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July 10, 2019

Via RESS

Ms. Kirsten Walli Board Secretary Ontario Energy Board PO Box 2319 2300 Yonge Street, 27th floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB File No. EB-2018-0165, Toronto Hydro-Electric System Limited ("Toronto Hydro") Custom Incentive Rate-setting ("Custom IR") Application for 2020-2024 Electricity Distribution Rates and Charges – Undertaking Responses for Day 6 of the Oral Hearing and Request for Corrections to the Oral Hearing Transcripts for Day 7

Please find enclosed Toronto Hydro's responses to undertakings provided on Day 6 (July 8, 2019) of the Oral Hearing, except undertakings J6.7 and J6.12 which Toronto Hydro expects to file tomorrow. Under separate cover, Toronto Hydro requests that a portion of the response to undertaking J6.6 be treated confidentially, pursuant to the OEB's Rules of Practice and Procedure.

Toronto Hydro has reviewed the transcript from Day 7 (July 9, 2019) and requests that the transcript be corrected for the following errors:

- Page 80, line 23 states: "1.351 million" should state "billion;"
- Page 112, line 20 states: "ways to he gauge customers" should state "ways to engage customers;"
- Page 122, line 15 states: "load support for innovation" should state "low support;"
- Page 122, line 26 states: "investoring and monitoring control equipment" should state "investing in monitoring and control equipment;"
- Page 147, line 11 states: "a multi-growth service" should state "a multi-year cost of service;"
- Page 161, lines 24-25 state: "your of our IR responses" should state "one of our IR responses;"
- Page 189, lines 15-16 state "...a mum of the metrics have continuity" should state "...a number of the metrics have continuity;" and

• Page 193, line 26 states "holing the averages steady" should state "holding."

Please contact me directly if you have any questions or concerns.

Respectfully,

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Daliana Coban Manager, Regulatory Law Toronto Hydro-Electric System Limited

cc: Lawrie Gluck, OEB Case Manager Michael Miller, OEB Counsel Parties of Record Amanda Klein, Toronto Hydro Andrew Sasso, Toronto Hydro Charles Keizer, Torys LLP

1	ORA	AI HFARII		AKING RES	PONSES TO	
1	-					
2	ASSOCIAT	ION OF M	1AJOR POW	ER CONSU	MERS IN ON	ITARIO
3						
4	UNDERTAKING NO. J	5.1:				
5	Reference(s):					
6						
7 8	To provide the external	costs for ON	∕I&A.			
9						
0	RESPONSE:					
1	Please refer to Table 1 below for OM&A costs attributable to the use of external					
2	resources during the current rate period.					
3						
4	Table 1: External OM&A Costs (\$ Millions)					
	2015 Actual 20	016 Actual	2017 Actual	2018 Actual	2019 Bridge	2020 Test
	84.8	94.1	105.2	115.9	104.6	107.3

The external costs presented in Table 1 above reflect the costs forecasted in the pre-filed 16 evidence submitted in August 2018. However, as noted in the response to undertaking 17 J5.2, Toronto Hydro increased its reliance on external service providers (U-Staff-166.12) in 18 2018 in order to complete the work required. This was necessary because of delays in 19 hiring certified and skilled trades and designated technical professionals due to labour 20 negotiations issues (U-VECC-87). As the effect of these delays will likely continue in 2019 21 and 2020 until the hiring is completed, Toronto Hydro expects that it will continue to 22 supplement its resource capacity through third-party service providers. Therefore, the 23 utility notes that the 2019 bridge and 2020 test year external OM&A costs are likely to be 24 higher than the forecasted amounts above. Based on its 2018 results, Toronto Hydro 25

- 1 expects that the OM&A shortfall due to compensation as a result of hiring delays will be
- 2 entirely offset by an increase in external services costs. Therefore, as noted in the
- 3 response to undertaking J5.2, the utility needs the requested level of OM&A funding to
- 4 complete the work planned for 2020 and beyond.

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
3	
4	UNDERTAKING NO. J6.2:
5	Reference(s):
6	
7	To confirm whether the resource utilization figure excludes overtime; if not, to provide
8	the breakdown; to provide a forecast figure for 2019 and 2020.
9	
10	
11	RESPONSE:
12	Toronto Hydro confirms that the resource utilization rates presented in the response to
13	part (h) of interrogatory 4A-AMPCO-101 exclude overtime. Please refer to Table 1 below
14	for the forecasted resource utilization rate for the 2019 Bridge and 2020 Test years.
15	
16	Table 1: 2019-2020 Resource Utilization Rate

2019 Bridge	2020 Test	
83.2%	83.3%	

ORAL HEARING UNDERTAKING RESPONSES TO
ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
UNDERTAKING NO. J6.3:
Reference(s):
To advise if there are any further human-resource metrics THESL would consider.
RESPONSE:
The table below summarizes key measures that the utility uses to manage employee
performance throughout different levels and parts of the organization.

Table 1: Key Measures to Manage Employee Performance

Measures	Description	Evidence Reference
Service Quality	Multiple electricity service quality requirements (ESQRS) in accordance with the OEB's Reporting and Record- keeping Requirements ("RRR").	Exhibit 1B, Tab 2, Schedule 3, pages 2-3.
Planned Capital Project Completion	This measures the completion of planned capital projects that are being delivered under the 2015-2019 CIR capital programs.	JTC2.23
Order to Operate / Hold Off Execution	This measures field execution productivity as it relates to the Control Center's preparation of Hold Offs and Orders To Operate in an efficient manner to allow crews in the field to proceed with their work.	Exhibit 1B, Tab 2, Schedule 1, pp. 13-15 of 29
Design Readiness	Design progress for the planned capital projects in next year's Execution Work Plan.	JTC2.23

Measures	Description	Evidence Reference
Attendance	Average days of absenteeism per employee	Exhibit 1B, Tab 2, Schedule 1, p. 11 of 29; 4A-AMPCO-96
TRIF	Total Recordable Injury Frequency	Exhibit 1B, Tab 2, Schedule 1, pp. 9-10; Exhibit 2B, Section C2.2.1, pp. 8-9.
Restricted Work Days	The number of calendar days to a maximum of 180 days during which an employee is subject to restricted work.	Exhibit 1B, Tab 2, Schedule 1, pp. 9-10
Resource Utilization Rate	Labour utilization measures the efficiency of the use of available labour hours. It is calculated as Total Time Charged by Employee to Projects divided by Total Payroll costs.	4A-AMPCO-101(h); JTC3.24

2 The measures above show that Toronto Hydro manages employee productivity through

various lenses, including the attainment of specific outcomes (e.g. Service Quality), work

4 execution efficiency (e.g. Planned Capital Project Completion, Design Readiness, Order to

5 Operate), and resource effectiveness (e.g. Labour Utilization Rate, Attendance, TRIF,

6 Restricted Work Days). The utility relies on its Management Control and Reporting

7 System (MCRS) to monitor and drive continuous improvement in performance on these

8 key measures.

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
3	
4	UNDERTAKING NO. J6.4:
5	Reference(s): Exhibit K6.1, page 46
6	
7	To provide the percentage of work orders assigned priority level P1 that have been
8	attained within the targeted timeline of 15 days for 2018 and to the end of 2019.
9	
10	
11	RESPONSE:
12	For 2018 year-end and 2019 year-to-date, 33 percent and 48 percent, respectively of
13	work requests assigned a priority level of P1 were attained within the suggested timeline
14	of 15 days. The work requests that were not attained within the suggested timeline were
15	attained within an average of 57 days for 2018 and 41 days for 2019.
16	
17	There are a number of external and operational factors that can result in longer timelines
18	to attain work requests. These include lead times to procure or arrange for the
19	installation of specialized equipment (including work protection methods), arranging
20	outages or isolations with customers to complete the work, coordination with third
21	parties (e.g. the City of Toronto or Toronto Police), and weather, environmental, and site-
22	specific constraints.
23	
24	In circumstances where the suggested timeline is not attainable, Toronto Hydro
25	undertakes necessary risk mitigation activities to ensure risks appropriately managed.
26	Examples of such activities include condition monitoring, enhanced communications,
27	additional maintenance, and deployment of barriers (e.g. oil absorbent pads).

In recent years, Toronto Hydro has been managing an increasing number of work 1 requests as noted in 4A-AMPCO-82 (for Corrective Maintenance) and Exhibit 2B, Section 2 E6.7, page 9 (for Reactive Capital). The volume of work has placed considerable pressure 3 on Toronto Hydro's ability to meet suggested timelines for attaining work requests. In 4 response to these operational pressures, Toronto Hydro has placed additional emphasis 5 on work request attainment, through its resources, management processes, measures, 6 7 reporting, and short-interval controls. The result of these incremental efforts is shown in 8 the relative improvements for 2018 to 2019 to the percentage of P1 work requests that were attained within 15 days, as presented above. 9

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
3	
4	UNDERTAKING NO. J6.5:
5	Reference(s):
6	
7	To file the SAP implementation review.
8	
9	
10	RESPONSE:
11	The SAP Implementation Review was an internal monitoring activity for the ERP Phase 1
12	project. The review, which was performed in four phases, did not culminate in an Internal
13	Audit report. Rather, the results were presented to the Audit Committee in two stages.
14	For Phases 1 and 2 of the review, the results were presented in November 2018, as shown
15	on page 4 of Toronto Hydro's response to interrogatory 1B-SEC-9, Appendix O. For
16	Phases 3 & 4 of the review, the results were presented to the Audit Committee in May
17	2019, as shown in Appendix A to this response.

Business Support Activities

During the Q1 2019 Internal Audit continued to support the business through four activities described below.

SAP Implementation Support – Phase 3 & 4

Project Aurora is a strategic initiative to implement SAP ERP that will replace Ellipse and 29 other legacy systems.

- Phase 3 (Data Migration) and Phase 4 (Security) fieldwork is complete and the memo to management has been finalized. The issues noted are summarized below.
- SAP Basis Administrator access: Access to certain sensitive transaction codes were not immediately removed from non-administrators following the ERP go-live. This access was not used and was detected through the existing controls and has been removed.
- Monitoring SAP Security Logs: Management has not yet implemented an application for monitoring SAP security logs. Management has committed to implement an application to monitor SAP security logs by May 31, 2019 to ensure that access threats in SAP are identified and resolved on a timely basis.
- Review of role changes: SAP role changes are not formally reviewed for potential segregation of duty conflicts, however, Management has committed to have this performed by May 30, 2019 using a third party application. In addition, this will be monitored internally on an ongoing basis by December 31, 2019.

Auditor General Information Requests

Internal Audit supported the business in responding to a request from the Auditor General. The request involved determining which City of Toronto properties had customer owned transformers and ensuring that related transformer billing credits were being applied to the appropriate City of Toronto Hydro accounts.

SAP Process Narratives Documentation – Phase 2

- During Phase 1 in late 2018, Internal Audit, in a joint effort with PwC, documented the process narratives and Risk and Control Matrices for more than 15 financial processes following the implementation of SAP.
- Internal Audit is supporting management explore the costs and benefits of Phase 2, which would be focused on documenting operational processes (e.g. Capital Projects, Master Data – Enterprise Asset Management, IT General Controls, Facilities Management, Work Force Planning, Personnel Performance, Fleet Management, etc.) in the post-SAP environment.
- Phase 2 would also include revising some of the financial processes covered in phase 1 that had not yet stabilized at the time they were first audited (e.g. Fixed Assets and IT General Controls).

KPMG Support Activities

- Internal Audit supports the external audit process (during Q4-Q2 period) by obtaining the information requested by KPMG from the applicable stakeholders within the business.
- Information obtained and provided to the external auditors by Internal Audit pertains primarily to Information Technology (e.g. Information Technology General Controls, System Access, System Automated Controls, System Change Management, etc.).

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
3	
4	UNDERTAKING NO. J6.6:
5	Reference(s):
6	
7	To refile undertaking J6.6 from the previous proceeding.
8	
9	
10	RESPONSE:
11	Toronto Hydro confirms that the contingency amount for the ERP Phase I project was
12	as the utility noted in its response to undertaking J6.6 for the last rate
13	application (EB-2014-0116).

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	N.D. HANN
3	
4	UNDERTAKING NO. J6.8:
5	Reference(s): Exhibit No. K6.2, Page 33
6	4B-Hann-128, Table 1
7	
8	To provide any guidance documents that go to how things get categorized.
9	
10	
11	RESPONSE:
12	This undertaking was taken in the context of the Root Cause definition table provided at
13	the above references as well as staff training.
14	
15	The root cause for failed equipment is determined by Toronto Hydro engineers. When
16	equipment fails and is brought in from the field for assessment, engineers carry out a
17	failure analysis that may include, but is not limited to, visual assessment of the failed
18	equipment, visiting the site of the failure, gathering of information from field personnel,
19	and mechanical, electrical, or chemical testing. Engineers work with internal stakeholders
20	as well as manufacturers, as required, to determine the root cause. This failure analysis
21	process is documented in the Equipment Failure Analysis Program procedure provided as
22	Appendix A to this response. The results of the analyses described above and in the
23	appendix are logged in Toronto Hydro's Equipment Failure Database, which is where the
24	root cause definitions are centralized.
25	
26	Engineers involved in Equipment Failure Analysis undergo specific training that enables
27	them to handle equipment in a safe manner, conduct equipment teardowns, and use

various testing tools. In some cases, equipment manufacturers or equipment testing 1 facilities are engaged to provide training. One example of this is the 'Distribution System' 2 Failure Investigations and Root Cause Analysis' training that was provided by Kinectrics 3 for Toronto Hydro engineers. Moreover, job shadowing plays a critical role in training 4 related to Equipment Failure Analysis. A new engineer with little to no experience with 5 Equipment Failure Analysis would shadow an experienced engineer to learn and 6 7 understand the application of procedures, tools and training in the analysis of failed 8 equipment and determination of a root cause of failure.

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Quality procedure QSP-QA-84001 supersedes SP-013 Revision 3



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EQUIPMENT FAILURE ANALYSIS PROGRAM

QSP-QA-84001

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REVISION LOG

Revision Number	Revision Date	Pages Affected	Description of Changes	Approved by
00	March 2016	-	-	Manager of Standards & Policy Planning

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1 PURPOSE

The Equipment Failure Analysis Program is a standardized process for investigating equipment failures and addressing related quality issues. Equipment failures occur on a regular basis and it is important to track them systematically to avoid an overload or mismanagement of data. Successful capture of the data will allow the Quality department to thoroughly analyze quality issues and their impact on the reliability of the distribution system. The end goal is to determine and carry out corrective and/or preventative actions for each issue in order to mitigate the possibility of a reoccurrence.

2 SCOPE

The Equipment Failure Analysis Program sets out to investigate equipment that fails prematurely, fails abnormally, or does not function as intended; determine a root cause; and to implement corrective and/or preventative actions in order to mitigate reoccurrence.

The Program receives input data from different sources, including, but not limited to: Tagged equipment returned from the field, emails and existing Toronto Hydro maintained databases, including but not limited to: Interruption Tracking Information System (ITIS) and System Response Report (SRR). Upon completion of the investigation, the root cause and recommended corrective actions are communicated to the affected stakeholders.

Issues relating to the following are documented, but no root cause analysis or reporting is completed:

- Equipment that has reached the end of its reported "Life Expectancy" (refer to "Toronto Hydro Electric System useful Life of Assets" report prepared by Kinectrics; report # K-418021-RA-0001-R002) and has not failed in an abnormal manner.
- Equipment containing asbestos and/or PCB.

3 TERMS AND DEFINITIONS

TERMS

DEFINITIONS

Failure Mode

The manner by which a failure is observed.

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Criticality	A relative measure of the consequences of a failure mode.
Root Cause	The most basic cause that can reasonably be identified that, when fixed, will mitigate the problem's reoccurrence.
Non-Conformance	The nonfulfillment of a specified requirement.
Corrective Action	Corrects a non-conformance that has already occurred.
Preventative Action	Measures put in place to address the potential for a non- conformance to occur.
Originator	The person that raised the issue or returned the defective equipment to the attention of the Quality department.

4 ACRONYMS

EFA	Equipment Failure Analysis
EFD	Equipment Failure Database
DRP	Directly Responsible Person
WIP	Work In Progress
RCA	Root Cause Analysis
S/N	Serial Number
ITIS	Interruption Tracking Information System
SRR	System Response Report
DETS	Defective Equipment Tracking System
WO	Work Order
NCR	Non-Conformance Report
COPQ	Cost of Poor Quality
FLIS	Feeder Loading Information System

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5 ROLES & RESPONSIBILITIES

5.1 Management

Management is responsible for the approval of this procedure.

5.2 Quality Supervisor

The Quality Supervisor is responsible for the following:

- Approval of this procedure;
- Implementation and execution of this procedure;
- Overseeing resolution strategies for any escalation of issues and/or inquiries.

5.3 Field Crews

The Field Crews are responsible for the following:

- Identifying equipment failures in the field.
- Filling out the Equipment Return Tag (refer to Appendix A) with removal details, affixing it to the equipment.
- Returning the tagged equipment to the designated Equipment Failure Areas (refer to Appendix B) at one of the Toronto Hydro warehouses. Notifying the Quality department for large equipment that cannot be returned.
- Providing assistance and additional information as requested by the Quality Representative.

5.4 Quality Representative

The Quality Representative is responsible for the following:

- Logging failed equipment returned to each of the Toronto Hydro warehouses into the EFD on a weekly basis.
- Notifying the Field Crew by standardized email that the failed equipment has been logged into the EFD.
- Leading the equipment failure investigation by obtaining detailed information relevant to the equipment failure and determining the equipment failure mode.
- Prioritizing investigations based on the severity of the issue.
- Documenting all relevant information in the EFD as it is gathered.
- Working with the Originator and affected stakeholders within Toronto Hydro to obtain additional information.
- Conducting a site visit, if required.
- Performing a root cause analysis and establishing corrective and preventative actions, as required.

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- Preparation, review and closure of Non-Conformance Reports per the Non-Conformance Reporting Procedure, as required.
- Communicating the results of the investigation with affected stakeholders.

5.5 Supply Chain Representative

The Supply Chain Representative is responsible for the following:

- Coordinating with the Supplier of defective material and the warehousing Logistics Handler in order to obtain a Return Material Authorization (RMA) and a Shipping Notice required to ship the defective material back to the Supplier for root cause analysis and repair.
- Participate in communications between the Quality Representative and the manufacturer of defective material.

5.6 Logistics Handler

The Logistics Handler is responsible for the following:

- Placing defective equipment into quarantine, as required by the Quality Representative.
- Issuance of Shipping Notices when a defective material is to be returned to Supplier's facility for root cause analysis.
- Scrapping equipment when equipment failure investigation is complete or is not required.

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6 EQUIPMENT FAILURE ANALYSIS PROCESS FLOWCHART

Field Crews	Quality Representative	Supply Chain	Logistics Handler
Fill out an Equipment Return Tag and attach it to the failed equipment. Deposit the failed equipment at one of the Equipment Failure Areas.	Obtain a request to investigate an equipment failure or issue. Log the equipment return information or issue into the Equipment Failure Database, initiating investigation. Has the equipment failed in an abnormal NO	Representative	
	manner? YES Has the equipment reached its reported "End of Life" or does the equipment contain asbestos or PCB? Begin Root Cause Analysis of the failed equipment. Initiate Quality Alert YES Does the equipment	YES	Initiate Scrap Process.
	Process QSW-QA- 83001. Process QSW-QA- failure meet the criteria for a Quality Alert? NO Does the failed equipment need testing/ analysis that cannot be done in-house? NO NO Is the equipment failure related to a supplier quality issue? Finalize Root Cause Analysis.	YES Contact the equipment manufacturer or a 3 rd party for a Retum Material Authorization. A quote will – be obtained and approved prior to preparation of the RMA, if required. Obtain RCA report from manufacturer or 3 rd party and forward it to Quality	Prepare Shipping Notice and package failed equipment for shipping.
YES	NO Prepare Proposed Corrective and Preventative Actions Initiate Non- Conformance Reporting Process QSP-QA-83001. Communicate investigation results with Originator and affected stakeholders and close EFD investigation.	Representative.	
	VES Does the equipment failure meet the criteria for a Quality Alert? NO NO Initiate Major Equipment Re-Use Consent Process QSP- QA-72101.	NO	Initiate Scrap Process.

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7 EQUIPMENT FAILURE ANALYSIS PROCESS

7.1 Return of Defective Equipment and Logging

The Originator of the issue will fill out an Equipment Return Tag (refer to Appendix A) for each piece of failed equipment and then securely attach the tag to the equipment. The Originator will return the equipment to one of the Toronto Hydro warehouses and place it in the designated Equipment Return Area.

Alternatively, for equipment that cannot be removed, a notification can be sent to the Quality department to initiate an investigation.

A representative from the Quality department will visit each Toronto Hydro warehouse on a weekly basis in order to document and photograph each piece of returned equipment and log them into the Equipment Failure Database (EFD). The investigation will be assigned to a Quality Representative.

The Equipment Failure Analysis Program may also receive input data from various other sources, including, but not limited to:

- Emails Formal and informal notifications of equipment failures and/or quality issues.
- Existing Databases Searches through Interruption Information Tracking System (ITIS), System Response Reports (SRR) and Defective Equipment Tracking System (DETS) to look for useful equipment failure data.
- Toronto Hydro Legal & Claims Departments Request for root cause analysis as part of their case file.
- Environment, Health and Safety (EHS) Request for assistance with root cause analysis as part of their EHS investigation.
- Suppliers/Manufacturers Product recalls and non-conformances.
- Quality Hotline

7.2 Gather Information and Prioritize

The Quality Representative assigned to the investigation will review the Equipment Return Tag information, the photographs, along with any relevant information derived from other Toronto Hydro sources in order to determine an action plan for the investigation and to prioritize. The other sources of information include, but not limited to: Ellipse, GEAR, ITIS, SRR, DETS, FLIS, As Constructed Drawings, and Maintenance History.

If the Quality Representative determines that the equipment failure may relate to a systematic issue or a safety concern, a Quality Alert may be issued to alert any

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stakeholders that would be affected. In this case, the Quality Alert Process (refer to QSW-QA-83001) will be followed.

7.3 Analysis of Equipment Failure

The Quality Representative will carry out their analysis by observing the returned equipment; speaking with any witnesses, Grid Response crews, and Reactive crews; and/or coordinating a site visit in order to obtain as much information as possible.

The Quality Representative may require mechanical, electrical, or chemical testing in order to determine the failure mode. If the tests cannot be performed by Toronto Hydro staff or if the required equipment is not available, testing may be commissioned by the equipment manufacturer or a 3rd party at the request of the Quality Representative.

When the equipment failure mode has been identified, the Quality Representative will work with other groups in order to determine the probable root cause. These groups can be internal departments to Toronto Hydro as well as Suppliers, manufacturers, contractors, or other.

When the probable root cause identified is a process issue that is not a supplier quality issue, a list of corrective and preventative actions will be proposed in order to mitigate the reoccurrence of the issue. For supplier quality issues, the Non-Conformance Procedure (refer to QSP-QA-83001) will be followed.

Examples of Actions for a Process Issue:

- Request the assistance of the Originator or other crews in order to correct the issue in the field.
- Issue a Quality Alert to inform crews of the issue and of any required actions.
- Review training procedures and recommend refresher training for Toronto Hydro staff and approved contractors, if necessary.
- Initiate process improvement or change (I.e Construction Standards, Technical Specifications, Standard Design Practice, etc.)

7.4 Investigation Results and Closure

Upon completion of the investigation, the root cause and recommended corrective and preventative actions are communicated via one or more of the following:

• Notification Email – Addressed to the Originator and their Supervisor.

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- Equipment Failure Analysis Report Addressed to the Originator, their Supervisor and other affected stakeholder, as required.
- Quality Alert Process (refer to QSW-QA-83001).

If the Quality Representative determines through root cause analysis that the equipment failure was caused by the Supplier or manufacturer, an NCR will be completed and the Non-Conformance Procedure (refer to QSP-QA-83001) will be followed.

If the Quality Representative determines that the equipment may be repaired or refurbished, the Major Equipment Re-Use Process (refer to QSP-QA-72101) will be followed.

8 MONITOR AND MEASURE

The Quality Representative will monitor the results entered in the EFD to identify any trends. Examples of some grouping for trends are:

- By Equipment Type
- By Equipment Rating
- By Geographical Zone
- By Station, Bus or Feeder

Recommendations may arise as trends are discovered and will be reported to affected stakeholders as they are identified.

9 **REPORTING**

An Equipment Failure Database report will be generated bi-annually in Powerpoint format and uploaded to the Quality section on Toronto Hydro's intranet, Plugged In. The report will summarize the findings within the Equipment Failure Analysis program and to illustrate potential trends. Key stakeholders may be engaged in regards to specific issues, as required, in order to share information and trending information to drive continuous improvement.

EFD information will be made available in order to compile the Supplier/Manufacturer Quality Scorecards bi-annually as per the Supplier Assessment and Scorecard Work Instruction (refer to QSW-QA-84001).

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10 **REFERENCES**

Non Conformance Reporting procedure; QSP-QA-83001

Supplier Assessment and Scorecard Work Instruction; QSW-QA-84001

Major Equipment Re-Use Consent Process; QSP-QA-72101

Quality Alert Process; QSW-QA-83001

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APPENDIX A – EQUIPMENT RETURN TAG

	TORONTO	
•	EQUIPMENT RETURN TAG	
	For immediate assistance or inquiries: Call: 416-542-3400 (x23400) Or Email: qualityhotline@torontohydro.com We will contact you once the equipment is received.	

Figure 2: Front of Equipment Return Tag

Normal Equipment Return (Major Assets Only)	No XX1 Equipment Failure Legal/Claims Quality Issue	
Name:	_Dept:	
Date:	_ Phone #:	
Address/Pole #:		
WO/SRR #:		
Problem Description:		
Please provide as mu	ch description as possible.	

Figure 3: Back of Equipment Return Tag

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APPENDIX B – EQUIPMENT RETURN AREAS

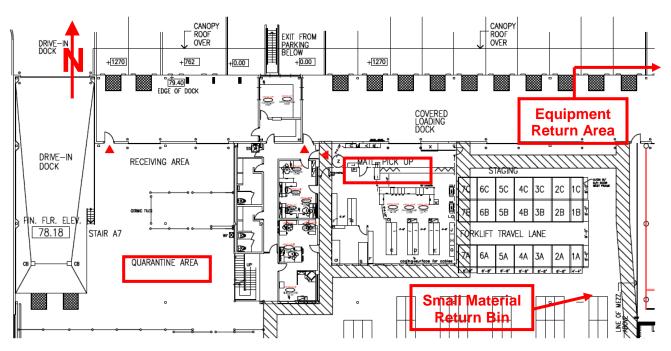


Figure 4: 500 Commissioners Street (Toronto) Warehouse

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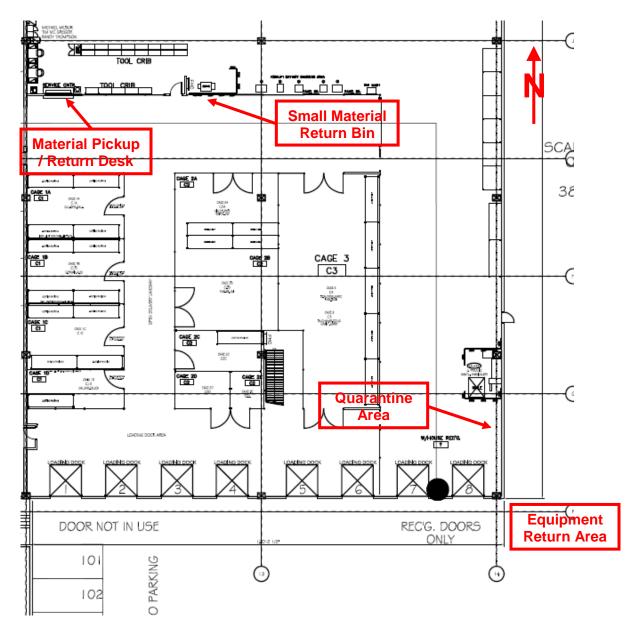


Figure 5: 601 Milner (Scarborough) Warehouse

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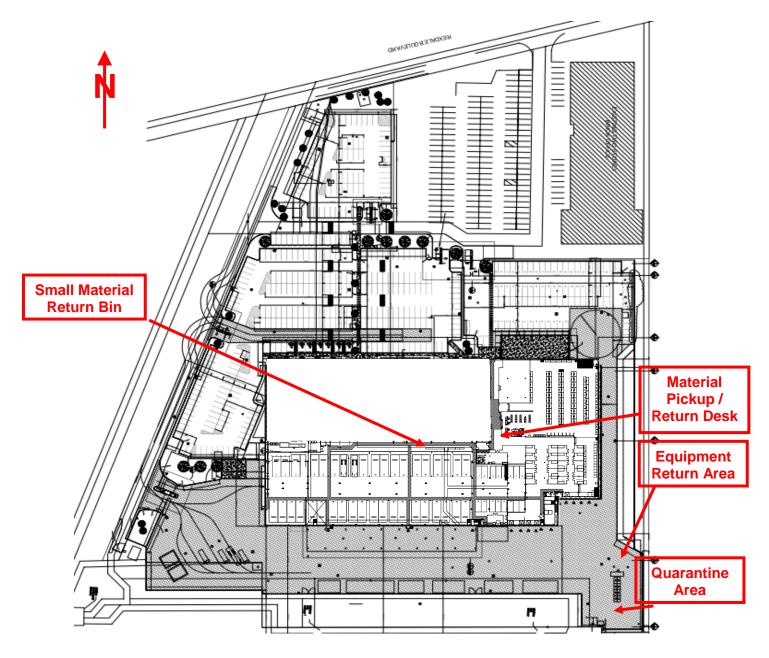


Figure 6: 71 Rexdale (Etobicoke) Warehouse

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	N.D. HANN
3	
4	UNDERTAKING NO. J6.9:
5	Reference(s):
6	
7	To provide the criteria for invoking mutual assistance.
8	
9	
10	RESPONSE:
11	When deciding whether or not to request mutual assistance in order to prepare for a
12	pending event or respond to an ongoing event, Toronto Hydro would consider the factors
13	outlined below.
14	
15	Pre-event:
16	Potential risk to public safety;
17	• Type of anticipated event;
18	• Weather forecast (magnitude of sustained wind speeds, wind gusts, precipitation,
19	impact area, ice accumulation, confidence, duration of extreme weather event,
20	etc.);
21	• Seasonal factors (e.g. foliage, groundwater saturation, etc.);
22	Likelihood of damage to Toronto Hydro plant;
23	Anticipated availability, capability and proximity of mutual assistance resources;
24	Known Toronto Hydro resource limitations; and
25	Anticipated cost of pre-staging mutual assistance resources and anticipated
26	customer benefit.

1 <u>Post-event:</u>

- Risk to public safety;
- Type of event;
- Number of customers interrupted;
- Resource capacity and type vs estimated amount and complexity of damage;
- Estimated amount of time needed to restore all customers;
- Availability, capability and proximity of mutual assistance resources; and
- Anticipated cost of utilizing mutual assistance resources and anticipated customer

9 benefits.

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	OEB PANEL
3	
4	UNDERTAKING NO. J6.10:
5	Reference(s):
6	
7	To advise what undertaking would show the cost per customer changes, the drivers that
8	are associated with costs per customer.
9	
10	
11	RESPONSE:
12	Please refer to Appendix A to this response for the total and per-customer OM&A costs
13	for the 2015 to 2020 period. In order to facilitate year-over-year comparability, the
14	OM&A costs have been normalized for the following accounting changes:
15	• The inclusion of contact voltage scanning costs in OM&A as of 2018;
16	• The inclusion of monthly billing costs in OM&A as of 2020; and
17	• The implementation of the accrual method of accounting for OPEB as of 2020.
18	
19	Toronto Hydro notes that on a normalized view, the average annual increase in OM&A
20	cost per customer over from the 2015 test year to the 2020 test year is less than 1
21	percent. The utility has achieved this result by finding efficiencies and productivity in its
22	OM&A programs, as detailed throughout the evidence filed in this proceeding.

J6.10-Appendix A Normalized Recoverable OM&A Cost per Customer

	Last Rebasing Year (2015 Board Approved)	2015 Actuals	2016 Actuals	2017 Actuals	2018 Actuals	2019 Bridge Year	2020 Test Year	Variance (2020 Test Year vs 2015 Actuals)	Compounded Growth over 2015 Actuals ⁶
Reporting Basis									
OM&A Costs									
O&M	-	\$ 115.7	\$ 120.0	\$ 119.3	\$ 131.7	\$ 127.3	\$ 127.1	\$ 11.5	1.9%
Admin Expenses	-	\$ 128.3	\$ 129.9	\$ 135.9	\$ 136.6	\$ 140.9	\$ 150.4	\$ 22.1	3.2%
Total Recoverable OM&A from Appendix 2-JB	\$ 243.9	\$ 244.0	\$ 249.8	\$ 255.3	\$ 268.3	\$ 268.2	\$ 277.5	\$ 33.5	2.6%
Normalization of OM&A Expenses									
Monthly Billing ¹	-	-	-	-	-	-	\$ 5.0	\$ 5.0	-
Cash vs Accrual OPEB ²	-	-	-	-	-	-	\$ 2.3	\$ 2.3	-
Contact Voltage ³	-	-	-	-	\$ 1.6	\$ 2.0	\$ 1.9	\$ 1.9	-
Total Normalized OM&A	\$ 243.9	\$ 244.0	\$ 249.8	\$ 255.3	\$ 266.7	\$ 266.2	\$ 268.3	\$ 24.4	1.9%
Number of Customers ^{4,5}	747,812	747,812	759,032	765,560	769,691	776,787	784,331	36,519	1.0%
Normalized OM&A per customer	326.2	326.3	329.1	333.4	346.6	342.6	342.1	15.8	1.0%

Notes:

- 1 Toronto Hydro recorded the incremental costs and savings from the mandatory transition to monthly billing for non-seasonal residential and all GS<50 kW customers in the Monthly Billing Deferral Account costs pursuant to the OEB's decision and order (EB 2014-0116) dated December 29, 2015. Starting 2020, monthly billing costs are included as part of OM&A. For further information, refer to Exhibit 9, Tab 1, Schedule 1 and Exhibit 4A, Tab 2, Schedule 14.
- In the 2015-2019 plan period, Toronto Hydro accounts for OPEBs on a cash rather than on an accrual basis for rate making purposes as directed by the OEB in its decision and order (EB 2014-0116) dated December 29, 2015. On September 14, 2017, the OEB issued its final report on the regulatory treatment of pension and OPEB costs and established the use of accrual accounting for OPEB as the default method on which to set rates for pension and OPEB amounts in cost-based applications. Therefore, Toronto Hydro proposes to account for OPEBs on an accrual basis for rate making purposes for the 2020 test year. For further information, refer to Exhibit 4A, Tab 2, Schedule 20.
- 3 As a result of the implementation of the new accounting standard for leases (IFRS16) in 2018, the costs associated with contact voltage scanning over 2018 to 2020 are presented as part of OM&A. Prior to the implementation of the new standard, these costs were capitalized and amortized over the life of the contract and included as part of the depreciation expense for revenue purposes. This change in presentation does not have a significant impact on the revenue requirement. For further information, refer to Exhibit 4A, Tab 2, Schedule 2.
- 4 The method of calculating the number of customers is the year end method
- 5 The number of customers and the number of FTEs should correspond to mid-year or average of January 1 and December 31 figures.
- 6 Please refer to interrogatory response 4A-AMPCO-69 on the formula for calculating the compounded growth.

1	ORAL HEARING UNDERTAKING RESPONSES TO
2	OEB PANEL
3	
4	UNDERTAKING NO. J6.11:
5	Reference(s):
6	
7	To provide the technical conference transcript reference about vault maintenance and
8	the number of inspections.
9	
10	
11	RESPONSE:
12	Toronto Hydro believes that this undertaking asks for a reference to the technical
13	conference transcript where Toronto Hydro communicated that it is not proceeding with
14	the proposed revision to the Condition of Service regarding the Person-in-Attendance
15	vault entry charge.
16	
17	Appendix A in this response includes the requested reference from Day 2 of the Technical
18	Conference. In addition, Appendix B provides a copy of the letter that was sent to
19	affected customers notifying them of Toronto Hydro's decision not to proceed with the
20	proposed change in Conditions of Service.
21	
22	The interrogatory reference requested is 4A-GTAA-7.

comes to specific inspection programs, employs a consistent 1 2 resource group such that we get consistent results in the 3 inspection forms. And if we were to begin using persons in 4 attendance to also do that work, that might begin to change 5 the quality of the specific observations that are coming out of the inspection. 6 7 So there is a number of reasons why trying to 8 piqqyback inspections on what you are talking about won't 9 necessarily be a more efficient approach. 10 MR. QUINN: Thank you for your detailed answer. I think, Mr. Millar, I will reserve the rest for a later 11 12 So thank you very much, panel. That is the end of date. 13 our questions for this panel. 14 MR. MILLAR: Thank you, Mr. Quinn. 15 Mr. Rubenstein, did you still have some follow-up 16 questions? 17 CONTINUED EXAMINATION BY MR. RUBENSTEIN: MR. RUBENSTEIN: Yes, I do. First, can I just ask, 18 has the revisions to section 1.7.5 of the Conditions of 19 20 Service gone into effect, the ones proposed to be effective 21 February 1st? 22 MR. TAKI: No, they have not. 23 MR. RUBENSTEIN: Is there a plan for them to go into 24 service at some point? Or is it, you are waiting for the 25 Board decision? Or what is the status? 26 MR. TAKI: At this point, and based on the feedback 27 we've received from customers, we will not be proceeding 28 with the proposed changes.

ASAP Reporting Services Inc.

(416) 861-8720

Toronto Hydro-Electric System Limited EB-2018-0165 Oral Hearing Schedule J6.11 Appendix B FILED: July 10, 2019 (1 page)



March 26, 2019

Dear Vault Owner,

Re: Proposed changes to Section 1.7.5 of our Conditions of Service (COS) relating to vault access

In January, we indicated that as of February 1, 2019, Toronto Hydro would provide one Person in Attendance (PIA) onsite – free of charge – for a maximum of two hours, once every 12 months, for customers who are accessing vaults containing Toronto Hydro equipment solely for the purpose of mandatory fire equipment inspections. Any other inspections that require a PIA would be subject to charges to cover the cost of the PIA.

After careful consideration, Toronto Hydro has decided to defer any change to the COS regarding vault access fees to 2020. We are therefore maintaining the status quo of one free vault access every 12 months.

While we believe the concept of limiting free access to vaults solely for the purposes of fire inspections is prudent and strikes a balance of fairness between different customers, upon further reflection we want to better understand our customer feedback around this issue.

We apologize for any confusion this has caused. If you have any questions or comments, please email us at <u>ConditionsofService@torontohydro.com</u> with reference to Section 1.7.5.

Best Regards,

Toronto Hydro