis (“2019 Scorecard MD&A”)

The link below provides a document titled “Scorecard - Performance Measure Descriptions” that has the technical definition, plain language description and how the measure may be compared for each of the Scorecard’s measures in the 2019 Scorecard MD&A:


Scorecard MD&A - General Overview

In 2019 North Bay Hydro Distribution Ltd. ("NBHDL") once again met or exceeded all performance targets, continuing the 5-year trend that consistently shows an efficient, stable business meeting industry objectives.

✓ NBHDL operates under the distribution license ED-2003-0024. It owns, operates and manages the assets associated with the distribution of electricity to approximately 21,000 residential customers and 3,000 business customers operating in the city of North Bay.

✓ In 2019 NBHDL completed the successful purchase of Espanola Regional Hydro. This acquisition will play a part in NBHDL’s measured growth as the two entities move towards full integration in 2022.

✓ Through April 2019 NBHDL achieved 151% of its 2015-2020 Conservation and Demand ("CDM") target. A significant driver of this achievement is the leading edge, technologically advanced cogeneration plant that went into operation in late 2015 at the North Bay Regional Health Centre. This project continues to be a great success for all partners involved. Looking forward to future years, provincial CDM programs will be administered through a more centralized delivery, but NBHDL will continue to assist its customers in any way possible to achieve their conservation goals.

✓ NBHDL continued to be a leading example of how locally based LDCs play a critical and unique role in the distributed energy future Ontario is embracing and the delivery of energy efficiency programs. Continuing with the forward-thinking approach, NBHDL continued facilitating the connection of the first microgrid of its kind in Canada with the local Community Energy Park, which went into operation in late May of 2019. This project will be a significant example to LDCs looking to provide green energy and resiliency to its communities.

✓ NBHDL continued its healthy financial performance in 2019. Liquidity and leverage ratios were well within the target for a healthy, stable company. While the achieved return-on-equity fell outside the deemed threshold, NBHDL is now in the sixth year of a five-year rate cycle and will be filing an upcoming Cost of Service (COS) application to address future capital infrastructure and operating requirements.

✓ NBHDL conducted its bi-annual customer safety survey and continues to score well relative to provincial and national averages. This is something NBHDL takes pride in as part of an overall safe work philosophy.

✓ The tree replacement initiative continues to be an encouragingly well-received program that results in an annual waiting list. In an effort to promote a Green Canopy and to give back to customers affected by NBHDL’s vegetation management work, staff planted over 100 trees/shrubs throughout the City. This brings the program total to 522 since it began.

✓ Our overall Scorecard performance is a result of NBHDL’s continued investment in our infrastructure, our employees and in our response to customer needs.

The details provided in this report on service quality, customer satisfaction, safety, system reliability, asset management, cost control, CDM results, and financial ratios confirm NBHDL’s continuing strong performance in 2019.
Service Quality

**New Residential/Small Business Services Connected on Time**

In 2019 approximately 59 eligible low-voltage residential and small business customers were connected to the system within the five-day timeline prescribed by the OEB, 100% of the time. NBHDL has achieved results above the industry target of 90% since 2009 and has done so through a continued commitment to customers and through adherence to processes in place to meet the five-day window.

Where feasible, NBHDL coordinates connection activities with other planned construction activities undertaken by the utility and throughout the City of North Bay. NBHDL attends the annual utilities meeting held by the City’s engineering department and is involved on the City Development and Review Team ("DART") where representatives from all utilities, City departments (Public Works, Parks and Rec, Economic Development Office (EDO), Fire, etc.) and local agencies (MTO, North Bay and Mattawa Conservation Authority, etc.) review applications put forth to the City that involve new development/servicing, zoning changes, and site plan and control. A strong relationship exists between NBHDL and the EDO and this provides the City with the ability to easily obtain information that helps in attracting new development into the NBHDL service territory.

**Scheduled Appointments Met On Time**

Approximately 4,000 appointments were scheduled with customers in 2019 for various activities including, but not limited to, work requested by customers, conservation and demand management initiatives, providing underground locate services, meter access and investigation when requested by customers. NBHDL also meets with customers regarding the tree trimming program that includes not only discussing the program itself, but addressing customer concerns and questions and obtaining the proper permissions for tree removal or trimming. NBHDL met all of these appointments on time, exceeding the industry target of 90%. NBHDL strives to maintain this high standard and has maintained a 99.9% average since 2009.

NBHDL maintains routine appointment scheduling for different activities (ex; service spots are completed every Thursday) and strives to meet appointments on time at all times. If the appointment is initiated by NBHDL, customers are contacted and scheduled at a time that best meets their schedule. An automated system handles underground locate requests which flow through Ontario One Call; once a customer calls into Ontario One Call an email is sent to NBHDL and a work order is automatically created and sent to mobile units in the field. Field staff schedule the work within a 5day window. This automation has created a very efficient process for both customers and employees and, unlike many utilities, NBHDL completes this program with in house staff for quality assurance and flexibility to respond to requests.

**Telephone Calls Answered On Time**

In 2019 Customer Service Representatives ("CSR") handled over 19,000 in-coming calls from customers; over 95% of those calls were answered in 30 seconds or less. This result exceeds the OEB mandated 65% target for timely call response. NBHDL has averaged over 24,501 calls per year to its Customer Service Centre over the last 5 years and has consistently performed ahead of the OEB’s target while experiencing improvement in the performance metric resulting in 2019’s best result, over 20% ahead of the industry target for the third year in a row.

NBHDL’s Customer Service department is centralized to handle all inquiries; customers can call and speak with a representative that is able to handle all types of inquiries or concerns eliminating the need to transfer customers to different individuals or departments – a one-stop shop. It is important to note that, though not a statistic the OEB measures, CSRs handled approximately 11,000 outbound calls in 2019.
Customer Satisfaction

With the exception of Billing Accuracy, specific customer satisfaction measurements have not been defined across the industry. The OEB has instructed utilities to review and develop measurements in these areas and begin tracking with plans to review information provided by utilities over the next few years and implement a commonly defined measure for these areas in the future. As a result, each utility may have different measurements of performance until such time as the OEB provides specific direction regarding a commonly defined measure.

- **First Contact Resolution**
  First Contact Resolution can be measured in a variety of ways and further regulatory guidance is necessary in order to achieve meaningful comparable information across electricity distributors.

  Due to customer demand, NBHDL is one of few utilities to still offer counter service to walk-in customers and front-line staff are trained to resolve customers' issues directly, both on the phone and in-person. For NBHDL, First Contact Resolution is measured based on the number of customer concerns that are escalated formally to NBHDL’s President or directly to the OEB. NBHDL’s CSRs endeavor to resolve all customer concerns directly, however, calls can be escalated to department managers either by customer request or in cases where management input is required. Much like the front-line staff, management makes every attempt to resolve the concern in a matter that satisfies the customer and meets internal policies. As a customer centric service provider, NBHDL staff and management are typically able to resolve customer issues, however, in 2019 three (3) concerns were escalated to the OEB. This represents less than .02% of NBHDL’s 24,000 customers.

  A large proportion of customer complaints are related to the overall cost of hydro, which is a real concern for everyday people and businesses across the Province. NBHDL recognizes the impact costs have on customers and we strive to find on-going and sustainable efficiencies within the business, however, NBHDL is only responsible for approximately 29% of the total bill for residential customers; the remaining 71% of costs are collected or distributed by NBHDL on behalf of various provincial entities. NBHDL is the frontline for the broader electricity sector and with this position comes the responsibility for answering customers’ questions and concerns that are the result of the actions of other sector participants and outside the scope of NBHDL’s direct control. This can be both challenging and frustrating for customers.

  In all instances of customer concerns the issue is addressed directly and every attempt is made to ensure the proper processes and policies are in place, and followed, to prevent future escalations and to ensure fairness to all customers and NBHDL while delivering an efficient customer service experience.

- **Billing Accuracy**
  After consultation with electricity distributors, the OEB has prescribed a measurement of billing accuracy which must be used by all utilities. An industry target of 98% billing accuracy was established.

  In 2019 just over 304,000 bills were issued to customers and NBHDL achieved a billing accuracy of 99.87%, exceeding the prescribed OEB target of 98%. Over the last five years, NBHLD has averaged 99.78% in this metric and continuously monitors its billing accuracy and processes to identify opportunities for improvement and to ensure accurate bills are produced for customers.
• **Customer Satisfaction Survey Results**

The OEB introduced the Customer Satisfaction Survey Results measure beginning in 2013. At a minimum, electricity distributors are required to measure and report a customer satisfaction result at least every other year. At this time the OEB is allowing electricity distributors’ discretion as to how they implement this measure.

Regardless of the OEB’s formal introduction of Customer Satisfaction Survey Results customer engagement has always been important to the success of NBHDL, the purpose of which has been to focus on addressing issues of concern raised directly by customers. NBHDL is both proactive and reactive in its customer engagement consultations, the majority of which provide helpful insight into the day to day operations of NBHDL. Historically NBHDL has relied on direct, day-to-day, real time interactions with customers to inform decision making, to advise of issues important to customers and to address communication and customer service needs.

For the 2018 filing, NBHDL once again engaged the commonly used UtilityPULSE for the bi-annual formal customer satisfaction survey. This survey is widely utilized among LDCs in Ontario and the results of the survey contribute to benchmarking scores from electric utility customers across Canada. The survey covers a wide range of issues relating to customer satisfaction, service levels, business operations, reliability, conservation, smart meters and smart grid. The survey provides information that supports improving customer care at every level of the business. In addition to providing NBHDL customer responses to a variety of questions, both provincial and national results were provided to give NBHDL a sense of not only where the company stands in terms of customer perception, but how NBHDL fares across other LDCs in Ontario and across the board in Canada.

The results of the survey provided a snapshot of performance based on customer responses on 6 categories: Customer Care (Price/Value), Company Image (Corporate Leadership/Stewardship) and Management Operations (Operational Effectiveness/Power Quality & Reliability). As the statistic evolved, NBHDL has determined that a percentage (%) result would be more informative, aligned with the other scorecard metrics and provide for easier comparability. NBHDL believes one of the key metrics within the UtilityPulse survey is the ‘Customer Experience Performance rating (CEPr) score’. This is an effectiveness rating and is affected by many dimensions of service. Every touch point with customers on the phone, website or in-person influences what customers think and feel about the organization. NBHDL was able to improve on its 2016 result (85%) and scored 89% on this metric, exceeding the Ontario LDC average of 83% and the National average of 84%. Considering the delicate nature of the province’s energy portfolio and the public perception thereof, NBHDL takes pride in knowing its customers have had improved perception year over year. NBHDL believes that this metric provides an overall picture of customer experience and satisfaction and will use this result for future comparisons until such time as the OEB determines a measure across the industry. For comparison purposes with the 2014-2015 scorecard results, NBHDL was once again graded with an overall “A” compared to an Ontario and National average of “A” and “B+” respectively.

NBHDL undertook some new metrics in the most recent survey. Specifically focusing on the ability to effectively communicate with its customers, and the overall convenience of service delivery. With respect to communications, UtilityPulse aggregated an overall Communication Score in which NBHDL scored an 82% as compared to a provincial aggregate of 79%. This focused on both general communications and communications via the customers’ preferred methods (email, phone, etc.). On the convenience front, UtilityPulse inquired about a variety of customers services and whether or not they were satisfied with the access and convenience. For all measurable comparatives, NBHDL scored better than the provincial average, though it is clear that the online experience can be approved upon.

NBHDL sets a high standard for performance when it comes to customer care and is especially proud of this result considering the increase in customer concerns over pricing and value across the Province. NBHDL strives to deliver customer excellence and value and believes this is shown in the various results of the survey including the category of demonstrating credibility and trust, where NBHDL exceeded 85%. In fact, the customer satisfaction results of the survey increased from 92% to 93% after customers went through the entire survey. NBHDL takes great pride in this. We feel that once customers see the big picture of what happens at the local level, within the community, the value of the work we do to provide safe and reliable power and excellent customer service becomes more apparent.

NBHDL will continue to use the bi-annual survey results to benchmark improvement and to identify additional opportunities to enhance customer satisfaction. Ongoing, daily interactions that leave the customer with the information they need will remain NBHDL’s highest priority.
Safety

NBHDL is committed to protecting our workforce, customers, the public and the environment. In addition to achieving compliance with applicable laws, we strive for excellence in our environmental, health and safety performance through adopting good management practices and setting clear objectives and targets for achieving continual improvement. To achieve this, we ensure that environmental, health and safety management accountabilities and responsibilities are clearly defined and understood, that our employees are competent and effectively trained, and that appropriate resources are made available.

NBHDL has a Joint Health and Safety Committee that meets monthly or as determined by the Committee. Multiple safety training sessions are held for staff throughout the year. While formal meetings and training programs are important, safety is a daily focus and practice for all employees. NBHDL makes every effort to eliminate accidents/incidents in the workplace and should an accident/incident occur, it is investigated for cause(s) and recommended action(s) are put in place when necessary to prevent a reoccurrence.

In 2019 NBHDL did not encounter a lost time incident. As part of its on-going commitment to safety, NBHDL will undertake extensive investigations and evaluations of the current practices, make recommendations, and implement those recommendations by reviewing any incident with all staff and retrain qualified personnel on the safe use of all equipment. This reinforces our safety culture established in 2017 as it instills awareness, involvement, accountability, and continuous improvements in order to ensure that incidents are avoided and every worker returns home safely every day.

- Public Safety

The OEB introduced the Safety measure in 2015. This measure looks at safety from a customers' point of view as safety of the distribution system is a high priority. The Safety measure is generated by the Electrical Safety Authority (ESA) and includes three components: Public Awareness of Electrical Safety, Compliance with Ontario Regulation 22/04, and the Serious Electrical Incident Index.

- Component A – Public Awareness of Electrical Safety

In order to gauge overall electrical safety awareness amongst the general public, the ESA was tasked with developing standardized survey questions and methodology in consultation with the Ontario Energy Board and key stakeholders, including distributors. The survey is intended to measure the level of public awareness, within the distributor’s service territory, of electrical safety information and precautions related to distribution system assets and 2015 was the first year that the data for this component of measure was shown on utility scorecards. The 3rd bi-annual survey was conducted in early 2020 resulting in a score of 81%, remaining steady as compared to the previous surveys. It’s important to note that this survey is not focused on utility customers only; it is completed by randomly-selected residents, 18 years or older, residing in a utility’s service territory. In our case, the survey was conducted by telephone among a representative sample of 400 residents of the City of North Bay. NBHDL’s score indicates that the public in our service territory have good knowledge about electrical safety, though we believe there is always room for improvement, especially when it comes to safety.

Six core questions were developed and an index score was applied to each response to allow comparability of utilities across the Province. The categories deemed significant to public safety awareness were the likelihood to call before you dig, the impact of touching a power line, the safe proximity to overhead power lines, the danger of tampering with electrical equipment, the safe proximity to a downed power line, and actions taken in vehicle in contact with wires. During February 2020 a random sample of 400 residents of the City of North Bay were contacted by a reputable research group, working on behalf of NBHDL, and asked to complete the public awareness survey. The general public’s responses are an impressive benchmark for NBHDL to monitor and compare and NBHDL is proud to see residents maintaining a high level of safety awareness.

Slightly more than half of the respondents (56%) would definitely call before digging while another 22% are ‘most likely to call’; NBHDL reminds customers that is it the LAW to call before you dig! A high number of respondents (96%) think touching a power line is very dangerous (we agree!), but we would remind all of this simple
fact: it is very dangerous to touch an overhead power line with your body or any object. Close to 1-in-8 respondents (12%) believe you should maintain a distance of 3 to 6 metres (while half (50%) believe you should maintain a distance of 6 metres or more). A high number of the public (88%) know that tampering with equipment is very dangerous, but this should be 100%. Please stay away from all electrical equipment, it is incredibly dangerous to touch or tamper with and the consequences could be irreversible. A majority (78%) believe you should maintain a distance of 10 metres or more from downed power lines, and a strong majority (86%) believe you should stay in the vehicle until power has been disconnected from the line. Always remember, should your vehicle come in contact with power lines, staying in the vehicle is your best and safest option until the power is disconnected.

After calculating the Public Safety Awareness Index Score, in accordance to OEB parameters, North Bay Hydro had an overall score of 81% for general public awareness. The City of North Bay’s public awareness result is one that NBHDL is very proud of and we will continue to do the best job we can to get the message of electrical safety out to the public. While respondents did not pick the ‘best’ answer for the safe proximity to overhead lines (3 to 6 meters), NBHDL will always caution the public to stay as far away as possible from power lines and encourages a distance of 6 meters or more – you can never be too safe when it comes to electrical safety.

While not a formal component of the scorecard, NBHDL engages the public on the importance of safety through several avenues. An annual school program for grade school students provides an overview of electrical safety, safety messages, dangers in the home, safety tips and what to do, how to stay aware, and hazards – a dill pickle gets electrocuted in the process! NBHDL’s website includes a page dedicated to safety. The information provides the hazards and tips on generator safety, what to do when the power goes out, indoor electrical safety, outdoor safety, safety tips for kids, and safety information related to vegetation management. NBHDL also promotes the “Call Before You Dig!” campaign with Ontario One Call.

- **Component B – Compliance with Ontario Regulation 22/04**
  Over the past five years, NBHDL was found to be compliant with Ontario Regulation 22/04 (Electrical Distribution Safety). This was achieved by the company’s strong commitment to safety, and adherence to company procedures & policies. Ontario Regulation 22/04 - Electrical Distribution Safety establishes objective based on electrical safety requirements for the design, construction, and maintenance of electrical distribution systems owned by licensed distributors. Specifically, the regulation requires the approval of equipment, plans, specifications and inspection of construction before they are put into service.

- **Component C – Serious Electrical Incident Index**
  NBHDL has not had any serious incidents due to contact with its infrastructure by the public over the last five years.
As a percentage of total sustained outages in the NBHDL system, the majority causes continue to be attributed to the following OEB categories: Foreign Interference, Tree Contacts, and Defective Equipment. Since the NBHDL system is predominantly overhead with a substantial portion running through rural areas, trend data will always correlate with the number and severity of storms that roll through the City each year. NBHDL is an embedded distributor to Hydro One and as such, will experience loss of supply. Loss of Supply is not a variable that NBHDL can alter in an effort to improve reliability.

Outages that are caused by tree contacts are mitigated with a cyclical Vegetation Management Program. NBHDL’s goal is to achieve a new standard of a 5-year cycle, by changing from primarily trimming/topping to performing full removals in order to address the high number of large trees located in close proximity to live conductors. Once all areas within NBHDL’s service territory are completed to the new standard, it is expected that the overall number of tree related outages will be reduced and in turn, since trees will be at a much greater separation from poles and high voltage lines, there will be a reduction in the potential of animal contact situations (reducing foreign interference outages). In addition, the new standards will help reduce tree related damage in storm situations and make the system safer for the general public and Power Line Maintainers.

As a proud and active member of the North Bay community, NBHDL has committed to doing its part in restoring the tree canopy in the urban part of the City. As such, NBHDL has continued to maintain efforts to re-green the City while addressing the need for safe tree clearance with respect to power lines. In 2019, NBHDL planted over 100 new trees as part of the re-greening campaign, bringing the total since inception to 522.

Outages involving defective equipment are mitigated through periodic inspections of the distribution system, regular maintenance activities, and system renewal and rejuvenation projects. NBHDL is committed to reducing outages caused by equipment failure and continues to invest in upgrading its system and rebuilding its aging infrastructure.

- **Average Number of Hours that Power to a Customer is Interrupted**
  During normal hours of operations, NBHDL’s control room can remotely manage the local grid rerouting power and dispatching crews to respond to outages quickly and efficiently. Outside hours of operations, NBHDL maintains an emergency response crew on call to restore power as quickly as possible at all times.

  In 2019, NBHDL’s average number of hours in which power to a customer was interrupted (outage hours not including cause code 2) was 1.16 and below the target range of 2.10. NBHDL’s goal is to have its system reliability trend in an improved manner over a five-year period; however, it is important to note that in any given year, outage hours will correlate with storm occurrences and severity. In 2019, Tree Contact and Foreign Interference related outages accounted for a combined 40% of the hours in which power to a customer was interrupted, while Defective Equipment was responsible for 13%. While the decrease in Defective Equipment is significant compared to 2018 (52%), it is due to a relatively small number of incidents in 2018 that affected a comparatively larger number of customers.
• **Average Number of Times that Power to a Customer is Interrupted**

In 2019, NBHDL’s average number of customer interruptions (i.e., frequency) was 1.35 and well below the target range of 1.99. As stated above, occurrence of storms is a significant factor in annual reliability statistics. Foreign Interference and Tree Contact related outages accounted for 12% of the number of times in which power to a customer was interrupted while Defective Equipment was responsible for 4%. While the decrease in Defective Equipment is significant compared to 2018 (40%), the circumstances explained in the bullet above detail the difference.

As explained below in the Asset Management section, NBHDL has put together an extensive plan to address aging infrastructure that addresses old and high-risk defective equipment. This plan provides a proactive, balanced approach to distribution system planning, infrastructure investment and replacement programs to address immediate risks associated with end-of-life assets; manage distribution system risks; ensure the safe and reliable delivery of electricity; and balance ratepayer utility affordability. NBHDL has a largely overhead supplied system and as a result, power lines are more exposed to the elements. While this leads to more outages than underground supplied systems, the trade-off is lower costs to customers.
Asset Management

- Distribution System Plan Implementation Progress

Distribution System Plan (DSP) implementation progress is a performance measure instituted by the OEB in 2013. Consistent with other new measures, utilities were given an opportunity to define it in the manner that best fits their organization. The DSP outlines a utility’s forecasted capital expenditures, over a five-year period, required to maintain (and for some utilities expand) the distributor’s system to serve its current and future customers. This measure is intended to assess NBHDL’s effectiveness at planning and implementing the DSP.

NBHDL owns and operates seventeen (17) municipal stations, has almost 575,000 meters of overhead lines and underground cable circuits and there are fifty-seven (57) distribution feeders, eight (8) subtransmission feeders, and 4,026 distribution transformers. A significantly large percentage of the assets employed on NBHDL’s distribution system have been in service for much longer than their typical useful life and the main focus of the capital program is investments in system renewal. Specifically, NBHDL has been adhering to a plan to complete a voltage conversion program that began in 1977/1978 – the completion of this project will harmonize the entire system to one distribution voltage for optimal efficiency. An Asset Condition Assessment was utilized in the development of the DSP which uses data related to the health and condition of assets, including asset age, results of testing and visual inspections to determine the risk of asset failure in order to find the right balance between capital investments in new infrastructure and operating and maintenance costs so that the combined total cost over the life of the asset is minimized.

NBHDL has based the DSP implementation progress as a percentage (%) of budgeted gross capital spending compared to actual spending. NBHDL achieved 119% of the DSP forecasted budget of $6.1M in 2019. NBHDL is aligned with total DSP spending to date as variances to budget in a given year are typically addressed in the overall picture of the 5-year plan spending. Given the dynamic nature of the business, a number of issues emerge over the course of a year that require the management to postpone, re-prioritize or otherwise amend the capital work plan adopted at the start of the year. External factors such as extreme cold weather and a deep frost line are the type of elements that can have an impact on the ground when executing the work and cause delays that are outside NBHDL’s control.

Significant construction work, totaling just under $2M, continued in the city in 2019. A section of Ski Club Road continues to be worked on as part of a project to revitalize two major 44kV sub-transmission circuits. Substation work of nearly $1.3M included improvements to municipal substation (MS) #11 and #13 as well as the completion of the rehabilitation of MS #10 (Marshall Ave), in addition to other technology upgrades. Customer demand work, and general operational requirements such as building upgrades, IT requirements and planned updates to the fleet also occurred in 2019.

NBHDL makes every effort to maximize the utilization of assets without compromising reliability or safety and will continue to do so in the future while executing on the DSP. In an effort to manage costs and keep rates low, NBHDL anticipates that capital spending will remain reasonably stable and paced for the 2015 - 2019 planning horizon. Throughout 2019 and 2020, NBHDL has been working on the completion of a new DSP; this will cover the upcoming 5-year period (2021-2025) and will be a guide to maintaining a safe and reliable distribution system that incorporates appropriate planning, pacing and cost effectiveness.
Cost Control

- **Efficiency Assessment**
  The total costs for Ontario local electricity distribution companies are evaluated by the Pacific Economics Group LLC (PEG) on behalf of the OEB to produce a single efficiency ranking. The electricity distributors are divided into five groups based on the magnitude of the difference between their respective individual actual and predicted costs. In 2019 for the eighth year in a row NBHDL was placed in Group 3, which is defined as having actual costs within +/- 10% of predicted costs. Group 3 is considered “average efficiency” – in other words, NBHDL’s costs are within the average cost range for distributors in the Province of Ontario. In 2019, 49% (29 distributors) of the Ontario distributors were ranked as “average efficiency”; 41% were ranked as “more efficient”; 10% were ranked as “least efficient”. A core objective of NBHDL is to maintain in Group 3.

- **Total Cost per Customer**
  Total cost per customer is calculated as the sum of NBHDL’s capital and operating costs and dividing this cost figure by the total number of customers that NBHDL serves. The cost performance result for 2019 is $732/customer which is a $37 (5.3%) increase per customer over 2018. The average increase over the last 5 years is approx. 2.16% per year. This total cost figure does not reflect NBHDL’s actual costs. Rather, these figures represent econometric values derived by the PEG model in order to rank Ontario utilities on a comparative “same size” basis. The total cost used in these measures reflects the mature state of development seen in Northern Ontario and in North Bay; an aging population with increased demands on service.

NBHDL continually strives to manage costs without unduly affecting service to customers or creating significant rate increases while addressing increasing customer expectations of an interactive, value added service provider. NBHDL understands that the service we provide is an essential part of daily life for customers and increasing bills are a concern for all. NBHDL’s costs account for approximately 29% of a typical residential customer’s bill and the company actively monitors costs against prudent budgets set for both capital and operating costs which are aligned with NBHDL’s most recent Cost of Service rate application in 2015. Operating costs are those associated with the maintenance, inspection and operation of the system and those associated with metering, billing and collections.

Similar to all distributors in the province, NBHDL has experienced increases in its total costs required to deliver quality and reliable services to customers. Province wide programs such as Time of Use pricing, growth in wage and benefits costs for employees, as well as investments in vegetation management, new information systems technology, cyber-security and the renewal of the distribution system, have all contributed to increased operating and capital costs. NBHDL will continue to replace distribution assets proactively along a carefully managed timeframe in a manner that balances system risks and customer rate impacts as will be demonstrated in NBHDL’s 2021 rate application.

From the fall of 2019 through to the fall of 2020 NBHDL will be actively involved in a Cost of Service Application that will detail all operating and capital requirements of the company from 2015 through to a forecast of 2021. The 2021 costs will then form the basis of rates for the next 5 years. Staff at the OEB and intervenors, representing various customer groups, will go through thousands of pages of evidence supporting NBHDL’s case for rates and test that evidence for reasonability, prudence and justification.

- **Total Cost per Km of Line**
  This measure uses the same total cost that is used in the cost per customer calculation above, but the total cost is divided by the kilometers of line that NBHDL operates to serve its customers. NBHDL’s 2019 rate is $30,928 per Km of line, a $1,720 (5.9%) increase over 2019; with an average increase of 2.10% per year over the last 5 years. NBHDL’s capital focus is asset renewal which is simply replacing (and in some cases reducing) the same Km of line, not increasing total Km; this results in increasing renewal costs each year, but with the same (or lower) total Km of line. NBHDL also experiences a low level of growth in its total kilometers of
lines due to a low annual customer growth rate.

The City of North Bay has experienced limited growth typical of municipalities in Northern Ontario. Utilities situated in or clustered around the GTA have growth both in customers and lines to service these customers, which are often built by developers. Their metrics can be different than areas or communities served more remote from Toronto. NBHDL uses multiple measures, beyond those used by the OEB to compare ‘same size’ utilities, to monitor the efficiency of the business and strives to manage costs while delivering on capital and maintenance programs, and will continue to do so.
Conservation & Demand Management

- **Net Cumulative Energy Savings (Percent of target achieved)**

NBHDL was committed to helping our customers understand their energy usage by offering programs that enable them to become more energy efficient. We have a history of excellence in Conservation and Demand Management (CDM) program delivery and results and this includes exceeding each of our annual targets in the Conservation First Framework years of 2015, 2016, 2017 and 2018. The strong program results continued in 2019, having achieved 151% of its 2020 persistent energy savings target.

In 2019 NBHDL was able to demonstrate the value of locally owned and operated LDC’s by assisting in the connection of a second cogeneration project, working together with many partners including the City of North Bay. This project had a number of technical challenges to overcome, but NBHDL was able to innovate with its partners to overcome problems unique in the north.

NBHDL also recognizes that collaborations are a key component to our overall success. To help meet NBHDL’s conservation goals under the Conservation First Framework that was introduced in 2015 by the Independent Electricity System Operator (IESO), NBHDL worked with other Utilities in the province through a collaborative group called Ecobility (formerly CustomerFirst) to design and deliver cost effective conservation programs for our customers. The six participating utilities in the Ecobility group continue to perform above average on energy savings and operate under their allocated budget. By working together, Ecobility utilities have found efficiencies in the delivery of conservation and this led to further cost savings for electricity customers.

As announced on March 21, 2019 by the Minister of Energy, Northern Development and Mines, the IESO was directed to cancel the conservation programs running through electrical utilities in the Province and those business programs that remained, were to be delivered directly by the IESO. While no longer directly involved in program delivery, NBHDL remains committed to assisting its customers in achieved their conservation goals and believes that LDCs are the best suited to deliver conservation to the local communities they serve.
Connection of Renewable Generation

Ontario runs two renewable generation programs. FIT (“Feed-in Tariff”) applicants are those customers setting up solar or other renewable generation equipment to generate more than 10 kW of electricity at a time. MicroFIT applicants are those customers applying to generate electricity at a level less than or equal to 10 kW of electricity at a time. NBHDL encouraged customers to participate in the FIT and microFIT programs, and has been able to meet all timelines for assessments and connections. The microFIT program stopped accepting applicants at the end of 2017.

- **Renewable Generation Connection Impact Assessments Completed on Time**
  Electricity distributors are required to conduct Connection Impact Assessments (CIAs) within 60 days of receiving authorization from the Electrical Safety Authority. There were two CIAs in 2019. NBHDL has three (3) FIT installations with generating capacity of 1.89 MW, including the Merrick Landfill. NBHDL currently has 5 Net-Metering connections. This continues to be a positive option for customers looking to connect with smaller electrical generation installations.

- **New Micro-embedded Generation Facilities Connected On Time**
  In 2017, the microFIT program ceased accepting new applications.
Financial Ratios

- **Liquidity: Current Ratio (Current Assets/Current Liabilities)**
  As an indicator of financial health, a current ratio that is greater than 1 is considered good as it indicates that the company can pay its short-term debts and financial obligations. Companies with a ratio of greater than 1 are often referred to as being “liquid”. The higher the number, the more “liquid” and the larger the margin of safety to cover the company’s short-term debts and financial obligations. NBHDL’s current ratio decreased from 1.84 in 2018 to 1.69 in 2019 primarily due to a decrease in accounts receivable and an increase in short term debt. NBHDL’s current ratio in subsequent years is expected to remain at current levels or slightly increase with future borrowing and continual management of accounts receivable and liabilities.

- **Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio**
  The OEB uses a deemed capital structure of 60% debt, 40% equity for electricity distributors when establishing rates. This deemed capital mix is equal to a debt to equity ratio of 1.5 (60/40). A debt to equity ratio of more than 1.5 indicates that a distributor is more highly levered than the deemed capital structure. A high debt to equity ratio may indicate that an electricity distributor may have difficulty generating sufficient cash flows to make its debt payments. A debt to equity ratio of less than 1.5 indicates that the distributor is less levered than the deemed capital structure. NBHDL held relatively stable in 2019 where the exchange of new debt was offset by a comparatively lower net income which is reflected in a slight increase in the ratio to 1.03 in 2019 as compared to 1.00 in 2018.

NBHDL manages its liquidity and debt to support its financial obligations and execute its operating and capital plans as well as maintain capacity and access to capital to support future development of the business. NBHDL’s liquidity and leverage ratios are strong compared to the required covenant levels imposed by lenders.

- **Profitability: Regulatory Return on Equity – Deemed (included in rates)**
  NBHDL’s last Cost of Service application was finalized in November 2015 and approved rates included an expected (deemed) regulatory return on equity of 9.30%. The OEB allows a distributor to earn within +/- 3% of the expected return on equity. When a distributor performs outside of this range, the actual performance may trigger a regulatory review of the distributor’s revenues and costs structure by the OEB.

- **Profitability: Regulatory Return on Equity – Achieved**
  NBHDL’s achieved return in 2019 was 6.14%, which is outside the +/-3% range allowed. Given that NBHDL was in the fifth year of a cost or service cycle and will return with a new application in late 2020 for 2021, this is not an indication of overall health or performance. No regulatory review was deemed necessary by the OEB.

Productivity improvements and operational efficiencies continue to be a priority for the business. NBHDL will continue to seek process improvements, find efficiencies and manage costs while delivering on the operational and capital programs that have been put before the OEB. NBHDL will continue to deliver electricity to its customers in a safe, reliable and efficient manner that provides good value for money while being responsive to customer and community needs and contributing to provincial and local public policy objectives.
Note to Readers of 2019 Scorecard MD&A

The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the distributor regarding their future performance. Some of the factors that could cause such differences include legislative or regulatory developments, financial market conditions, general economic conditions and the weather. For these reasons, the information on future performance is intended to be management’s best judgement on the reporting date of the performance scorecard, and could be markedly different in the future.