#### PUB-NLH-081 2017 General Rate Application

#### Page 1 of 1

1	Q.	Exhibit 3
2		Page 1, line 13 – Provide a copy of the Ernst & Young report / study.
3		
4		
5	A.	Please refer to PUB-NLH-081, Attachment 1 for a copy of the Ernst & Young report –
6		Target Operating Model Assessment.

# **Target Operating Model Assessment**

Newfoundland Labrador Hydro

29 January 2015

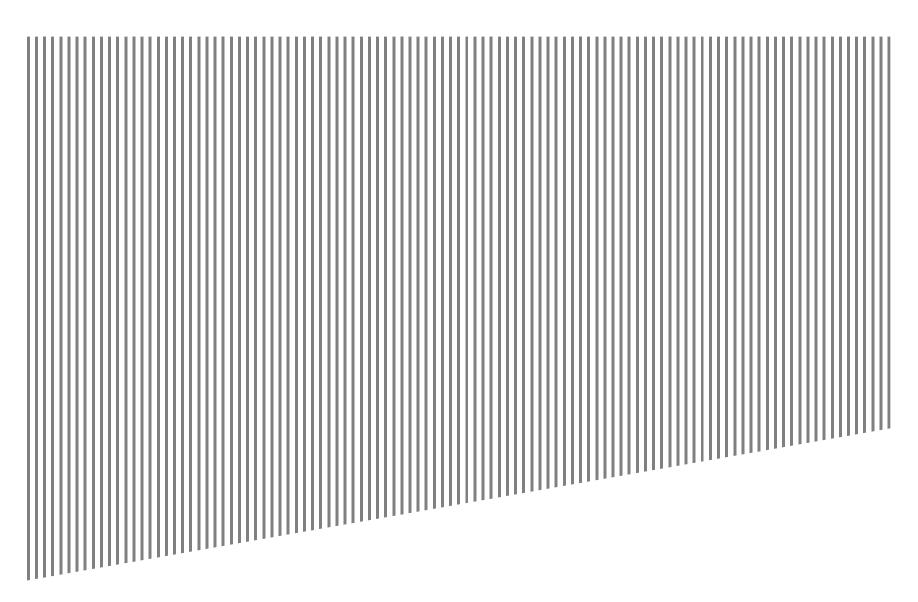


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# I. Executive Summary



### Scope

EY has been engaged to perform a target operating model rapid assessment for the following areas:

**Contact Centre Strategy** 

**Quality Assurance** 

**KPI** Reporting

Payment Processing (Billing)

Web Self-Service

Mobile App & SMS

**Training** 

**Knowledge Management** 

**Customer Experience Insight** 

**Field Operations** 

IVR/Telephony

**Outage Management** 

- The results of this assessment have identified and prioritized improvement opportunities and initiatives in a roadmap to help NL Hydro Customer Service reach its desired future state.
- During EY's assessment, several overarching themes were uncovered and are discussed in the following slides. These themes all relate to the need for improved efficiency and effectiveness.
- Improving an organization's efficiency and effectiveness is the cornerstone driving customer satisfaction and increasing performance.

### Improving customer service – an integrate of the control of the co

## 1. Deliver on expectations in every interaction with the customer

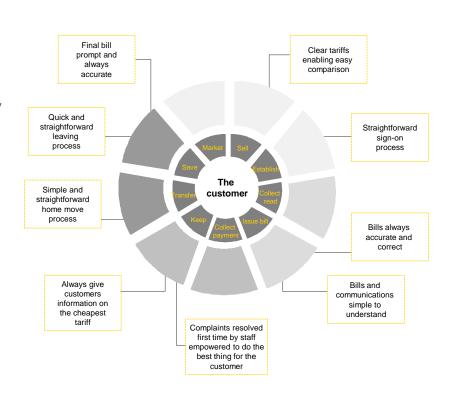
- Build a track record of successful delivery
- Consistent and predicable outcomes in every interaction with the customer
- Queries answered promptly, complaints resolved swiftly, bills correct

## 2. Openness and transparency in every interaction

 Communicate clearly (tariff, price increase, new services)

## 3. Empower customers to make their own decisions

Enable customers to make informed decisions





### **Executive Summary – Observations**

- This assessment identified over 40 recommendations, many yielding high, sustainable benefits and several that can be implemented with minimal effort.
- To implement many of these recommendations, senior level "buy-in" is required, as is the successful integration of people, process and technology.
- Strategy is the astute allocation of resources "time, talent and capital" in planned activities to better serve customers. The opportunity exists to leverage NL Hydro's resources to implement customer service improvements.
- The Power & Utilities Maturity Model Assessment (PUMMA) results indicate that for most processes, NL Hydro Customer Service is on the "basic" dimension with substantial room for improvement (Appendix B). There is an opportunity to move to the next dimension levels ("developing" and "established") by implementing the high priority opportunities presented in this report.
- According to recent surveys, providing billing/payment options and customer support are key to improving customer satisfaction (Appendices D and E).



### Executive Summary - High Priority Opportunity Attachment 1

- There are several overarching opportunity themes resonating throughout the assessment:
  - Implement a CRM The selection, design and implementation of a CRM is one of the key opportunities for NL Hydro to improve customer service. A successfully installed CRM will provide vital information necessary to track call reasons and volumes, and customer preferences, evaluate CSR performance, and identify areas in need of further training. It will also assist in workload forecasting and trend analysis. Currently, CSRs manually record follow ups in notebooks. As an interim solution until a CRM platform is installed, NL Hydro should consider using Lotus Notes or other rudimentary calendar functionality for scheduling and follow up reminders.
  - ▶ Enhance the Customer Portal In 2015, the customer portal is scheduled to be upgraded (more history, more user-friendly). Opportunity exists to enhance portal to include more FAQs, payment options, recurring payments, e-bill enrollment, turnons and turn-offs, more usage and account history, letter history, bill image, report a payment capability, etc.

### Executive Summary - High Priority Opporting of 52, Nich 2017 GRA

- Need More Structured Performance Reporting and Tracking NL Hydro should create a robust, dynamic balanced scorecard and dashboard that includes basic customer service key performance metrics (e.g. number of calls by disposition, average speed of answer (ASA), write-offs as a percent of revenues, percentage of accounts receivables by current, 30, 60 and 90 day delinquency buckets, number of estimated meter reads, numbers of meters repaired and refurbished, number of customers on e-bill and recurring payments, etc.). These scorecards and dashboards will measure customer service operational performance, provide trending analytics, and identify areas in need of increased attention, training and scrutiny. The KPIs on the monthly report are also in need of modifications to add goals (for variance analysis) and month-over-month and year-over-year statistics (for trending purposes).
- Enhance IVR Functionality The functionality of the existing IVR is extremely limited and the opportunity exists to replace the IVR with a more robust option that makes it possible for the customer to make payments and respond to questions without the need to speak to a CSR. This is critical, as the IVR will no longer be supported after July, 2015.

### Executive Summary - High Priority Opporting Of 52, Nich 2017 GRA

#### Provide Additional Payment Option Offerings

- Online Payments Currently, customers can pay many of their bills online in a safe and secure environment. NL Hydro should offer this option to customers to greatly increase customer satisfaction, drive down operating costs and reduce inbound calls to call centre.
- Credit Card Payments Anecdotally, customers often ask to make payments via credit card, but allegedly the Public Utilities Board (PUB) does not allow this payment option (note: we researched the PUB's regulations and could not find anything written prohibiting the use of credit cards. We also learned that other Canadian utilities accept credit card payments). EY suggests NL Hydro work in tandem with NL Power to track how often customers request to pay via credit card (again, this underscores the need for a CRM). This way, the utilities can provide the PUB with compelling, empirical evidence that the use of credit cards would be a positive, attractive payment option for customers.
- Check-By-Phone Payments There are many secure, inexpensive chequeby-phone products that facilitate the acceptance of cheques over the phone by CSRs. These cheques can be accepted in real time and deposited with the bank via ACH. This accelerates cash flow, reduces bad debt and churn, and reduces costly disconnect truck rolls.

## Executive Summary - High Priority Opporting Not 2017 GRA

PUMMA level 1	High priority opportunities:									
processes (those in scope)	Enhance customer portal	Provide additional payment options	Improve IVR functionality	Structured perf. measurement & tracking	Implement a CRM					
Develop customer strategy	x	x	x	x	x					
Manage customer accounts				x	x					
Serve customer	x	x	x							
Manage revenue collection	x	x	x							
Manage customer service request				x	x					

Each of the key priority opportunities could help NL Hydro improve performance in more than one PUMMA level 1 process.



# Cost Estimates for High Priority Opportunities 081, Attachment 1 Page 11 of 52, NLH 2017 GRA

Key High Priority Opportunity	Estimated Cost
Implement a CRM	\$75,000-\$250,000*
Enhance Customer Portal	\$135,000
More Structured Performance Measurement & Tracking	<\$1,000
Improve IVR Functionality	\$10,000-\$25,000*
Provide Additional Payment Options	\$5,000-\$15,000/year*

\*Cost dependent on level of functionality desired. Estimates consider vendor costs, applicable transactional costs, consulting and project management costs, and training.



## Summary Recommendations Priority Matrice NLH-081, Attachment 1 Page 12 of 52, NLH 2017 GRA

Opportunities for improvements have been summarized in the matrix below. Quick win opportunities will fall into the "low effort, high benefit" section. Longer-term opportunities are of "high effort, high benefit"

	HIGH EFFORT	Ease to implement	LOW EFFORT
efit HIGH BENEFIT	<ul> <li>Improve Customer Portal, IVR and website for Easier Payment</li> <li>Implement CRM</li> <li>Automate Process to Place Accounts into Collections Cycle</li> <li>Implement Mobile Apps and Texting</li> <li>Consider Outsourcing For Billing / Pmts.</li> <li>Update Meter Procedures</li> <li>Automate Meter Records</li> <li>Develop/Implement AMR Deployment</li> <li>Provide Ability for CSRs to Accept Payments over the Phone</li> <li>Work with PUB to Allow Credit Card Pmts.</li> </ul>	<ul> <li>Facilitate IVR Payment</li> <li>Establish Dedicated Large C&amp;I Account Managers</li> <li>Ensure all Procedures &amp; Processes are Documented</li> <li>Modify Information System's "Footprints" Ticketing System for CSR Use</li> <li>Upgrade Customer Portal</li> <li>Increase IVR Functionality</li> </ul>	<ul> <li>Promote E-Bills and Recurring Payments</li> <li>Create Balanced Scorecard &amp; Dashboard</li> <li>Provide Access to Treasury's Imaging Database to CSRs</li> <li>Provide Access to Bill Images to CSRs</li> </ul>
Level of benefit	<ul> <li>Re-establish Business Process Analyst Position</li> <li>Develop &amp; Implement Customer Service Awareness Training to other Departments</li> </ul>	<ul> <li>Obtain Support for Avaya IVR</li> <li>Commence Gentle Reminder Collection Calls</li> <li>Perform Credit Checks on New Customers</li> <li>Formalize &amp; Enhance New Employee &amp; Refresher Training</li> <li>Develop Process to Ensure Field Work Orders Are Captured in System Accurately &amp; Timely</li> <li>Centralize New Install Rate Entry Function</li> </ul>	<ul> <li>Add Graphs to KPI Monthly Report</li> <li>Add Year-Over-Year Trending to KPI Monthly Report</li> <li>Interim Step – CSRs to Utilize Existing 27 Phone Codes to Identify Call Types</li> <li>Improve Inter-Department Communications (e.gOutages)</li> </ul>
LOW BENEFIT	<ul> <li>Facilitate Screen-Pops for CSRs</li> <li>Facilitate Targeted Bill Messaging</li> </ul>	<ul> <li>Place Message on IVR to Resolve NL Power Calls Without Calls Going to CSRs</li> <li>Add Personnel to Meter Shop</li> </ul>	<ul> <li>Prioritize Post-Winter Season Moratorium Collection Efforts</li> <li>Promote Prompt Pay Discount Program</li> <li>Promote Balanced Bills</li> <li>Take Deposits from Residential Customers</li> <li>Create Electronic Payment Issues Template</li> </ul>



#### **Critical Success Factors**

In order to successfully execute the recommendations in this assessment, the following factors need to be considered:

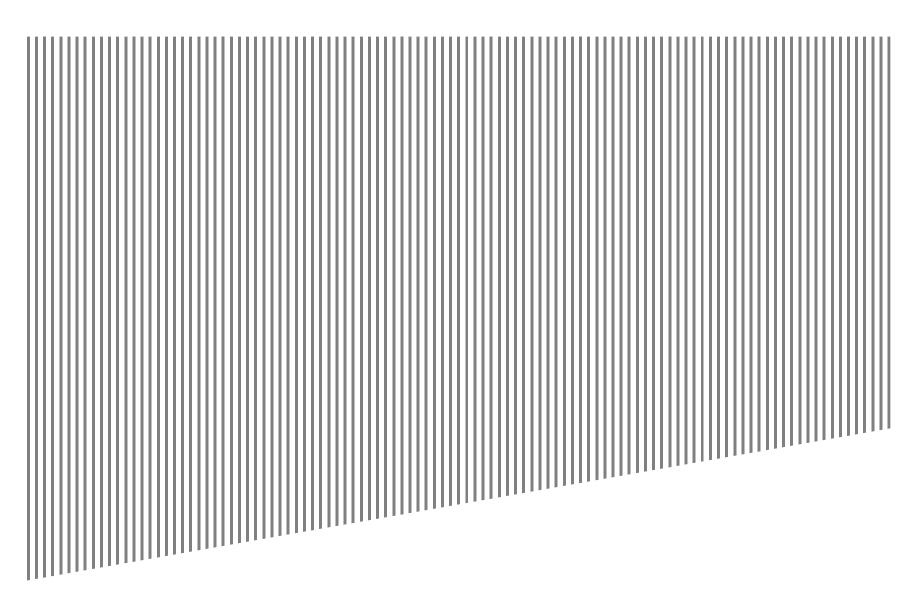
- Executive support and agreement on strategy and related priorities
- Support from customer service team
- Support from internal stakeholders (TRO, Sys Ops, IS, etc.)
- Requires dedicated project resources can't be done off the corner of someone's desk
- Robust project management and strong project governance
- Establish and maintain capacity for project momentum and focus
- External consulting support provides required objectivity, knowledge transfer of similar successful projects in other jurisdictions, therefore accelerating detailed design and implementation
- Robust change management and communication strategy
- Budget allocation for people, process, and technology
- Real costs may be incurred in the first year to achieve long-term savings and improvement in service quality



### **Next Steps**

- NL Hydro Customer Service to review and prioritize recommendations
- NL Hydro Customer Service to implement "low-hanging fruit" as soon as practical
- NL Hydro Customer Service to evaluate resources required to implement these recommendations
- ▶ NL Hydro Customer Service to seek Board approval to proceed, where applicable
- NL Hydro Customer Service to commence design efforts

Note: EY is available to assist NL Hydro with the evaluation, design and implementation of these suggested steps



# Target Operating Model Assessment – Defaile 15 of 52, NLH 2017 GRA Observations

#### **Contact centre**

- There are currently 5 CSRs who capture call information manually in notebooks for follow-ups, etc.
- There is no CRM to capture call details, provide history, offer screen pops, etc.
- No call recording capability exists; no call monitoring performed
- Hours are 8:30 a.m. to 4 p.m., Monday through Friday customers cannot leave phone messages after hours or on weekends
- Call centre manages work flow fluctuations by augmenting role with work orders and other related tasks
- CSRs request identification and address information from customers at start of call, but for new customers there is no credit check performed and deposits are rarely taken
- CSRs do not enter call reasons (choice of 27) into phone during calls therefore limited call information is captured (e.g.; type of call, call volumes by type, etc.)
- A rudimentary dashboard exists that provides service levels (i.e.; calls answered within 30 seconds), but dashboard contains little else and is not really used
- Most CSR training (new employee as well as refresher) is informal
- Customer letters and emails are handled by CSR lead



# Target Operating Model Assessment – Defaille 17 of 52, NLH 2017 GRA Observations

#### **Billing**

- ▶ There are approximately 38,000 bills generated each month (8 monthly billing cycles).
- ▶ There are approximately 13,000 customers on AMR reads and 25,000 customers on manual reads.
- ▶ JD Edwards is used for back-end billing and work order processing.
- There are approximately 4,000 accounts on e-bill. A promotion was performed last May which was very successful: there are plans to continue promotions in 2015.
- ▶ Bill messages are limited to 2 messages per bill, limited to 240 characters. Bill messages cannot be targeted to certain customers.
- Balanced billing is not pushed (requires manual time-consuming "true-ups").
- ▶ Bills are estimated due to weather, meter readers annual conferences, safety hazards, etc.
- Much of Sandra and Collette's institutional knowledge is in their heads, and not thoroughly documented (Note: both are very knowledgeable and dedicated employees, but Sandra will be retiring shortly).
- Since 2004, all CSRs have been cross-trained in billing.
- Errors often occur with new customers with assigned rate tables; e.g.: customers who should receive rebates, overbilling situations. Field workers aren't verifying rates before issuing bills.
- Newfoundland Power is NL Hydro's largest customer; there are 18 other industrial accounts.
- Many industrial billing adjustments need to be reviewed.
- QA there is a need for double-checks to verify accuracy of new install rates.
- QA Billing performs a Proof Billing Process and then a Final Billing Process for each bill cycle.



# Target Operating Model Assessment – Defaille 18 of 52, NLH 2017 GRA Observations

#### **Collections**

- NL Hydro does not report to credit bureaus
- ▶ Winter moratorium in place 11/15 4/15 in Labrador and 12/1 3/31 in Newfoundland
- Meter Readers will remind customers when they are past due, but they do not accept payments
- ▶ Day 45 = reminder notice; Day 60 = Final notice; Day 75 = disconnect occurs
- Placing accounts into collections process requires manual intervention
- No gentle reminder calls are performed (e.g.; at day 30 and 45)
- Few deposits taken for residential customers; some taken for C&I customers
- In some areas, even with AMR, disconnects have to be performed manually by meter readers

#### **Payments**

- Customers cannot make payments online, through IVR or in real time to CSRs
- NL Hydro is not allowed by regulators to accept credit cards for payments unable to find any regulations about this
- Preauthorized pay plans are taken out of account on discount date (so customers receive a 1.5% discount)
- Most EFT payments come from non-residential customers
- Late payments incur finance charge of prime plus 5%
- Payments processed today get loaded in batch form overnight and hit customers' accounts the next day
- Wish list for Treasury CSRs should have a template with questions to ask customers about their electronic payments so Treasury can better research issue



# Target Operating Model Assessment – Defaille 19 of 52, NLH 2017 GRA Observations

#### **Field Operations**

- Field Operations is responsible for all transmission and distribution including asset management, diesel, gas turbines, terminal stations, etc.
- Field Operations uses JD Edwards for work order management system
- Opportunity to provide Field Operations with Customer Service "Awareness" training
- Tony Lye is working with Field Operations on service provisioning standards

#### **Provisioning / Meter Reading**

- Meters must be read every month
- Measurement Canada: confirms calibrations; does sample audits, can fine NL Hydro for expired meters
- ▶ 1600 meters exchanged in 2014; goal of 3,500 meters in 2015; normally ~2,000 meters per year
- Meter standards not up to date
- Meter operating procedures not up to date (last updated 1993)
- Meter error rate is about 2-3%
- All meter records are captured on paper and not automated
- AMR deployment is primarily driven by meter reader attrition did not see a definitive deployment strategy
- Strong focus on safety! Daily safety checklist is sent to Jim Wiseman each day by meter readers
- Training: for safety, meter readers are audited with regard to work methods, AMR meter training, dog awareness training, grounding and bonding and irate customers confrontation. Quarterly conference calls on safety, and an annual meeting in person.



# Target Operating Model Assessment – Defaile 10, Attachment 1 Observations

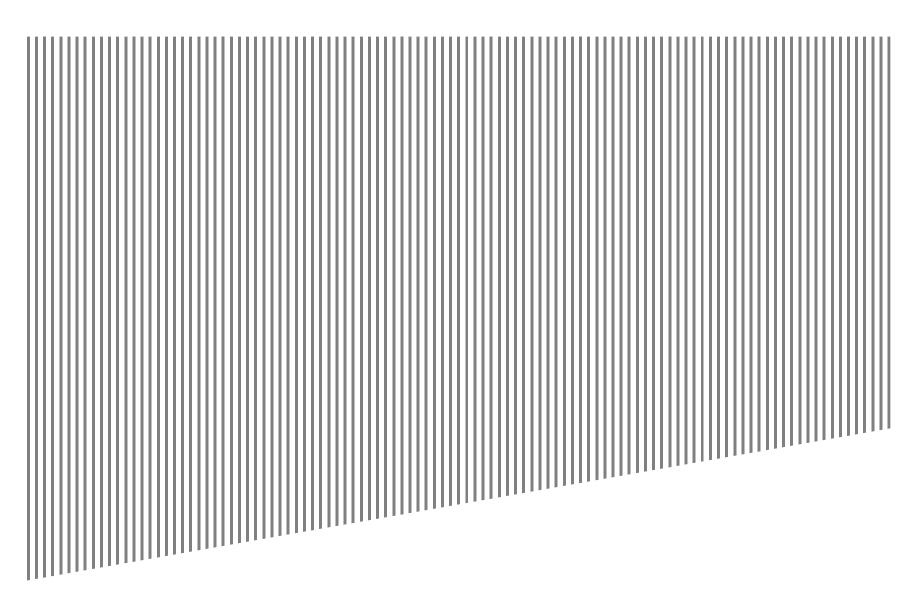
#### **Technology**

- Phone system is Avaya; IVR will no longer be supported by 7/15, but a workaround may exist
- UCIS (JD Edwards platform) is custom built for NL Hydro about 11 years old; recently upgraded
- In 2015 the customer portal is scheduled to be upgraded (more history, more user-friendly) (potential vendor is Silver Blaze Solutions Capricorn)
- Functionality exists to access Treasury's payments imaging database on CSR desktops ("Inquire" icon), but currently not being used
- Functionality exists to access bill images on CSR desktops ("Inquire" icon), but currently not being used
- In 2016, upgrading from Utiligy's "World" to "Enterprise One" product, called Utiligy 360 with much more functionality
- Information Systems has ticketing system called Footprints that may be modified to use for CSRs rolling out 1/5/15. CSRs could have their own workspace. 100 licenses exist. A new hire in Information Systems will start in 2015 to support Footprints' ticketing system
- No mobile apps or texting is being done
- IVRs can be used to check account balances or outage info, but little else

#### **Other**

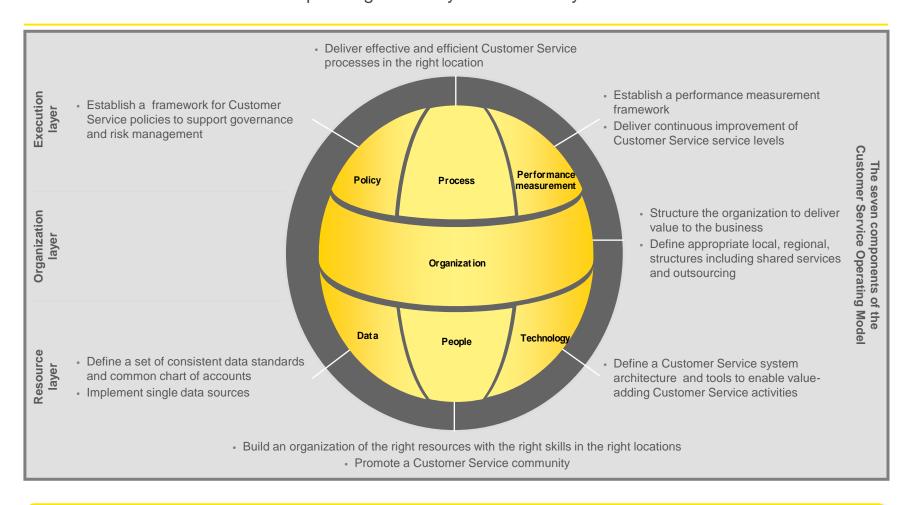
- No dedicated account management exists for large C&I accounts
- There used to be a Business Process Analyst (writes processes, manages projects, etc.) but position was eliminated
- ▶ KPIs do not show goals, or month-over-month or year-over-year statistics
- No dashboard or balanced scorecard exists





### **The Customer Service Operating Model**

Is the customer service function operating efficiently and effectively?



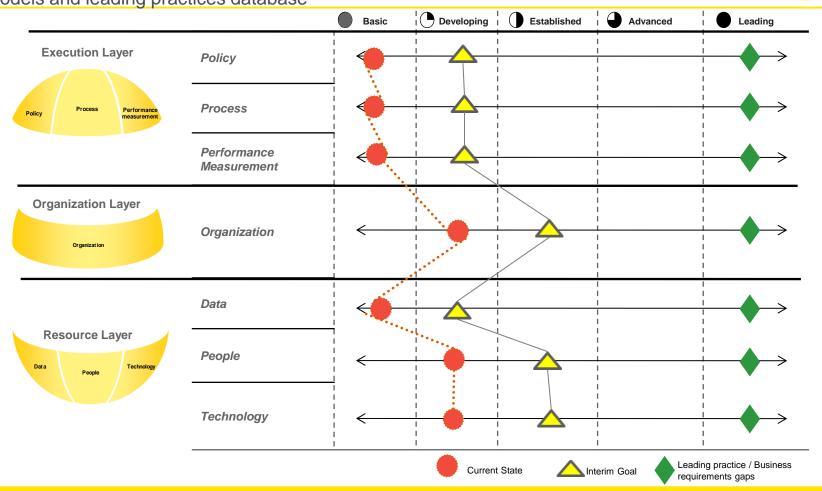
The operating model for Customer Service is the framework for delivery of service to the internal and external customers of Newfoundland Labrador Hydro, and is designed in response to a vision and/or strategy for Newfoundland Labrador Hydro. It contains a number of key components that can be customized at the design stage.



### **The Customer Service Operating Model**

PUB-NLH-081, Attachment 1 Page 23 of 52, NLH 2017 GRA

Results of a facilitated Customer Service diagnosis session using maturity models and leading practices database



EY has conducted a facilitated session to identify Newfoundland Labrador Hydro's current state across the maturity model dimensions. We have included sample Power & Utilities maturity models and leading practice accelerators in the appendix of this document.



## Detailed Opportunities – Operational Strate 94 of 52, NLH 2017 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
<\$1,000	Promote e-bills and recurring payments	High	Low	There have been prior programs promoting e-bills. E-bills are a terrific tool to reduce paper bills and other billing costs and these promotions should continue. Similarly, we recommend pushing recurring payments. Savvy customers who opt for e-bills will also opt for recurring payments. These payments increase cash flow, reduce write-offs, and reduce operational efforts (i.e.; collections efforts).
<\$1,000	Promote balanced billing	Low	Low	Balanced billing is a proven tool that not only assists the customer in budgeting their bills, but also reduces calls to the call centre (due to customer perception of high bills or billing errors).
Part of \$135,000 Portal Upgrade	Provide ability for customers to pay bills online	High	High	Currently, customers can pay many of their bills online in a safe and secure environment. Offering this option to customers will greatly increase customer satisfaction, drive down operating costs and reduce inbound calls to call centre.
<\$1,000	Prioritize collection efforts once winter season moratorium ends	Low	Low	Once the winter season moratorium period ends, there will be greater collection efforts and disconnects required than resources can accommodate. Accordingly, a plan should be developed to prioritize and address the riskiest accounts first (e.g.; oldest arrears, highest dollar arrears and riskiest based on credit scores).
<\$1,000	Promote 1.5% discount	Low	Low	Similar to the suggestions to promote e-billing, recurring payments and balanced billing, the organization should consider promoting the 15-day discount. This will potentially reduce arrears and the associated collection efforts.
TBD	Investigate ways to target certain customers on bill messages	Low	High	While there is currently no functionality allowing targeted bill messaging, any enhancements to the billing process will need to take into consideration the ability to apply messages based on various select criteria.
\$1,000 - \$5,000/year	Conduct gentle reminder calls at day 30 or 45 (outsourcing?)	Medium	Medium	As time allows, CSRs should commence gentle outbound collection calls. Alternatively, these calls can be outsourced to a collections vendor.

# Detailed Opportunities – Operational Strate By Shift 52, NLH 2017 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
TBD	Develop and implement strategy for AMR Deployment	High	High	AMR technology is being deployed at a very slow pace, primarily through attrition (i.e.; when meter readers retire). A more aggressive deployment should be designed and rolled out so that the entire customer base will be on AMR within the next few years.
\$5,000- \$15,000/year	Provide ability for customers to pay CSRs in real time (cheque or credit card)	High	High	There are many secure, inexpensive cheque-by-phone products that facilitate the acceptance of cheques over the phone by CSRs. These cheques can be deposited with the bank via ACH. This accelerates cash flow, reduces bad debt and churn, and reduces disconnect truck rolls. Note: Credit card acceptance is addressed in Appendix C.
<\$1,000	Pursue credit cards acceptance possibility with PUB	High	High	Anecdotally, customers often ask to make payments via credit card, but allegedly the PUB does not allow this payment option (note: we researched the PUB's regulations and could not find anything written prohibiting the use of credit cards). EY suggests NL Hydro work in tandem with NL Power to track how often customers request to pay via credit card (again, this underscores the need for a CRM product). This way, the utilities can provide the PUB with compelling, empirical evidence that the use of credit cards would be a positive, attractive payment option for customers

## Detailed Opportunities – Process and Polipus, NLH-081, Attachment 1 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
\$1,000-\$10,000	Automate collections process	High	High	The manual placing of accounts into the collections cycle is inefficient, time-consuming, and could lead to errors. Further research is required to determine how this can be automated.
<\$1,000	Perform feasibility study on taking deposits for all new and delinquent residential customers	Low	Low	A feasibility study should be considered to determine if deposits should be required from all new customers as well as delinquent customers.
<\$1,000/year	Perform credit checks on new customers, or at least verify social insurance numbers and/or driver's licence numbers	Medium	Medium	There are several reasonably priced credit check products that would allow CSRs to run credit checks in real time on new customers to verify identity and determine deposit requirements.
<\$1,000	Ensure that meter standards are up to date	Medium	High	This is already being researched by NL Hydro.
\$1,000-\$10,000	Automate all meter records	High	High	This is already being researched by NL Hydro.
<\$1,000	Re-enforce importance for employees to document and institutionalize policies and procedures	High	Medium	The documentation of all policies, processes and procedures is required to ensure that employees are aware and in compliance. Additionally, these policies, processes and procedures need to be readily available to all (in electronic format) and must be continually updated so that they are current.
\$1,000- \$5,000/year	Verify accuracy of new install rates	Medium	Medium	A formal QA process should be put in place to review all new install rates to ensure billing accuracy.
\$1,000-\$5,000	Develop and conduct training sessions to control regional offices processes. (Common Work Bench created but not enough to resolve issues).	High	Medium	While it would be difficult to standardize all processes (due to regional differences), a training program should be designed and implemented to standardize as many processes as possible.



## Detailed opportunities – Process and Polichie 27 of 52, NLH 2017 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
Part of CRM	Need a measurement tool to identify when to take CSR off the phone to work on backlog of work orders	Medium	High	Once a CRM is in place, staffing and workload forecasting can be performed in an automated manner.
<\$1,000	Create and implement issues template for CSRs to forward to Treasury Dept. to research electronic payment issues	Low	Low	Donna of Treasury department made this request. It will make Treasury's job easier and it will be simple to implement.

# Detailed Opportunities – Performance Manage 196752, NET 2017 GRA

Cost - Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
<\$1,000	Add goals to all KPIs	Medium	Low	This is already being addressed by NL Hydro and will soon be implemented.
<\$1,000	Add month-over-month and year-over-year trending on all KPIs	Medium	Low	This is already being addressed by NL Hydro and will soon be implemented.
<\$1,000	Implement a balanced scorecard and dashboard	High	Low	Scorecards and dashboards are an effective and convenient way to track operational performance, identify areas in need of improvement, and capture trending.

# Detailed Opportunities – People & Organization 12 NLH 2017 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
\$50,000/position	Consider creating dedicated account management positions for large C&I accounts	High	High	Large C&I customers account for a majority of the company's revenues. These customers have unique issues and require dedicated resources to ensure they are receiving maximum value.
TBD	Consider outsourcing some or all billing & payment efforts	Medium	High	Billing and remittance processing are traditionally not the core competencies of utility, and are often more expensive than using outsourced resources. There are numerous vendors specializing in providing billing and payment services to utilities. The company should research the feasibility of outsourcing some non-core processes.
\$1,000-\$5,000	Develop and roll out refresher training	High	Medium	A well-designed, formalized training program is the hallmark of a strong customer service department. The organization should invest in refresher training to ensure employees are up to speed on every aspect of the company so that they can provide superior service to the customers.
\$50,000/position	Add Meter Shop personnel to address backlogs and improve audit results	Low	Medium	The Meter Shop does a terrific job with its existing resources. However, with regulatory pressure, Measurement Canada Surveillance Audits, and other requirements, the addition of a staff member would alleviate the existing administrative backlog.



# Detailed Opportunities – People & Organization 152, NLH 2017 GRA

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
\$50,000/position	Add a Business Process Analyst position	Medium	High	Customer Service resources are stretched thin and spend much time "putting out fires" and responding reactively to issues. An analyst could focus on addressing technology and process improvements that will, in the long run, increase overall departmental efficiencies.
<\$1,000	Work with the field to ensure better communications in the case of planned outages	Medium	Low	Improved communications are always an inexpensive mechanism to enhance inter-departmental efficiencies and, in cases of outages, provide customers with timely and accurate updates.
<\$1,000	Work with line crews when they update work orders in the field to ensure paperwork is being sent in to be added to system	Medium	Medium	Improved communications/training is always an inexpensive mechanism to improve inter-departmental efficiencies and, in instances of new meter sets, provide the ability to accurately set up a customer's account so that the account can be billed properly and timely.
\$1,000-\$5,000	Create/rollout Customer Service "Awareness" training to other organizations	Low	Medium	To cultivate a true Customer Service culture throughout the organization, it is imperative to educate and obtain "buy-in" from all affected departments.



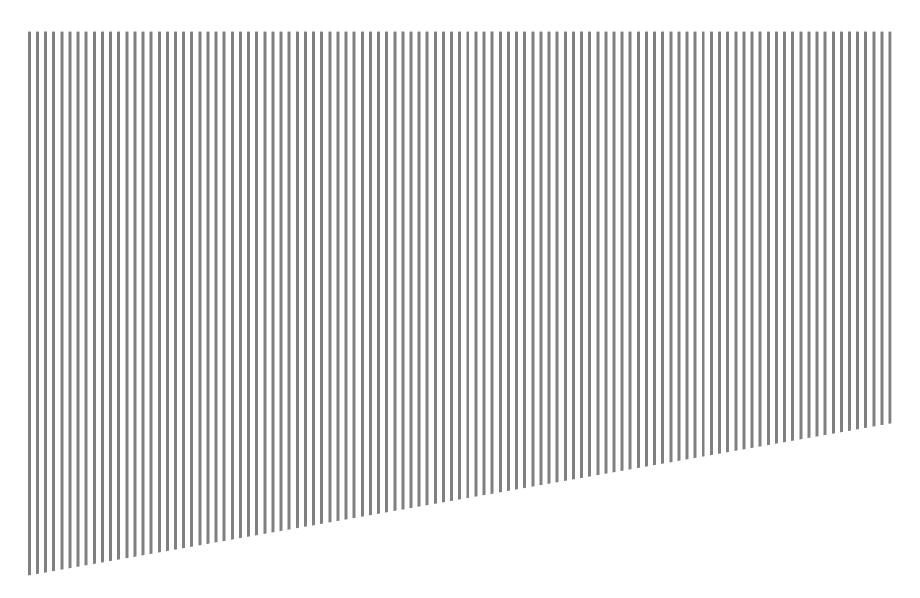
## Detailed Opportunities - Technology and Danie 1081, Attachment 1

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
Part of IVR enhancements	Ensure that IVR is supported (phone system is Avaya; IVR will no longer be supported by 7/15, but a workaround may exist)	Medium	Medium	This is already being researched by NL Hydro.
\$75,000- \$250,000	Purchase and install a robust CRM to capture call details, history, etc.	High	High	The selection, design and implementation of a CRM is one of the key opportunities for NL Hydro to improve customer service. A successfully installed CRM will provide vital information necessary to track call reasons and call volumes, customer preferences, evaluate CSR performance, and identify areas in need of training. It will also assist in workload forecasting and trend analysis.
\$10,000- \$25,000	Enhance IVR functionality	High	Medium	The functionality of the existing IVR is limited, but the opportunity exists to replace the IVR with a more robust option that makes it possible for the customer with the ability to make payments and respond to questions without the need to speak to a CSR.
\$10,000- \$25,000	Investigate and rollout mobile apps and texting functionality	Medium	High	Customers are familiar with mobile apps and texting and would readily welcome this technology. The uses are numerous, including providing outage information, sending reminder notices, and providing marketing or public relations information.
\$10,000- \$25,000	Enhance website functionality	Medium	Medium	This is already being researched by NL Hydro.
<\$1,000	Utilize existing functionality to access Treasury's imaging database on CSR desktops ("Inquire" icon), - was not being used but has been recently implemented	High	Low	This was realized during discovery phase of assessment and has been implemented.

## Detailed Opportunities - Technology and Day 2017, Attachment 1

Cost – Order of Magnitude	Opportunity	Benefit	Ease to Implement	Comments
~\$135,000 budgeted	Enhance customer portal (in 2015 the customer portal is scheduled to be upgraded with more history, more userfriendly). Portal enhancements to consider are: include more FAQs, payment options, recurring payments, e-bill enrollment, turn-ons and turn-offs, more usage and account history, letter history, bill image, report a payment capability, etc.	High	Medium	This is already being researched by NL Hydro and is budgeted for 2015.
<\$1,000	Utilize existing functionality to access bill images on CSR desktops ("Inquire" icon was not being used but has been recently implemented)	High	Low	This was realized during discovery phase of assessment and has been implemented.
\$1,000-\$5,000	I.S. has ticketing system called Footprints that - researches how to modify it to use for CSRs	High	Medium	This is already being researched by NL Hydro.
Part of IVR Enhancement	Modify IVR to inform NL Power customers of NL Power phone number so calls will not go to CSRs to handle	Low	Medium	There is an opportunity to improve IVR functionality to vector customer inquiries directly to NL Power (or at least provide the caller with NL Power's customer service phone number), thereby reducing volume of inbound calls to CSRs.

# IV. Appendices



# Appendix A – NL Hydro Interview Pub-NLH-081, Attachment 1 Page 34 of 52, NLH 2017 GRA



PUB-NLH-081, Attachment 1
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Various stakeholder interviews were held with select staff from NL Hydro, during the weeks of Dec. 8 and 15, 2014. All takeaways from the interviews were contemplated and woven into the report.

Interview date	Interviewer	Interviewee
12/9/2014	Claude Francoeur / John Woodward	Tony Lye, Customer Service Manager
12/9/2014	Claude Francoeur / John Woodward	Ron Lane, Call Centre & Billing Supervisor
12/10/2014	John Woodward	Rick Smith, Meter Shop Supervisor
12/11/2014	John Woodward / Julian Kennedy	Jim Wiseman, Provisioning Supervisor
12/11/2014	John Woodward / Julian Kennedy	Sandra Sheppard, Billing
12/11/2014	John Woodward / Julian Kennedy	Collette Barnes, Billing
12/12/2014	John Woodward	Heather Cale, CSR
12/15/2014	John Woodward	Sandra Carew, CSR
12/15/2014	John Woodward	Robert Coish, Industrial Billing
12/16/2014	John Woodward	Donna Coates, Treasury
12/16/2014	John Woodward	Dean Tucker, IS
12/17/2014	John Woodward	Pat Thornhill, Industrial Billing Officer
12/17/2014	John Woodward	Darren Moore, General Manager, TRO
12/17/2014	John Woodward	Leah George, CSR



# Appendix B – Priority matrix powers NEW 1 Attain tipes maturity model assessment



# Power & Utilities Maturity Model Assessment 37 of 52, NtH 2017 GRA

EY's PUMMA architecture includes nine (9) high level (Level 1) Processes. Based on the deliverables for this Target Operating Model Assessment, only the 5 processes in RED below have been considered

## **Develop insight**

This process consists of assessing the market and the ustor s' expectations and behavior. ur a customer-centric approach, proact. ganizations experience impro rustomer satisfaction and the ed customer retention.

processes

Level

### Manage marketing

This process consists of developing the marketing strat v, p aring the marketing plan a cuting the marketing activitie ncl. the communication/ sement activities) to raise custor awa ess of the brand and the products/services offered and to attract/retain customers.

### Serve customer

This process consists of providing customers with services during their life cycle: communicating with them, responding to their inquiries and complaints, and performing some retention activities so that the customer satisfaction is high and existing customers do not consider leaving their supplier (deregulated markets).

### **Develop customer strategy**

This process consists of setting the strategic direction around the customerfacing activities (offer development, marketing, sales and customer service). Through a customer-centric strategy, organizations experience increased revenue numbers and reduced cost to serve, which increases profitability.

5

## Manage sales

This process consists of developing the sales strategy, propring a sales plan and executing the solutions in order to acquire new tomers, to up-sell and cross-sell to the ing customer va ble) lost الم base and to win b customers.

8

## Manage revenue collection

This process consists of calculating, validating and distributing invoices/bills, managing customer invoice expectations. payment terms and delivery. It also includes requesting, receiving and processing customer payments and managing the debt collection process from initial identification of overdue payments to actual collection/ write-off of debt.

3

## Manage products and services

This process consists of identifying opportunities and esign a range of products and serv. 3 t rfer to customers (including ir prices and life cycle) that deliver v o both the company and cus iei also comprises making the necessary are rements with partners/suppliers.

### Manage customer accounts

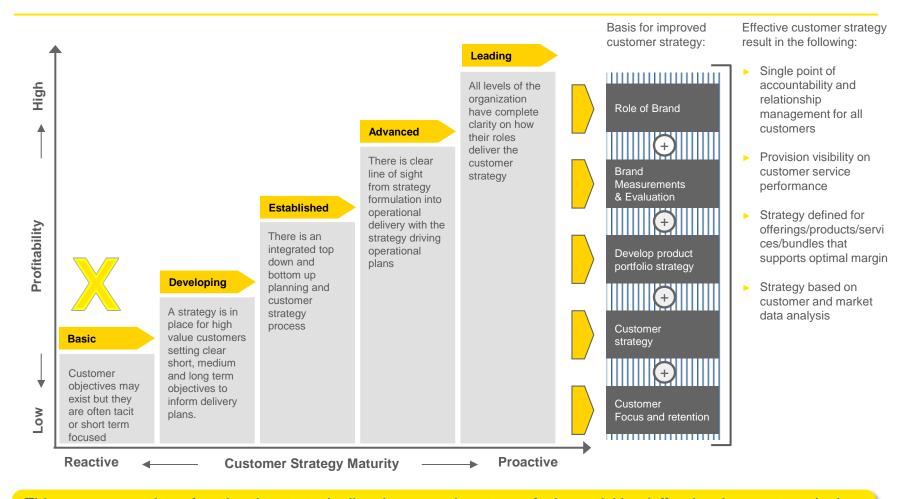
This process consists of processing (creating, terminating or changing) customer accounts, processing customer data updates, establishing new connections/site registrations and capturing any specific customer account needs. This also includes transfer of customers to other suppliers in deregulated markets.

## Manage customer service requests

This process consists of logging and transmitting the customer service requests to the relevant team/partner. This process may involve issuing a quotation or taking an appointment with the customer. Once the service requests has been completed. the information on the service requests is updated, and the customer is informed of the outcome.



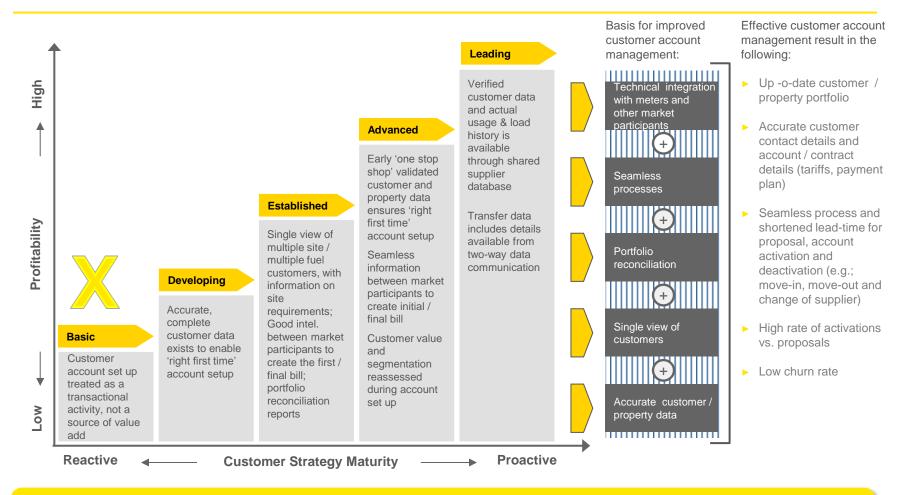
# **Develop customer strategy**



This process consists of setting the strategic direction around customer-facing activities (offer development, marketing, sales and customer service). Through a customer-centric strategy, organizations experience increased revenue numbers and reduced cost to serve, which increases profitability.



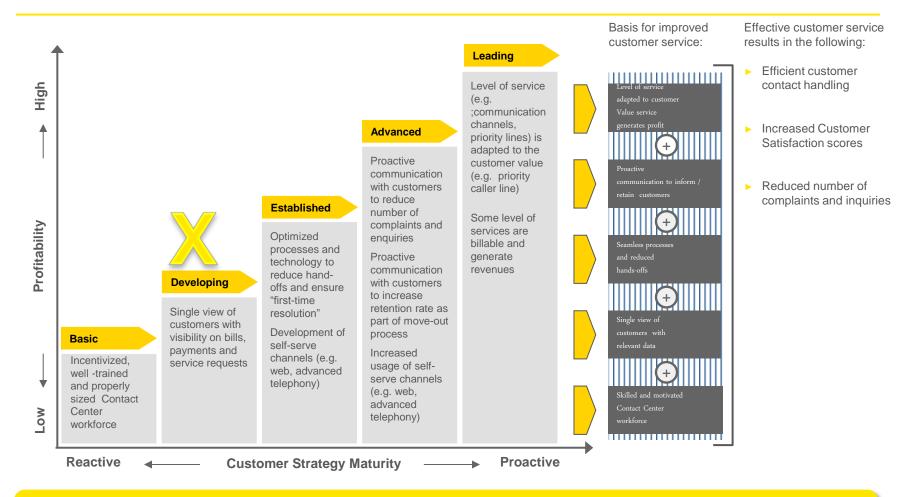
# Manage customer accounts



This process consists of processing (creating, terminating or changing) customer accounts, processing customer data updates, establishing new connections/site registrations and capturing any specific customer account needs. This also includes transfer of customers to other suppliers in deregulated markets.

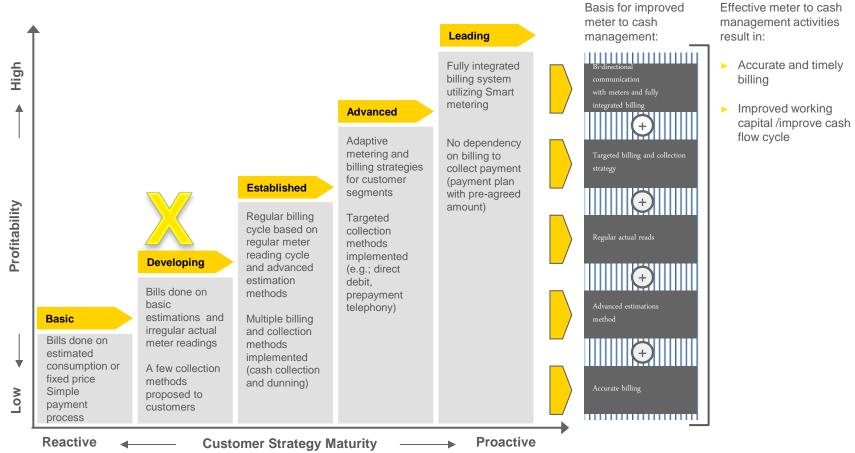


## Serve customer



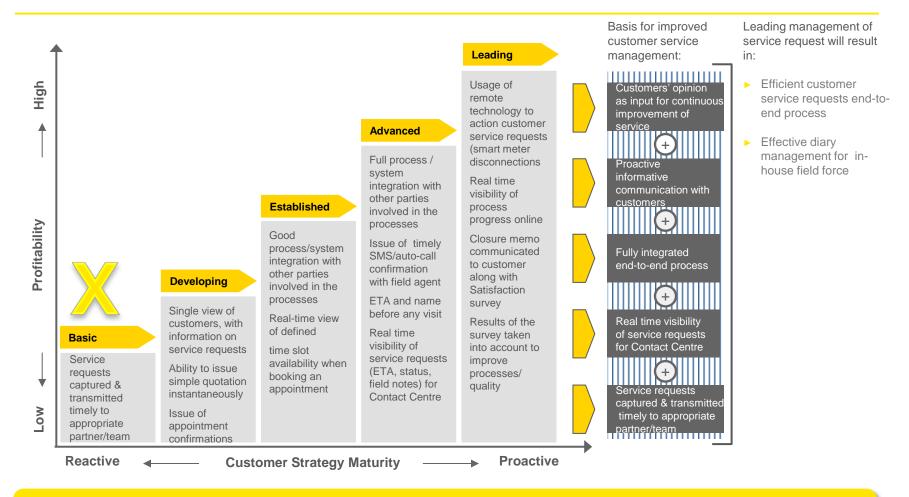
This process consists of providing customers with services during their lifecycle: communicating with them, responding to their inquiries and complaints, and performing some retain activities so that the customer satisfaction is high and existing customers do not consider leaving their supplier (deregulated markets).

## Manage revenue collection



This process consists of calculating, validating and distributing invoices/bills, including the management of customer invoice expectations, payment terms and delivery. It also includes requesting, receiving and processing customer payments and managing the debt collection process from initial identification of overdue payments to actual collection/write-off of debt.

## Manage customer service requests



This process consists of logging and transmitting the customer service requests to the relevant team/partner. This process may involve issuing a quotation or taking an appointment with the customer. Once the service requests have been completed, the information on the service requests is updated and the customer is informed of the outcome.



# Overall maturity scores – weighted

Dimensions	Overall scores (weighted)					
Dimensions	Current State	Future State	To-Be 2	To-Be 3	Leading Practice	
Operational Strategy	0.93	2.00	3.16	3.53	3.72	
Process & Policy	0.84	2.03	2.70	4.47	4.59	
People & Organization	1.07	2.98	3.41	3.58	4.71	
Technology & Data	1.11	2.22	3.02	4.46	3.70	
Performance Management	1.20	1.77	2.40	4.75	3.98	
Vertical Maturity Index	1.03	2.20	2.94	4.14	4.14	
Vertical Maturity Index (%)	24.9%	53.2%	71.0%	100.0%	100.0%	



# Appendix C – Canadian utility creditudes 24 of 52, NLH 2017 GRA acceptance matrix



# Canadian utility credit card acceptance male 45 of 52, NLH 2017 GRA

Name of Company	Credit Card Accepted	Type of CC (If Applicable)	E- Billing available	Other forms of Electronic Payment	Special Promotions for switching to E- bill	3 <sup>rd</sup> Party Collections for CC payments	Comments
CN Utility #1	No	CC not accepted	Yes	Yes-Pre Authorization debit	No	NA	Accepts Credit Card cheques
CN Utility #2	Yes	Visa & MasterCard	Yes	Yes-Pre Authorization debit	No	Yes	Only Visa and MasterCard. Credit Card payments are processed through a third party payment provider known as Paymentus. \$2.99 fee per credit card transaction.
CN Utility #3	Yes	MasterCard	Yes	Yes-Pre Authorization debit	No	Yes	Only MasterCard accepted as mode of Credit Card payment. Credit Card payments are processed through a third party payment provider known as Paymentus. \$2.99 fee per credit card transaction.
CN Utility #4	No	CC not accepted	Yes	Yes-Pre Authorization debit	Yes for enrolling in e-bill, 2 free music downloads and a tree planted in the customer's name. Must enroll by December 31, 2014.	NA	Credit card cheques are accepted. E-billing is fairly new and came into effect as of September 2014.
CN Utility #5	No	CC not accepted	Yes	Yes-Pre Authorization debit	Yes For signing up with e-billing, customer's name is included in a lucky draw to win \$2000 worth of groceries	NA	



# Canadian utility credit card acceptance matth (100) (Canadian utility card acceptance m

Name of Company	Credit Card Accepted	Type of CC (If Applicable)	E- Billing available	Other forms of Electronic Payment	Special Promotions for switching to E- bill	3 <sup>rd</sup> Party Collections for CC payments	Comments
CN Utility #6	No	CC not accepted	Yes	Yes-Pre Authorization debit	Yes For signing up with e-billing, customers receive a free LED light bulb. No date restrictions for signing up.	NA	Credit card cheques not accepted
CN Utility #7	Yes	MasterCard	Yes	Yes-Pre Authorization debit	Yes For every customer signing up with e-billing, utility will donate \$5 to the United Way Charity campaign	No	MasterCard is the only accepted form of credit card payment. As of March 31, 2014, Visa is not accepted. \$5.95 fee for every credit card transaction up to \$275
CN Utility #8	Yes	Visa & MasterCard	Yes	Yes-Pre Authorization debit	No	Yes	Utility accepts payments via MasterCard and Visa using a third-party service provider, Paymentus. Paymentus charges a fee of \$4.95 for each individual payment of up to \$200.
CN Utility #9	No	CC not accepted	Yes	Yes-Pre Authorization debit	No	NA	Credit card cheques not accepted
CN Utility #10	Yes	Visa & MasterCard	Yes	Yes-Pre Authorization debit	No	No	Visa and MasterCard are the only accepted forms of credit card payments. Credit card payments can only be made as a one-time transaction. Recurring credit card payment facility is not available. Transaction fee of \$5.95 is levied for all transactions up to \$300.



# Appendix D – JD Power electric util 1 Page 47 of 52, NLH 2017 GRA customer satisfaction survey results



# Electric utility customer satisfaction surve age 48 of 52, NLH 2017 GRA

- Survey examines six (6) satisfaction factors:
  - Power Quality and Reliability
  - Price
  - Billing & Payment
  - Corporate Citizenship
  - Communications
  - Customer Service
- Satisfaction levels for electric utilities are up, but are not keeping pace with other service industries (e.g.; telecommunications, television).
- Overall satisfaction increases when utilities proactively communicate outage information regularly and via the channels customers prefer, including utility-initiated phone calls, emails, text messages and social media sites.
- Power quality and reliability scores, an important driver of customer satisfaction, increased substantially. Customers experienced much shorter outages in 2014 than in 2013. The longest average outage in 2014 was 5.6 hours, compared to 12.0 hours in 2013.



# Electric utility customer satisfaction surve 2013-101-1017 GRA

- Giving customers choices about how they receive and pay their bills with improved information on their billing statements, resulted in increased customer satisfaction. Summary of satisfaction drivers:
  - Select their own payment due date versus those who do not
  - Receiving an electronic bill versus a paper statement only
  - On a fixed budget bill payment plan
  - When billing statements include a consumption graph
  - Customers who use their utility's online website to check their account or pay a bill
  - Ability to auto-deduct from a bank account
  - Ability to use recurring credit card payments
  - Through bank's online bill payment
- Many of the above payment and billing options also have a significant positive impact on collections and working capital management.
- Link to JD Survey Site:
  - <u>http://www.jdpower.com/press-releases/2014-electric-utility-residential-customer-satisfaction-study</u>
  - http://www.jdpower.com/press-releases/2013-electric-utility-residential-customersatisfaction-study



# Appendix E – State of the electric Public Appendix E – State of the electric Page 50 of 52, NLH 2017 GRA Survey 2015



# State of the electric utility survey 2015

- Utilities are entering an age where there is a need to better understand, engage with and ultimately service their customers
- Utilities largely engage their customers in traditional ways and only as needed
- Old conventional wisdom dictated that customers only cared about energy when their bill was high or there was a power outage
- Technological advancements and improved access play a huge role in how utilities can engage customers and give customers new reasons to care about and engage with their energy usage

The second secon	
Ways utilities engage its customers	%
Billing and customer support	72%
Community education and outreach	63%
Conservation tips and peer comparisons	58%
Energy usage data	58%
Service offerings	50%
Power outages	49%
Discount and rebate promotions	45%
Demand response events	34%
Other	2%

Is your utility's investment in customer engagement changing?	%
Yes, it is increasing	76%
No, it will stay the same	17%
Yes, it is decreasing	4%
My utility is not investing in customer engagement	2%

Source: State of the Electric Utility Survey – Utility DIVE, in association with Siemens



PUB-NLH-081, Attachment 1 Page 52 of 52, NLH 2017 GRA

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