ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998,* S.O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF an application under section 74 of the Act by Horizon Utilities Corporation for a licence amendment.

HORIZON UTILITIES CORPORATION

COMPENDIUM OF DOCUMENTS TO FACILITATE EXAMINATIONS

FEBRUARY 15, 2013

Dennis M. O'Leary
AIRD & BERLIS LLP
Barristers and Solicitors
181 Bay Street, Suite 1800
Box 754
Toronto, ON M5J 2T9

Lawyers for Horizon Utilities Corporation

INDEX

HORIZON EXHIBIT K2.2

Sent: Wednesday, February 22, 2012 12:51 PM
To: DAVIDSON Robert
Cc: spicer@multi-area.com <spicer@multi-area.com>
Subject: Contact Information for Developer for Summit Phase 7

Rob Davidson
Hydro One
(905) 681-4281 (Work)

As per our telephone conversation last Friday, please find below the contact information for the developer for the Summit 7 property:

Mr. Steve Spicer
Multi-Area Developments Inc
301 Fruitland Road, Unit 10
Stoney Creek, Ontario
L8E 5M1
(905) 664-2623
spicer@multi-area.com

Regards,

Daniel Roberge, P.Eng.,
Manager, Capital Projects
Horizon Utilities Corporation
55 John Street North, Hamilton, Ontario, L8N 3E4
Tel: (905) 521-4904
Fax: (905) 523-5764
daniel.roberge@horizonutilities.com

HORIZON EXHIBIT K2.2

From: DAVIDSON Robert
Sent: Wednesday, February 22, 2012 1:03 PM
To: HALL James
Subject: Fw: Contact Information for Developer for Summit Phase 7

James;
I'm out of office
Can you forward this info asap to internal Dx contacts as previously advised so they in turn can forward to developer the project set up package that was referenced.
Robert

From: HALL James
Sent: Wednesday, February 22, 2012 1:18 PM
To: MESSERVEY Gordon
Cc: YAKIMCHUK Michael
Subject: FW: Contact Information for Developer for Summit Phase 7

Gord,

Please see email forwarded by Robert Davidson with contact information for the developer wrt a SAA approach from Horizon. The Dx Issues group declined to accept the SAA without information regarding the development and instructed Horizon to inform the developer to apply for an offer to connect (i.e. follow the process). Would you please see that the developer receives a package.

Thanks,

Jim

HORIZON EXHIBIT K2.2

From: MESSERVEY Gordon
Sent: Wednesday, February 22, 2012 3:47 PM
To: HALL James
Cc: YAKIMCHUK Michael
Subject: RE: Contact Information for Developer for Summit Phase 7

Hi Jim,

I have no problems sending the customer a package and this will most likely be sent out to them tomorrow.

Based on the information I have seen on this site would this project not fall into the category or be considered one that we would support the SAA on? Isn't there approx $400K of expansion/enhancement just to get our supply to the site?

Gordon Messervey
Supervisor Planning & Design
Hydro One Networks Inc.
420 Welham Road, BAF
Barrie, Ontario, L4N 8Z2
☎ (705) 719-5774
mailto:gordon.messervey@HydroOne.com

HORIZON EXHIBIT K2.2

From: HALL James
Sent: Friday, February 24, 2012 2:14 PM
To: JORDAN Cheryl
Cc: DAVIDSON Robert
Subject: FW: Contact Information for Developer for Summit Phase 7
Importance: High

Cheryl,

I noticed in an email chain that Gord sent me that you were the one sending out a package to a developer – would Gord have also asked you to send out this package? Robert Davidson has been contacted by the developer and it seems that they have not yet received a package. Would you be in a position to track down the person Gord would have asked to forward the package or to send a package to the developer? You'll see the email address of the developer below. I believe Robert would appreciate being copied on that email.

Thanks,

Jim

From: DAVIDSON Robert
Sent: Friday, February 24, 2012 2:18 PM
To: HALL James; JORDAN Cheryl
Subject: RE: Contact Information for Developer for Summit Phase 7

To clarify, I don't know if the developer has been contacted.

He called me and in return I only left a message with him.

But we should be concerned if he has not yet been contacted about the "package".

Robert

HORIZON EXHIBIT K2.2

From: cheryl.jordan@HydroOne.com [mailto:cheryl.jordan@HydroOne.com] **On Behalf Of** subdivision@HydroOne.com
Sent: February-24-12 2:46 PM
To: rob.davidson@HydroOne.com; jim.hall@HydroOne.com
Cc: spicer@multi-area.com; subdivision@HydroOne.com; gordon.messervey@HydroOne.com
Subject: RE: Contact Information for Developer for Summit Phase 7

Pls see the attached email where Dale Webster has sent your developer our initial subdivision package.

Thanks,

Cheryl Jordan
Hydro One
Engineering Support Assistant
Distribution Planning
420 Welham Road, Barrie, ON L4N 8Z2
phn - 1-705-719-5739
phn - 1-866-272-3330 ext 5739

HORIZON EXHIBIT K2.2

From: Steve Spicer [mailto:spicer@multi-area.com]
Sent: February 24, 2012 3:58 PM
To: subdivision@HydroOne.com
Cc: rob.davidson@HydroOne.com; jim.hall@HydroOne.com; subdivision@HydroOne.com; gordon.messervey@HydroOne.com
Subject: RE: Contact Information for Developer for Summit Phase 7

Hi Cheryl

Thanks for the email. I received the package from Dale yesterday.

We really don't want to go through this process. It is a time consuming and expensive process for us. We went through it for the first phase of Summit Park about 7 years ago. Since then all 6 plans of subdivision and 2 plans of condominium have been serviced by Horizon. It doesn't make sense to us to change service providers part way through our development.

We have requested that Horizon apply to the OEB for a service area amendment. (letter attached).

We ask that you please consider not opposing the application.

Please let me know your thoughts on this matter.

Thanks

Steve Spicer

HORIZON EXHIBIT K2.2

MULTI-AREA
DEVELOPMENTS INC.

January 24, 2012

Attn: Mr. Daniel Roberge
Manager, Capital Projects
Horizon Utilities Corporation
P.O. Box 2249 Station LCD 1
Hamilton, ON L8N 3E4

Dear Daniel,

RE: Request for Electrical Supply

This letter will confirm the request of Multi-Area Developments Inc. to Horizon Utilities Corporation for the supply of electricity to lands at the South East corner of Rymal Road East and Fletcher's Road. The anticipated date that power is requested is April 1, 2012.

Multi-Area Developments Inc. supports Horizon Utilities Corporation intention to proceed with a Service Area Amendment application to the Ontario Energy Board without a hearing.

We understand that Hydro One Networks Inc. is aware of this request for a Service Area Amendment.

Should you require any additional information, please contact me at your convenience.

Sincerely,

Steve Spicer
Development Manager

301 FRUITLAND RD. UNIT 10, STONEY CREEK, ONTARIO L8E 5M1 / TEL. 905-664-2623 / FAX 905-662-8401
WEBSITE www.multi-area.com E-MAIL desantis@multi-area.com

HORIZON EXHIBIT K2.2

From: Steve Spicer [mailto:spicer@multi-area.com]
Sent: March 19, 2012 9:51 AM
To: Roberge, Daniel
Subject: Summit Park Phase 7

Hi Dan,

I spoke with Gordon Messervey at Hydro One on Friday afternoon. He seems to understand the situation and would like another week to finish reviewing our request.

Steve

From: Roberge, Daniel [mailto:daniel.roberge@horizonutilities.com]
Sent: March-19-12 9:54 AM
To: Steve Spicer
Subject: RE: Summit Park Phase 7

Do you feel that Hydro One could potentially reply with a position where they will not contest?

We may want to postpone our application until then.

Please let me know your thoughts,

Daniel

From: Steve Spicer [mailto:spicer@multi-area.com]
Sent: March 19, 2012 10:00 AM
To: Roberge, Daniel
Subject: RE: Summit Park Phase 7

Hi Dan

Yes, I believe that there's a good chance that they'll decide not to contest.

Steve

HORIZON EXHIBIT K2.2

From: Roberge, Daniel
Sent: Monday, March 19, 2012 10:05 AM
To: Innis, Ian; Gribbon, Jamie
Cc: Lerette, Kathy; Butler, Jim
Subject: FW: Summit Park Phase 7

Based on Steve's note below, I suggest we give Hydro One a few more days to respond to Steve since the SAA would have to be re-submitted.

Daniel

From: Innis, Ian
Sent: March 19, 2012 10:14 AM
To: Butany-DeSouza, Indy
Subject: FW: Summit Park Phase 7

Indy,

FYI.

Ian

HORIZON EXHIBIT K2.2

From: Roberge, Daniel [mailto:daniel.roberge@horizonutilities.com]
Sent: March-27-12 11:14 AM
To: Steve Spicer
Subject: RE: Summit Park Phase 7

Hi Steve:

Any developments from Hydro One?

Daniel

From: Steve Spicer [mailto:spicer@multi-area.com]
Sent: March 27, 2012 11:22 AM
To: Roberge, Daniel
Subject: RE: Summit Park Phase 7

Sent an email to Gordon Messervey yesterday but haven't heard back.

I'll let you know as soon as I've heard something.

Steve

HORIZON EXHIBIT K2.2

From: Roberge, Daniel
Sent: April 16, 2012 9:43 AM
To: 'Steve Spicer'
Subject: RE: Summit Park Phase 7

Good morning Steve,

Any updated from Hydro One?

Please let me know,

Daniel Roberge, P.Eng.,
Manager, Capital Projects
Horizon Utilities Corporation
55 John Street North, Hamilton, Ontario, L8N 3E4
Tel: (905) 521-4904
Fax: (905) 523-5764
daniel.roberge@horizonutilities.com

From: Roberge, Daniel [mailto:daniel.roberge@horizonutilities.com]
Sent: April-17-12 7:37 AM
To: Steve Spicer
Subject: RE: Summit Park Phase 7

Hi Steve:

I just listened to your voicemail. I will be at our Nebo facilities this morning for some meetings. I will call between meetings.

I can come see you also, if that works for you.

Daniel

HORIZON EXHIBIT K2.2

From: Steve Spicer [mailto:spicer@multi-area.com]
Sent: April 18, 2012 12:19 PM
To: Roberge, Daniel
Subject: RE: Summit Park Phase 7

FYI

Hi Steve,

As promised here is a Planning Level estimate for the costs to service the development known as Summit Phase 7. As discussed if you would like us to prepare the detailed design and costing we would require you to pay the $50/lot upfront but we would refund these fees if this service territory was to be changed to Horizon.

Planning Level Estimate

Connection Assumptions (Please note Revenue and O&M $'s will change if different Values are used)
Rate Class - R1, Home Size - 2000sqft, Loading - Base Load +AC

Capital Costs for Installation Work

U/G Internal Installation Ball Park Average $3000/lot (Excluding Civil costs)

Revenue and O&M Calculations

PV Revenue/Lot based on Connection Assumptions = Approx $6250
PV O&M/Lot based on Connection Assumptions = Approx $4300
Hydro One will have $1950/lot to contribute towards offsetting developer capital costs

Scenario Assuming all primary and secondary installed UG

Capital Costs $3000/lot X 284 lots = $852,000
Hydro Contribution $1950/lot X 50 lots = $553,800
Developer's Capital Contribution $852,000 - $553,800 = **$298,200**

Please let me know if you have any questions.

Regards,

Gordon Messervey
Supervisor Planning & Design
Hydro One Networks Inc.
420 Welham Road, BAF
Barrie, Ontario, L4N 8Z2
☎ (705) 719-5774
mailto:gordon.messervey@HydroOne.com

HORIZON EXHIBIT K2.2

From: Roberge, Daniel [mailto:daniel.roberge@horizonutilities.com]
Sent: Wednesday, April 25, 2012 2:20 PM
To: URBANOWICZ Alex
Cc: spicer@multi-area.com
Subject: FW: Summit Park Phase 7

Alex,

As per our telephone conversation, Horizon Utilities would like to know Hydro One's position on this application.

Mr. Spicer of Multi-Area needs to enter into an agreement soon with an LDC to support his construction dates.

My understanding is that Hydro One does not have the assets in place to support this development.

Do you have any more actions planned beyond providing the high-level estimate below?

Please let me know,

Daniel Roberge, P.Eng.,
Manager, Capital Projects
Horizon Utilities Corporation
55 John Street North, Hamilton, Ontario, L8N 3E4
Tel: (905) 521-4904
Fax: (905) 523-5764
daniel.roberge@horizonutilities.com

HORIZON EXHIBIT K2.2

From: alex.urbanowicz@hydroone.com [mailto:alex.urbanowicz@hydroone.com]
Sent: April 26, 2012 3:30 PM
To: Roberge, Daniel
Cc: spicer@multi-area.com; rob.davidson@HydroOne.com
Subject: RE: Summit Park Phase 7

Daniel
Thanks for the information. I have checked into the situation and found out that Horizon's Neil Freeman and Jamie Gribbon have also been involved in this matter. Jamie Gribbon has been advised that Hydro One doesn't have any details regarding Horizon's offer to connect and that we need this information as part of our due diligence process.

We need this information to compare to our own information before a decision can be made. Please provide me with the information and I'll ensure that it gets to the appropriate Hydro One parties. Thanks.

Alex Urbanowicz
Account Executive
Hydro One
850 Pond Mills Rd.
London On
N5Z 4R2
office:519-649-3727
cell:519-671-3233
fax:519-690-3044

HORIZON EXHIBIT K2.2

From: Roberge, Daniel
Sent: April 27, 2012 3:26 PM
To: Gribbon, Jamie
Cc: Innis, Ian; Butler, Jim; Lerette, Kathy; Freeman, Neil; Butany-DeSouza, Indy
Subject: FW: Summit Park Phase 7

Do we need to provide Hydro One with a copy of the Offer to Connect?

Please keep in mind that Hydro One has not provided an Offer to Connect. What they have provided is a Planning Level estimate.

Please advise,

Daniel

HORIZON EXHIBIT K2.2

From: Butany-DeSouza, Indy
Sent: Friday, April 27, 2012 04:11 PM
To: Roberge, Daniel; Gribbon, Jamie
Cc: Innis, Ian; Butler, Jim; Lerette, Kathy; Freeman, Neil
Subject: RE: Summit Park Phase 7

Daniel
We do not need to provide Hydro One an Offer to Connect. Hydro One does however need to provide such to the customer. We would obtain this from the load customer (Steve Spicer) and include it in our application. We need such for the application to be complete.

I have attached a very old decision for all, FYI. If you look at the second to last page, there is a bulleted list under Section 2: Additional Information Filing Requirements for Contested Applications

Hydro One has to provide the customer with the Offer to connect – we then get it from the customer. The requirement per the DSC is the provision of the Offer to Connect to the customer within 60 days of the request. At this stage it looks to me as if 30days has already elapsed (if not more) – I do not know when the customer first made the request. Can you advise on this last point?

Thanks IJBD

Indy J. Butany-DeSouza, MBA
Vice President, Regulatory Affairs
Horizon Utilities Corporation
Tel: (905) 317-4765
Cel: (416) 451-1822
indy.butany@horizonutilities.com

HORIZON EXHIBIT K2.2

From: Butany-DeSouza, Indy
Sent: May 9, 2012 8:40 AM
To: Roberge, Daniel; Gribbon, Jamie
Cc: Innis, Ian; Butler, Jim; Lerette, Kathy; Freeman, Neil
Subject: Re: Summit Park Phase 7

Daniel and Jamie,

Can you confirm when the customer made the request to HONI for the Offer to Connect?

Thanks, IJBD

Indy J. Butany-DeSouza, MBA
Vice President, Regulatory Affairs
Horizon Utilities Corporation
Tel: (905) 317-4765 Cel: (416) 451-1822
indy.butany@horizonutilities.com

Horizon Utilities Corporation (HUC) INTERROGATORY #28 List 1

Interrogatory

Reference: Horizon Utilities Response to Board Staff No. 1

Preamble

In an email dated February 22, 2012 (provided to Horizon Utilities by Multi-Area Developments Inc.) from Gordon Messervey, Supervisor Planning and Design, Hydro One, Mr. Messervey stated in respect of the Summit Park 7 development:

> "Based on the information I have seen on this site would this project not fall into the category or be considered one that we should support the SAA on? Isn't there approx. $400K of expansion/enhancement just to get our supply to that site?"

(a) Please ask Mr. Messervey to provide a list of all of the information he is referring to in his email and to produce copies of same.

(b) Please also ask where and how Mr. Messervey determined that the costs to get supply to the site would be "approx $400K". Please produce copies of all documents Mr. Messervey examined for the purpose of arriving at this estimate.

(c) Please produce any responses to this email and summarize any oral discussions which relate to this email by Mr. Messervey.

Response

(a) Mr. Messervey was unaware of the enhancement work that was already planned on Rymal Road outlined in Hydro One's Appendix A & B in Hydro One evidence filed January 11, 2013. He was basing his internal questions on the assets in the area as of February 22, 2012 without consideration for other sustainment work planned in the area.

(b) Mr. Messervey did not use any specific documents to arrive at the approximation he made in the email. That was a high level estimate made based on his professional opinion of the cost to build a 27.6kV distribution line.

(c) This internal email chain was inadvertently sent to Mr. Spicer at Multi-Area Developments with the package for him to complete requesting an Offer to Connect.

Horizon Utilities Corporation (HUC) INTERROGATORY #16 List 1

Interrogatory

Please provide a detailed description and chronology of the history of all work undertaken by Hydro One to date on the proposed 27.6 kV Rymal Road East Circuit, including:

(a) the date when the circuit was first considered as an option internally at Hydro One;

(b) when plans for the circuit were first prepared;

(c) when approval was first given for the work;

(d) when was the work first scheduled to commence;

(e) the actual dates that work was undertaken and the status of the work;

(f) a description of the work completed on each of the dates identified; and

(g) A timetable of all future scheduled work.

If not already produced in response to an earlier question, please provide copies of all documentation confirming the above. Please also produce copies of all construction schedules.

Response

(a) This circuit was first considered as an option internally at Hydro One in 2010 when the requirement for a loop feed to Binbrook was first identified.

(b) Please refer to Appendix A and B in Hydro One's Evidence dated January 11, 2013 for history behind the planning for the Enhancement project.

(c) There are several aspects to the Enhancement project that have various stages of approval. The final approval for the work to commence on the section of the 27.6kV feeder that has been done to date was provided in July 2012.

(d) The work was scheduled to commence immediately following the approval stated in (c).

(e) The following provides a list of the work that has been done on the first section of the 27.6kV feeder:

- May 2012 – Class C estimate is prepared
- June 2012 - ADET completed the design
- July 2012 - Planning received the design and construct award.
- Aug 2012 - Bell, Horizon and Hydro One work together on designing the Bell pole line on Rymal Road to meet all parties' requirements.
- Aug 2012 – Hydro One begins construction on Rymal Road
  - 14 poles
  - 6 anchors
  - 6 down guys
  - 42 crossarms
  - 129 insulators
  - 3 step up transformers (rabbits)
  - 3 transformers
  - 3660m of 556 aluminum wire
  - 1220m of 3/0 AA wire
- October 11, 2012 – Horizon suddenly withdraws its supporting guarantee, putting a stop to the progress of the work.
- October 2012 - Line construction was completed as far as possible until further notice from the Board instructing Horizon to cooperate with the supporting guarantee.

(f) Please see (e) above.

(g) The future work that is currently scheduled in 2013 related to the Enhancement Project to bring the 27.6kV feeder to Binbrook is:

- Extend the M5 feeder from Glover to Trinity Church - March 1/13 - April 30/13

- Fletcher Rd East to Swayze Road to Hwy 56 South to Towerline - August 30/13 - November 30/13

Distribution Area Study

for

Ancaster and Glanbrook Areas

Planning Document for the period between: *2010*-2022

Prepared by: Distribution Business Development Department

1.0 Background and Need

Hydro One Distribution supplies power to the retail customers in the southeastern part of the City of Hamilton. The area is part of the former Town of Ancaster and Township of Glanbrook and is supplied by the Nebo TS and Dundas TS feeders. The Ancaster area is supplied by Nebo TS 157M6, 157M7 & 157M8 and from Dundas TS 2M4 & 2M6 while the Glanbrook area is supplied from the Nebo TS M5 feeder.

According to the Census data available from Statistics Canada the Ancaster and Glanbrook areas saw a population growth of 34% and 85% respectively from year 2001 to year 2011. It is anticipated the substantial load growth will continue in the areas for the study horizon.

The Nebo TS M5 feeder is recommended for a backup supply since it is only one feeder for the supply of Glanbrook areas, specifically for the Binbrook community. Other Nebo TS feeders, M6, M7 and M8 are heavily loaded requiring load relief. As well, Nebo TS loading has reached its summer 10-Day Limited Time Rating (LTR) requiring capacity improvement.

This planning contained in this area study began in 2010. The loading and costing information have been updated with current numbers as they became better known through 2011 and 2012. The 10 year study horizon is 2012 – 2022.

This is a planning document; therefore planning assumptions are made throughout to allow for contingency plans as per HONI's "normal" system conditions.

2.0 Study Area

This study focuses on the Hydro One 27.6 kV supply networks in the town of Ancaster and Glanbrook areas in the City of Hamilton. The study area is currently supplied by Dundas TS (2M4 & 2M6) and Nebo TS (157M5, 157M6, 157M7 & 157M8). There are 6 distribution stations (DS) that are supplied from the feeders and these DSs make up the 8.32kV supply network within the study area. The DSs are Dickenson Road DS, Duff DS, Ancaster West DS, Fiddlers Green DS, Mount Hope DS and Woodburn DS.

The load growth within the study area is assumed to be 1.8% annually from 2014 to 2022 following a step increase in 2013-2014 due to the planned connection of a large load customer.

This study has one distributed generation which has been connected since 2008 on the Nebo TS M5 feeder; 3.2 MW biogas.

An overview of the study area is provided in Figure 1. The time period considered in this study is 10 years- from 2012 to 2022.

3.0 Transmission Lines

Nebo TS is 230/27.6 kV station doubly fed from Middleport TS and Beach TS via circuits Q24HM and Q29HM.

Dundas TS is 115/27.6 kV station doubly fed from Burlington TS and Newton TS via circuits B3 and B4.

4.0 Transformer Station (TS) and Capacity

The summer loading for Nebo TS has reached its summer Limited Time Ratings (LTR)
A summary of station's summer LTR and 10 year load projection are recorded in table 1. The actual peak load on Nebo TS for 2010 and 2011 was 98.8MVA and 109.5MVA respectively.

Table 1: Transmission Stations Capacity and Loading- Existing and Forecast

TS	Summer LTR [MVA]	Summer Peak Existing [MVA] 2012	Present Available Summer Capacity [MVA] 2012	5 Years (2017)*		10 Years (2022)*	
				Growth [MVA]	Projected Available Capacity [MVA]	Growth [MVA]	Projected Available Capacity [MVA]
Nebo TS	106	106	0	49	-49	61	-61
Dundas TS & Dundas TS #2	213	160	53	16	37	35	19

Note: TS loading includes both H1Dx and Horizon Utilities.
Dundas TS #2 was built in 2003 for load relief of Dundas TS.

5.0 TS Feeder Capacity

The existing 27.6 kV feeders of Nebo TS and Dundas TS affecting the study area are listed in the table 2 below. The load projection of each feeder is based on local growth knowledge on any possible future new load connections in addition to the normal growth rate at 1.8%. The table 2 below shows load growth if no corrective action is taken.

Nebo TS M6 and M7 are currently over their Planned Load Limit (PLL) of 350 Amps or 17 MVA for 27.6 kV feeder. These feeders will require load relief soon. Also, Nebo TS M5, M8 and Dundas TS M4 will approach their PLL starting in 2013

Table 2: TS Feeder Capacity and Loading- Existing and 10 year forecast – no additional feeders or load transfers.

TS Feeder	*Present 2012*		*2017*		*2022*	
	Voltage [%]	Load [A]	Voltage [%]	Load [A]	Voltage [%]	Load [A]
Nebo TS M5*	100%	288	95.2%	850	95.2%	926
Nebo TS M6	98.2%	430	98.0%	470	97.5%	514
Nebo TS M7	97.5%	494	97.4%	540	96.9%	590
Nebo TS M8	97.1%	330	96.5%	360	95.9%	393
Dundas TS M4	100%	330	99.7%	360	99.3%	393
Dundas TS M6	101.6%	180	101.3%	197	100.7%	215

Note: The lower permissible voltage limit on each feeder is 94% of the nominal voltage as per Hydro One's system voltage standards.
Red Hill Business Park is estimated to be 26MVA during the study period and is shown on Nebo M5 for the 2017 and 2022.

6.0 TS Feeder Performance

The average TS feeder performance for the past 3 years from 2007 to 2009 is listed in table 3 below.

Table 3: Transmission Station Feeder Performance- Average from 2007 to 2009

TS Feeder	3 Year Average from 2007 to 2009					
	SAIDI		SAIFI		CAIDI	
	SAIDI	Prov Rank	SAIFI	Prov Rank	CAIDI	Prov Rank
Nebo TS M5	0.0012	1376	0.0005	1146	2.2308	1947
Nebo TS M6	0.0017	1174	0.0014	532	3.1654	1337
Nebo TS M7	0.0083	352	0.0057	115	1.9829	2113
Nebo TS M8	0.0038	706	0.0038	192	0.8814	2599
Dundas TS M4	0.0146	198	0.0050	143	2.8382	1524
Dundas TS M6	0.0001	2356	0.0003	1423	0.4638	2725

Note: There are no significant distribution feeder reliability or performance issues in the study area except Dundas TS M4; this feeder is considered in the "worst performer" category

in the province in terms of customer interruptions duration and outage frequencies. The feeder was reconfigured in 2011 so that a half of its feeder is transferred to Dundas M6. The feeder performance is expected to improve as a result.

7.0 Distribution Station (DS) Capacity

The Planning Load Limit (PLL) of the Distribution Stations (DS) in the study area, along with existing, 5 and 10 years load forecast are summarized in Table 4.

Table 4: Distribution Station Summer Capacity- Existing, 5 and 10 years forecast.

DS	Summer PLL [MVA]	Summer Peak 2012 [MVA]	Present Summer Available Capacity [MVA]	5 Year (2017) Growth [MVA]	5 Year (2017) Projected Available Capacity [MVA]	10 Year (2022) Growth (2nd 5 yrs) [MVA]	10 Year (2022) Projected Available Capacity [MVA]
Dickenson Road DS	6.3	4.9	1.4	0.5	0.9	0.6	0.3
Duff DS	6.3	4.0	2.3	0.4	1.9	0.5	1.52
Ancaster West DS	6.3	7.0	-0.7	0.7	-1.4	0.8	-2.2
Fiddlers Green DS	6.3	5.8	0.5	0.6	-0.1	0.6	-0.7
Mount Hope DS	6.3	5.4	0.9	0.5	0.4	0.6	-0.2
Woodburn DS	6.3	3.3	3.0	0.3	2.7	0.4	2.3

Note: Duff DS, Woodburn DS, and Dickenson Road DS will have surplus capacity by the end of the study period. Ancaster West DS is currently over its PLL while Fiddlers Green DS is expected to be over its PLL in 2017 and Mount Hope DS by 2022.

8.0 DS Feeder Capacity

The DS feeders operate at 8.32 kV. A summary of these DS feeders, their existing, 5 and 10 year forecast loading is in Table 5.

Table 5: Distribution Station Feeder Capacity- Existing, 5 and 10 years forecast

DS Feeder	*Max. Load With Overcurrent Protection [A]*	*Present Load (2012) [A]*	*2017 Load [A]*	*2022 Load [A]*
Dickenson RD DS F1	200	5	5.5	6
Dickenson RD DS F2	200	169	185	202
Dickenson RD DS F3	280	160	175	191
Duff DS F1	200	185	202	221
Duff DS F2	200	95	104	114
Ancaster West DS F1	200	111	121	133

Ancaster West DS F2	280	79	86	94
Ancaster West DS F3	280	290	317	347
Fiddlers Green DS F1	280	169	185	202
Fiddlers Green DS F2	280	226	247	270
Mount Hope DS F1	140	154	168	184
Mount Hope DS F3	280	215	235	257
Woodburn DS F1	200	112	122	134
Woodburn DS F2	280	47	51	56
Woodburn DS F3	200	56	61	67

9.0 DS Feeder Performance

The average DS feeder performance from 2007 to 2009 is listed in Table 6 below. There are no significant distribution feeder reliability or performance issues in the study area.

Table 6: Distribution Station Feeder Performance- Average from 2007 to 2009.

DS Feeder	3 Year Average from 2007 to 2009					
	SAIDI		SAIFI		CAIDI	
	SAIDI	Prov Rank	SAIFI	Prov Rank	CAIDI	Prov Rank
Dickenson RD DS F1	0.00	0	0.00	0	0.00	0
Dickenson RD DS F2	0.0015	1222	0.0007	896	2.2089	1969
Dickenson RD DS F3	0.0021	1018	0.0003	1520	6.5029	340
Duff DS F1	0.0017	1150	0.0004	1354	4.3204	822
Duff DS F2	0.0003	2109	0.0001	2242	3.6388	1100
Ancaster West DS F1	0.0012	1369	0.0005	1134	2.1593	2001
Ancaster West DS F2	0.0002	2287	0.0001	2152	2.2691	1913
Ancaster West DS F3	0.0033	766	0.0006	960	5.4365	523
Fiddlers Green DS F1	0.0004	2013	0.0001	2309	3.4762	1180
Fiddlers Green DS F2	0.0022	993	0.0010	683	2.1038	2045
Mount Hope DS F1	0.0015	1226	0.0009	762	2.2514	1927
Mount Hope DS F3	0.0011	1466	0.0004	1232	3.4841	1175

Note: Ancaster West DS F3 had a series of outages in 2010 on its off road sections. As a result corrective actions have undertaken during 2011-2012 and its performance is expected to improve.
Dickenson Rd DS F3 has the worst CAIDI. The plan is in place to convert the section of F3 and provide a loop feed in 2013/2014.

10.0 Summary

This is a 10 year period area study (from 2012 to 2022) concentrating mainly on Town of Ancaster and the Township of Glanbrook where Hydro One serves as Local Distribution Company. The study took into account of the urban Hamilton official plan in estimating the load growth.

The issues identified in this area study were the following:

- Nebo TS was loaded beyond its summer LTR in 2012 (table 1).
- Nebo TS M6 and M7 feeders are over its planning limit of 17 MVA or 350 amps (table 2).
- Nebo TS M5 and M8 will be over its planning limit by early 2014 and 2016 respectively.
- Ancaster West DS, Fiddlers Green DS and Mount Hope DS will be over its PLL (6.25 MVA) within the study period requiring corrective actions to mitigate risks (table 4).
- Mount Hope DS F1 and Ancaster West DS F3 are currently under review for recloser upgrade and/or load transfer between feeders in order to bring the loading within the equipment rating. Dickenson Road DS F2 and Duff DS F1 reclosers will be reviewed as required for upgrades.

Loading in this study area will continue to increase at a steady rate and as a result Nebo TS upgraded capacity will be depleted by the end of the study period and thus further relief will need to be planned for 2023.

A summary of issues identified in this area study are in table 7 below.

Table 7: Summary of issues identified in this area study.

TS/Feeder	Issue	Year
Nebo TS	Over PLL	Now
Nebo TS M6	Over PLL	Now
Nebo TS M7	Over PLL	Now
Ancaster West DS	Over PLL	Now
Mount Hope DS F1 Recloser	Over PLL	Now
Ancaster West DS F3 Recloser	Over PLL	Now
Nebo TS M5	Over PLL	2014
Nebo TS M8	Over PLL	2015
Dundas TS M4	Over PLL	2015
Duff DS F1 Recloser	Over PLL	2017
Fiddlers Green DS	Over PLL	2017
Mount Hope DS	Over PLL	2022

11.0 Description of Alternatives

Based on the findings of this area study, the TS and TS feeder capacity limitation within the study area are a major concern requiring resolution.
Three alternatives were considered for relieving the forecasted Transformer Station Feeder overloads in the study area. Alternative 3 was considered but rejected due to the technical difficulties in building a new TS and running 4 new feeders from the existing Dundas TS site.

The common actions for all three alternatives are listed below:

- Change DS reclosers to higher rated reclosers in the years identified in section 8.
- Maintain Ancaster West DS load below the equipment rating by converting to 27.6kV (2014) and via transformer upgrade from 5MVA to 7.5MVA (2015).
- Maintain Fiddlers Green DS load below the equipment rating via transformer upgrade from 5MVA to 7.5MVA (2017)
- Transfer Ancaster West DS from Nebo M6 to Dundas M6

11.1 Alternative 1 – Increase capacity at Nebo TS

This alternative provides additional capacity at Nebo TS by 64MVA providing load relief to the overloaded feeders 157M5 (2014), 157M6 & 157M7 (currently) & 157M8 (2016). This additional capacity in the study area will be achieved by constructing four new feeders out of Nebo TS (M9. M10, M11 and M12) and transfer load from the overloaded feeders to the new feeders. About 30 km of new 27.6 kV circuits will need to be constructed in this alternative.

The proposed action plans for alternative 1 are summarized as follows (please refer to Figure 3):

- Increase Nebo TS capacity with four new feeder positions and larger transformers with 10 Day LTR of 170MVA in 2013. ($7M capital contribution 2013)
- Build four 27.6 kV underground and overhead egresses from Nebo TS for feeders M9 through M12 ($4M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013)
- Build approximately 14 km of 27.6 kV feeder, M11 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014)
- Build approximately 10 km of 27.6 kV feeder, M10, from Nebo TS to Airport Road/Upper James Road and transfer load from Nebo M6 and M7 feeders. ($2.5M, 2014)

11.2 Alternative 2 – Build "New Ancaster" TS on Shaver Rd

This alternative includes the construction of a new station, "New Ancaster" TS, with four feeders (M1, M2, M3 and M4) with two 25/41 MVA transformers, 230/27.6 kV (with maximum station load (LTR) of 57 MVA) on Shaver Rd (between Garner Rd. and Book Rd.) where four 230kV circuits M27B, M28B, Q24HM and Q29HM are located.
The new Ancaster TS would provide relieve to Nebo TS as well as its overloaded feeders, 157M6, 157M7 & 157M8 by load transfers from the Nebo TS to the new TS. Approx 19 km of new 27.6 kV feeder construction will be required in this alternative.

The proposed action plans for alternative 2 are summarized as follows (please refer to Figure 4):

- Build new station with two 25/41 MVA transformers, 230/27.6 kV, 4-feeders, "New Ancaster" TS, that will be supplied from either M27B & M28B or Q24HM & Q29HM circuits. The new TS will be built as typical DESN ($20M capital contribution 2013).
- Build four overhead feeder egresses, M1 through M4, from TS structure ($2M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013).
- Build approximately 14 km of 27.6 kV feeder overhead, existing M6 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014).

11.3 Alternative Considered but Rejected - Build Dundas TS #3

Both Dundas TS and TS #2 combined would not have enough capacity to accommodate load growth if the new load were transferred to Dundas TS. To relieve further an additional station, Dundas TS #3 would need to be built in 2013.
This alternative was considered but rejected for the following reasons:

- Difficulty and high costs running feeders across Hamilton/Burlington Bluffs and across Hwy 403 and through already built up city subdivisions.
- Not enough land to add another DESN station where there exists Dundas TS and Dundas TS #2
- Decrease reliability due to long feeders from Dundas TS #3 to load center
- Costly to build Dundas TS #3

12.0 Comparison of Alternatives

12.1 Treatment of Transmission Connection Costs

Under the Transmission System Code, HONI Transmission supports investments in Transmission Connection Facilities for supply to LDC's based on the NPV of future revenue from the LDC over a 25-year horizon. Connection tariff revenues associated with forecast load that is over and above existing available connection capacity is used.

To upgrade Trasnmission connection facilities, HONI Transmission requires Capital Contribution from HONI Distribution for the revenue shortfall.

Hydro One Transmission has determined the budgetary cost estimate for building the additional capacity for Nebo TS and Ancaster TS. The capital contribution required by Hydro One Distribution is about $7M for Nebo TS upgrage (Alternative 1) and $20M for new Ancaster TS option. Dundas TS option was not separately estimated however the contribution amount would be a minimum of $20M due to greater complexity in building a DESN at the current site.

12.2 Cost Comparison of Alternatives

The costs for each of the three alternatives are summarized in Table 8 below. Alternative 1 is the preferred and the lowest cost alternative. Alternative 2 requires $8.5M in additional costs and does not meet the loading requirement for the planning period.

Table 8: Cost table summarizing alternatives 1 and 2 major action items and NPV (2013)

	Alternative 1		Alternative 2	
Action Items	**Cost ($M)**	**Year**	**Cost ($M)**	**Year**
Dx Capital Contribution for TS proposed in each Alternative	7	2013	20	2013
New Feeder Egresses from TS (4 feeders)	4	2013	2	2013
New feeder to Binbrook	2.8	2013	2.8	2013
Red Hill Park enhancement	0.5	2013	0.5	2013
New feeder to Airport	2.5	2014		
Cumulative NPV (2013 $M)	**16.8**		**25.3**	

12.3 Capacity

The available TS capacity at the end of the study period is summarized in Table 9 below. Alternative 1 upgrading Nebo TS will see the additional capacity dwindle to 3MVA at the end of the study period requiring further work in as early as 2023. For the alternative 2 of building new Ancaster TS the new capacity would fall short by year 2022. Therefore,

Alternative 1 satisfies the capacity requirement for the study period whereas alternative 2 does not.

Table 9: Summary of available station capacity.

	Available Capacity (MVA)		
Alternative	2014 after upgrade	2017	2022
1	24	15	3
2	17	8	-4

12.4 Reliability

Both alternatives 1 and 2 provide four new feeders. Alternative 1 will build 30km additional feeders whereas Alternative 2 builds 18km. Alt 2 builds less line because Ancaster TS would be located close to the load centre where existing feeders are already there. The shorter line distance provides less line exposure and therefore will help yield an incremental improvement in the feeder performance.

12.5 Line Losses

Alternative 2 would result in smaller line losses than alternative 1 since new feeders from Ancaster TS would sectionalize the Nebo TS feeders and reduce their lengths reducing I^2R losses.

12.6 Recommendations

Alternative 1 – Upgrade Nebo TS is recommended for implementation as it provides a higher capacity and less capital contribution requirement. The advantage of meeting a longer period of capacity requirement at less cost is the deciding factor selecting alternative 1 over the benefits in line losses reduction and line length reduction provided in alternative 2.

The major action items for this recommended alternative are the following:

- All the common action items in Section 11.

- Increase Nebo TS capacity with four new feeder positions and larger transformers with 10 Day LTR of 170MVA in 2013. ($7M capital contribution 2013)
- Build four 27.6 kV underground and overhead egresses from Nebo TS for feeders M9 through M12 ($4M 2013)
- Build approximately 2 km from existing Nebo TS feeders M7 and M8 to enhance system for the Red Hill Business Park. ($0.5M 2013)

- Build approximately 14 km of 27.6 kV feeder, M11 from Nebo TS east on Rymal Rd and on Hwy 56 to provide a backup and load relief for Nebo TS M5 to Binbrook ($2.8M 2013/2014)
- Build approximately 10 km of 27.6 kV feeder, M10, from Nebo TS to Airport Road/Upper James Road and transfer load from Nebo M6 and M7 feeders. ($2.5M, 2014)

Table 10: Feeder Loading & Voltage Conditions – preferred alternative

TS Feeder	*Present 2012*		*2017*		*2022*	
	Voltage	Load	Voltage	Load	Voltage	Load
	[%]	[A]	[%]	[A]	[%]	[A]
Nebo TS M5	99.9%	288	99.6%	315	99.3%	344
Nebo TS M6	98.2%	430	100.1%	320	99.8%	350
Nebo TS M7	97.5%	494	100.1%	318	99.8%	350
Nebo TS M8	97.1%	330	97.8%	300	97.1%	350
Nebo TS M9			101.2%	265	101%	289
Nebo TS M10			98%	295	97.3%	350
Nebo TS M11			101.8%	130	101.6%	142
Nebo TS M12			101.2%	265	101%	289
Dundas TS M4	100%	330	99.8%	350	99.5%	355
Dundas TS M6	101.6%	180	99.8%	350	99.5%	355

Note: New Nebo feeders M9-M12 to be built in 2013.
Dundas M4 and M6 feeders are kept close to its PLL 350amps via load transfers to Nebo feeders M6/M7/M8/M10.
Lower permissible limit for voltage on feeders is 94 %. Voltage in % is taken from the feeder-end.
Dundas M4 and M6 will need further relief when a new TS is built in Ancaster in 2023 when a new TS is required for the load relief of Nebo TS.

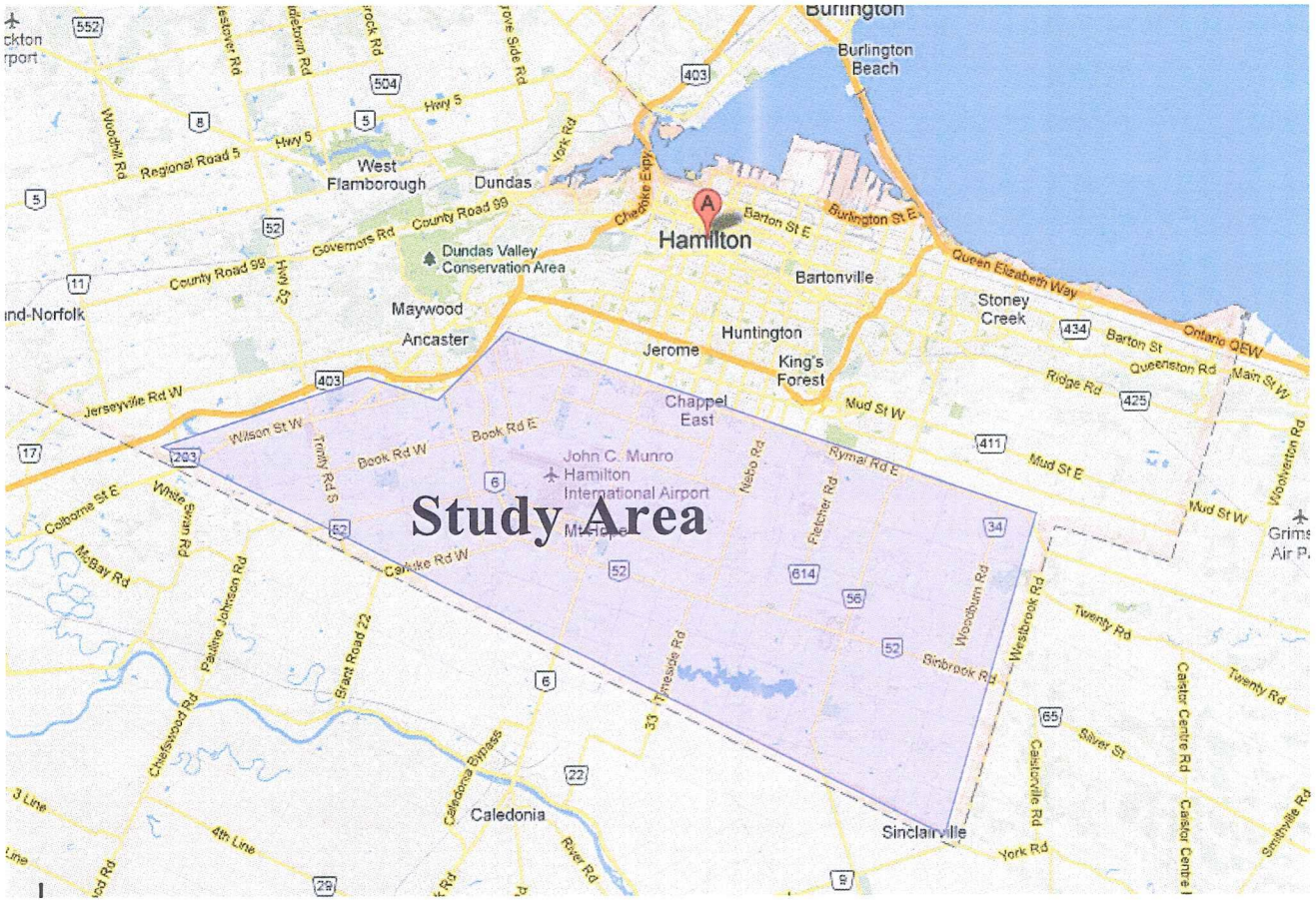


Figure 1: Study Area

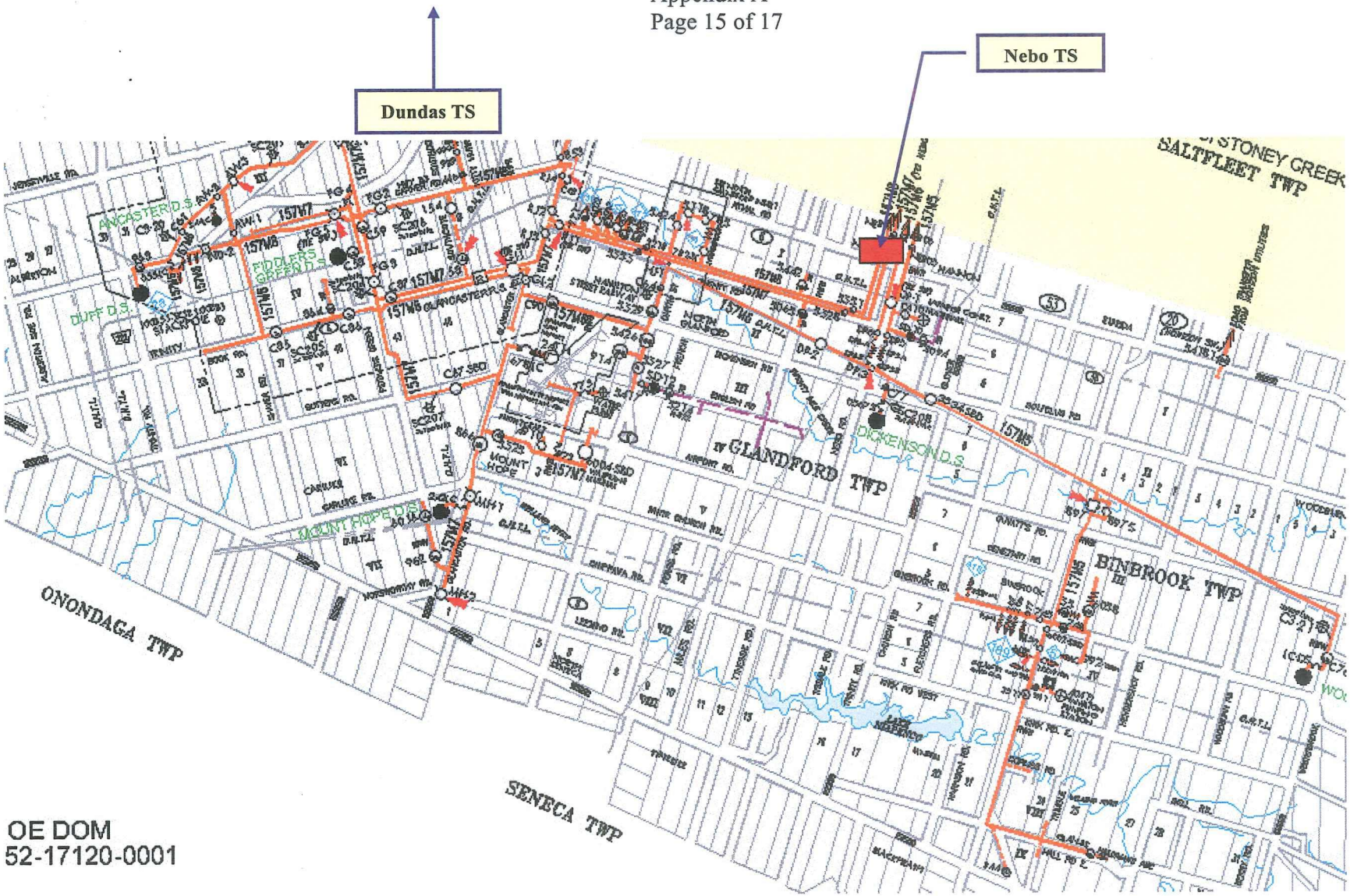


Figure 2: Existing 27.6 kV Facilities

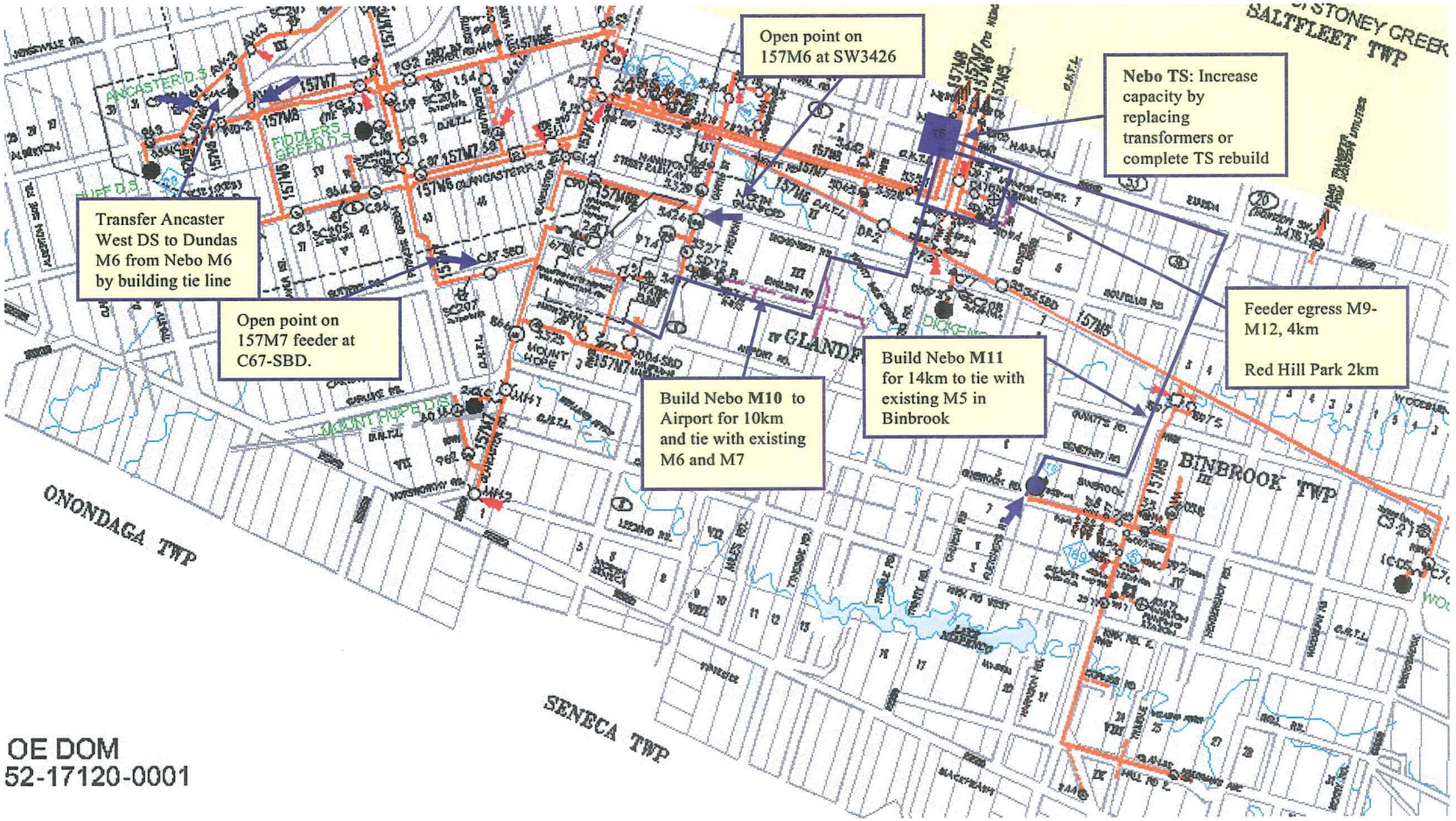


Figure 3 – Alternative 1 – Increase Capacity at Nebo TS

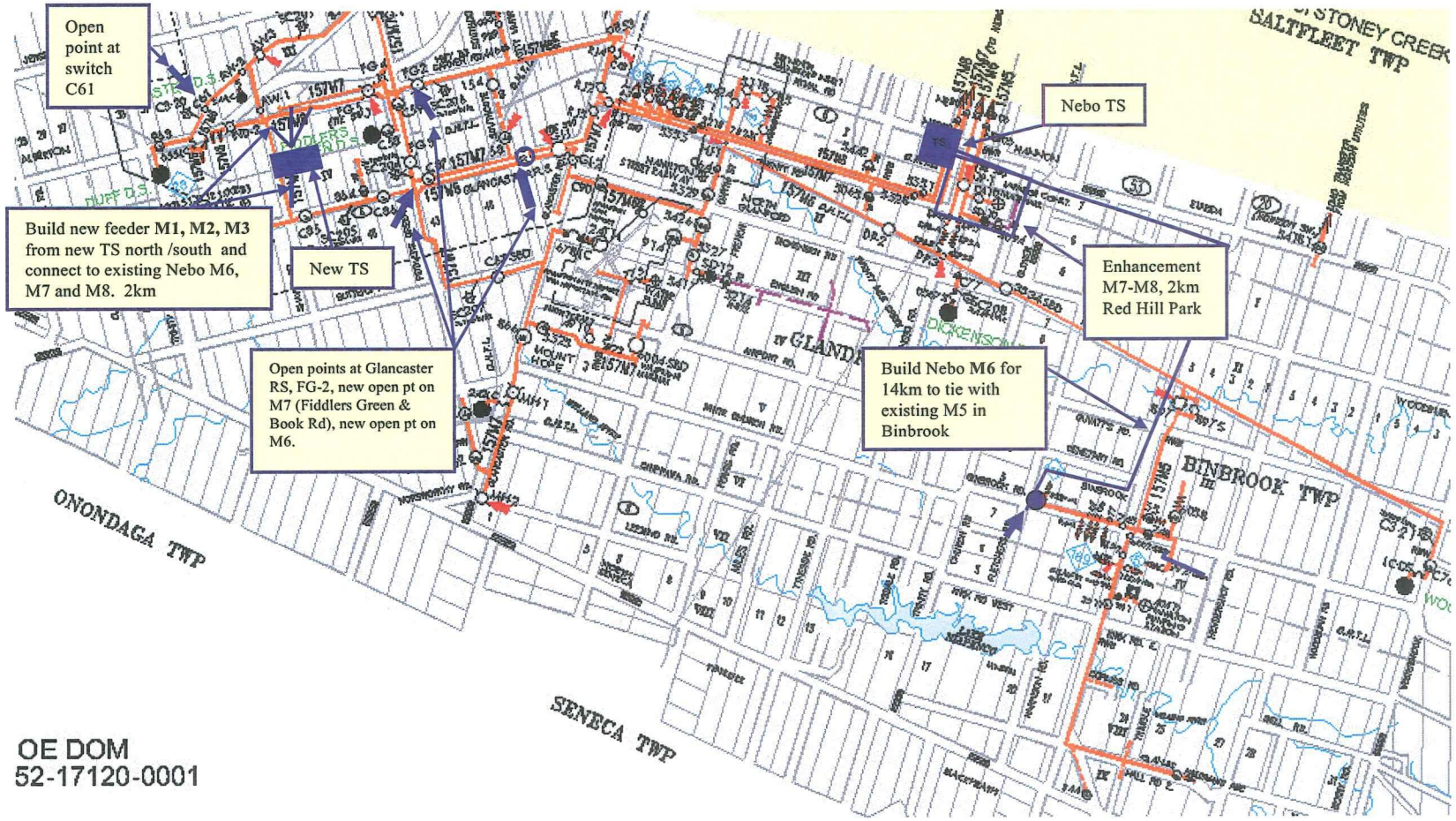


Figure 4 – Alternative 2 – Build "New Ancaster" TS on Shaver Road

Hydro One – Dundas Area

Loop Feed to Binbrook

Need: Binbrook area requires a backup feeder for supply security.

Background:

Binbrook is located in the former Glanbrook Township, which is now part of the amalgamated City of Hamilton. Binbrook and surrounding area in the former Township of Glanbrook has grown substantially over the past several years. The Statistics Canada Census data show the occupied private dwellings in Glanbrook grew by 46.8% from 2006 to 2011.

The City of Hamilton's Planning and Economic Development Department is designating the Binbrook area as part of its urban boundary. There were 2322 Hydro One customers in the Binbrook area at the end of 2012. The existing built-up area within the Binbrook urban boundary is about a third of the space available and there are signs that the growth is going to occur at a steady pace as the subdivision developers have applied for connection of more homes with over 1800 lots. A commercial plaza with a large grocery store has recently applied for connection.

The Binbrook area is currently supplied via Nebo TS M5 feeder which is a radial feeder supplying over 5000 customers. There are no other feeders to back up the M5 feeder to facilitate power restoration. This means that if a planned or unplanned outage occurs on the M5 customers fed from this circuit will be out of power until the feeder is restored. Providing an alternate supply to

Binbrook enables Hydro One to minimize the duration of interruptions regardless of their nature or cause.

Backup feeder:

In determining the route for the backup feeder the following factors were considered See map page 3 showing the preferred and alternative routes considered.

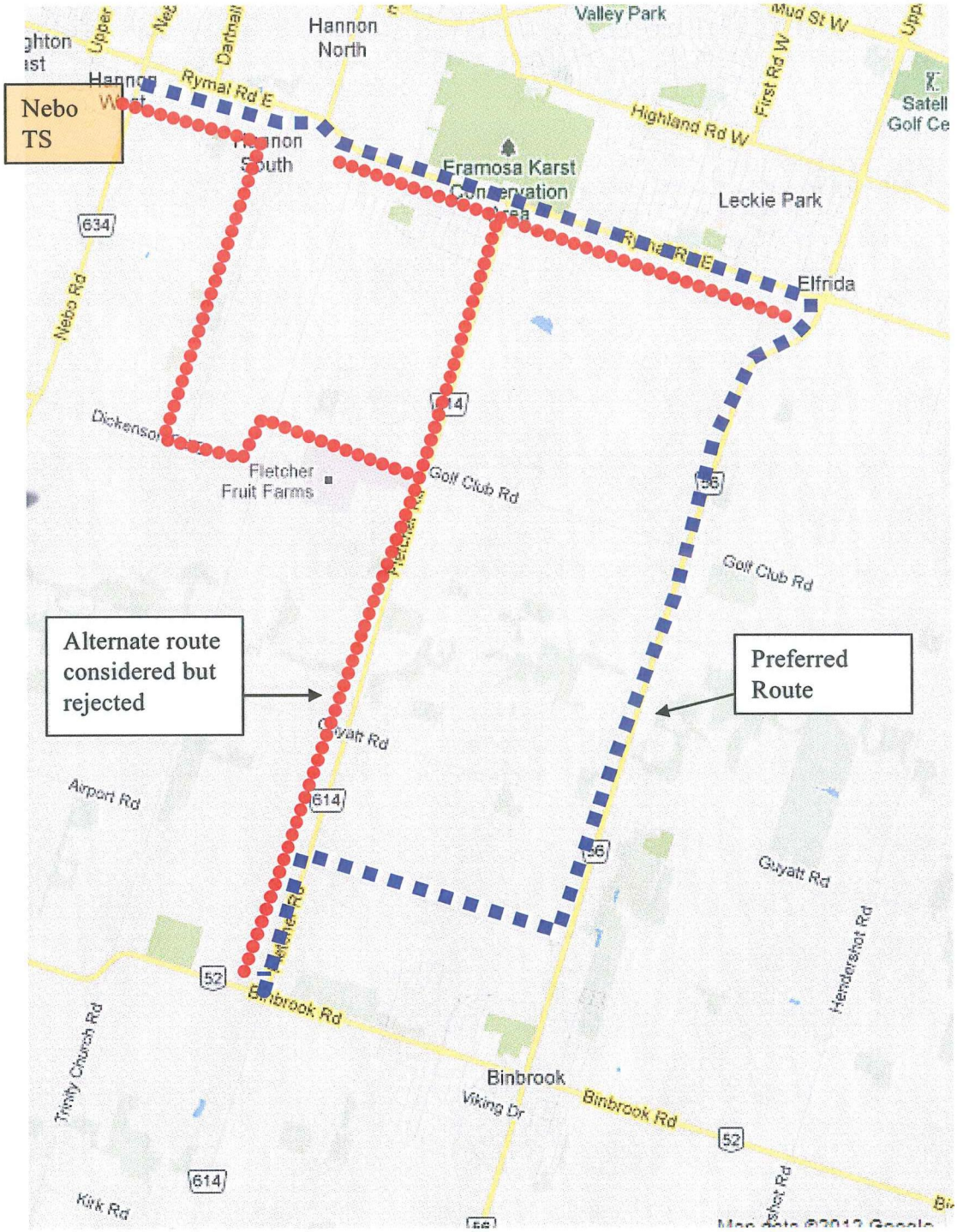
1. Environment: Environmental concerns were taken into consideration to have as little impact on the wildlife and landscape impact within the Glanbrook Township.

2. The new line is proposed in a route that can effectively and efficiently serve Hydro One service area. The feeder route will enable further system reinforcement eastward on Rymal Road from Hwy 56 as required in future. The preferred route will meet this requirement.

3. The cost to build the line in the proposed route is expected to be lower than other alternative due to the fact the much of the route is preframed for 27.6kV conversion. The preframing for future conversion started as far back as 1975. See photos on page 4-7.

4. Reliability: The new line in its route will not only provide a back up for the Binbrook area but also will set up a supply network to the Elfrida industrial complex on Rymal Road at Hwy 56 which is currently supplied from a radial 8.32kV. The 8.32kV system in the industrial complex will be converted to 27.6kV. The poles and the pole frames on Hwy 56 were built to the 27.6kV standards in anticipation of this

conversion. Based on good utility practice the desired distribution system will have as many loop feeds as possible for Hydro One's current and future customers, therefore reducing outage times where car accidents, storms, wildlife contacts and equipment issues may occur.



Map: Preferred Route for Binbrook Backup Feeder

HORIZON EXHIBIT K2.2

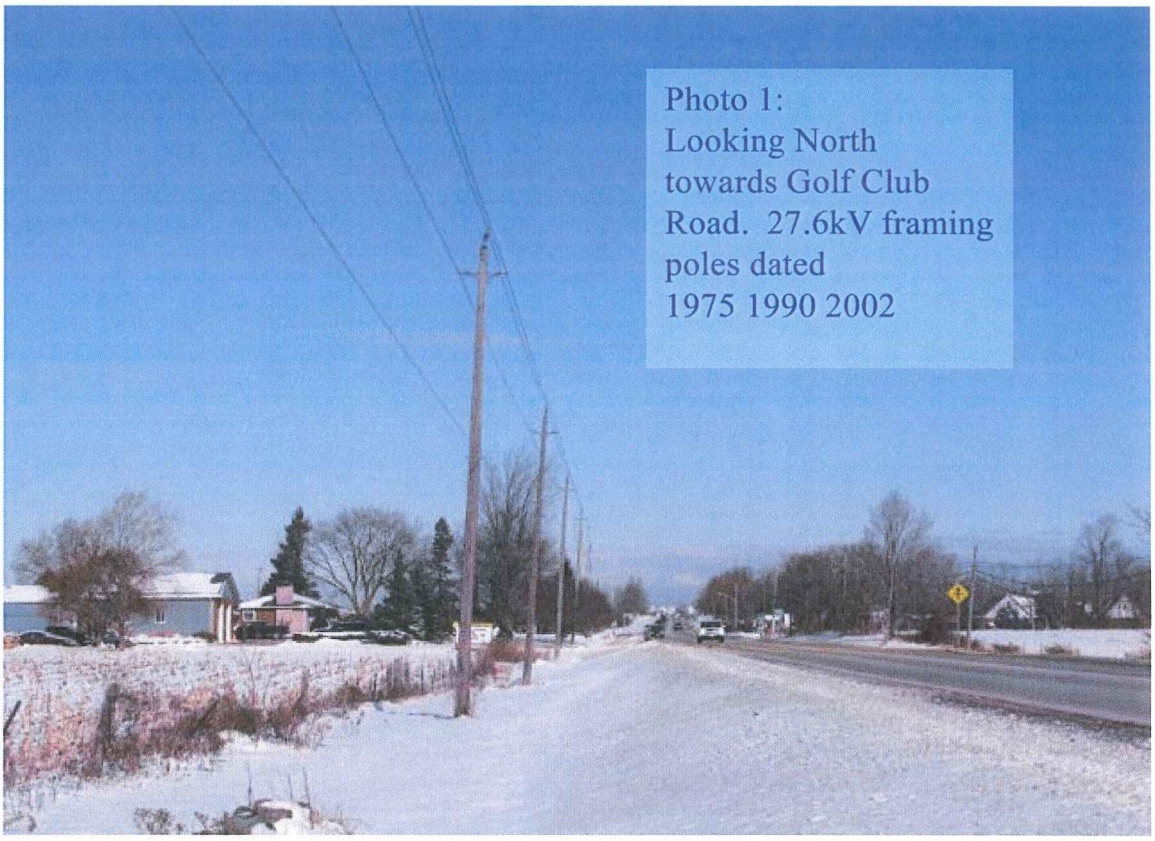


Photo 1:
Looking North
towards Golf Club
Road. 27.6kV framing
poles dated
1975 1990 2002

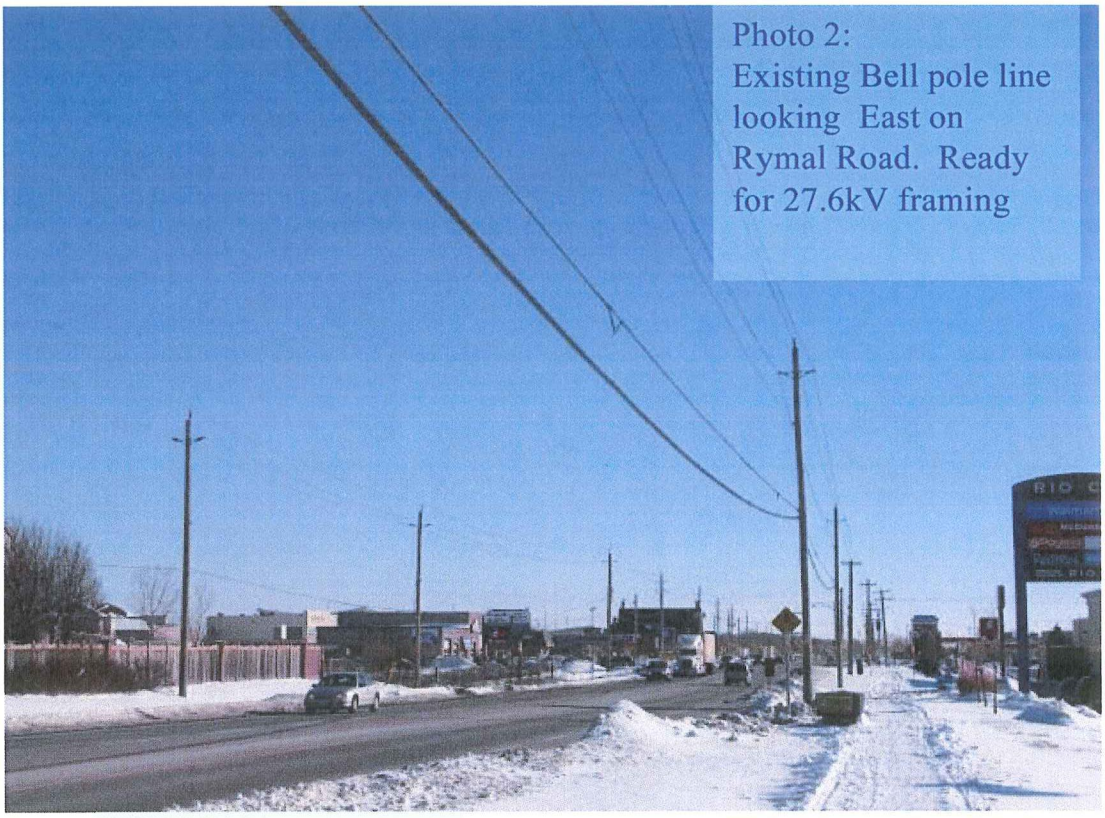


Photo 2:
Existing Bell pole line looking East on Rymal Road. Ready for 27.6kV framing

Photo 3:
Existing Bell pole line looking West on Rymal Road. Ready for 27.6kV framing. Poles 2005

HORIZON EXHIBIT K2.2

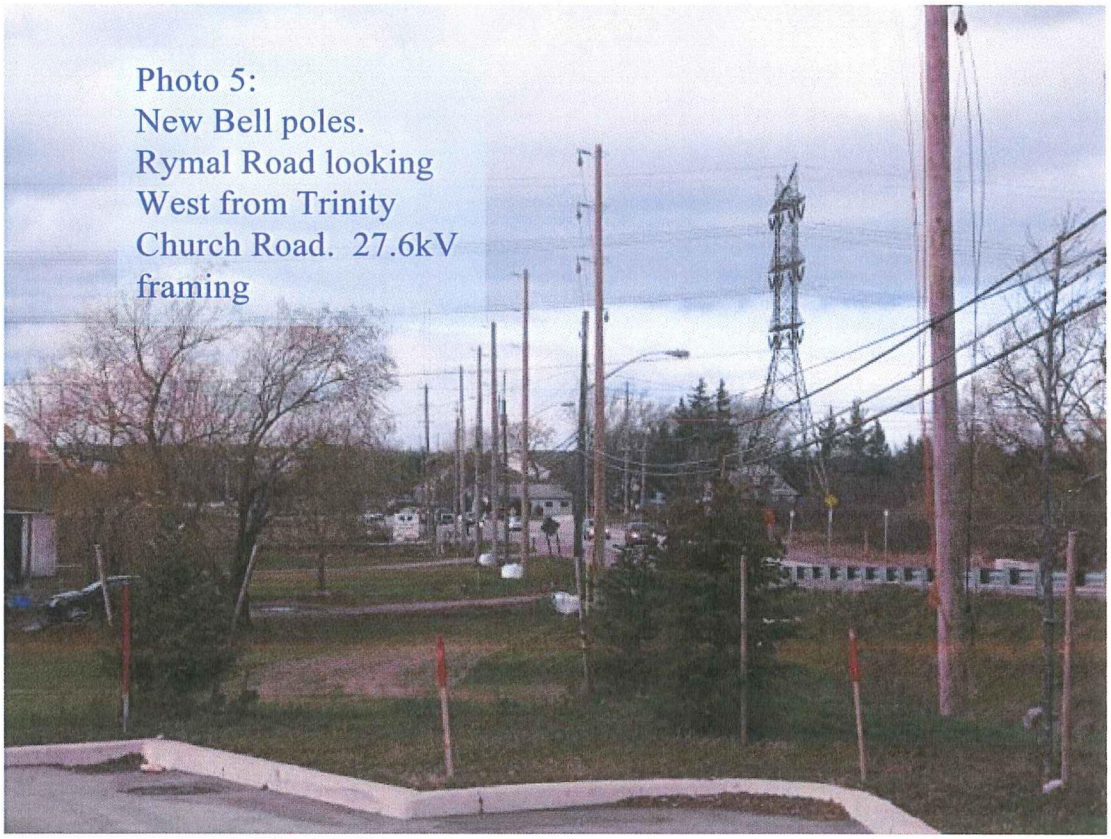


Photo 5:
New Bell poles.
Rymal Road looking
West from Trinity
Church Road. 27.6kV
framing

Ontario Energy Board (Board Staff) INTERROGATORY #3 List 1

Interrogatory

Ref: Hydro One Evidence, Pages 3 and 4

Hydro One states that its costs to service the proposed development in Part One of the Application is lower than the applicant and has provided a table for comparison purposes.

a) Please provide a table providing a breakdown of all the non-contestable and contestable costs to connect the development.
b) Please provide Hydro One's economic evaluation based on methodology and inputs described in Appendix B of the Distribution System code. Please provide a detailed description of all capital costs included in the economic evaluation. Please provide the capital contribution amount resulting from the economic evaluation, which will be required from the customer.

Hydro One states that given the construction of the Hydro One reinforcement line to Binbrook, service to customers in the area in question will not require further upstream capital additions by Hydro One or additional costs. This suggests that Hydro One will need to expand its infrastructure to serve the development in Part One of the Application.

a) If there are existing assets in the area that are capable of supplying the customer, please provide a detailed description of the assets and the date on which these assets were constructed.
b) If there are no existing assets in the area capable of serving the development, please explain why Hydro One believes it will not incur any expansion costs to serve this new development. If there are expansion costs, please explain who will be responsible for these costs to connect this development and how these costs will be allocated to this development.

Response

Please note that Hydro One has labeled the answer as parts a) b) c) & d) in our response.

c) The development is already connected to Hydro One's existing 8.32kV/4.8kV circuit on Rymal Road East. This circuit will be converted to 27.6kV/16kV under the planned enhancement project currently underway to bring a new circuit from Nebo TS to Binbrook. The feeder route will be along Rymal Road East and Hwy 56 south.

d) The new feeder to replace the existing 8.32kV/4.8kV circuit is planned enhancement work. The feeder route was selected based on the fact that the existing 8.32kV/4.8kV can be easily converted to 27.6kV/16kV and the route requires relatively no forestry work making it cost effective for Hydro One. Please see Appendix B of Hydro One's evidence dated January 11, 2013 for further details.

Ontario Energy Board (Board Staff) INTERROGATORY #5 List 1

Interrogatory

Ref: Hydro One Evidence, Pages 7 and 12

Hydro One states that it will have assets readily available to service the new school development (Part Four of the Application).

a) Please provide a detailed description of the assets in the area that are capable of supplying the customer and the date on which these assets were constructed.

b) Please indicate whether these assets will become redundant in the event that the proposed amendment is granted and if so, explain how the costs for stranded equipment will be addressed. If these assets will not become redundant, please indicate what existing loads they are now, or will be serving, if the amendment were granted.

c) If there are no existing assets in the area capable of serving the development, please explain why Hydro One believes it will not incur any expansion costs to serve this new development. If there are expansion costs, please explain who will be responsible for these costs to connect this development and how these costs will be allocated to this development.

Hydro One has provided an attachment containing Hydro One's service contract with the customer in Part Four of the Application. The Hamilton- Wentworth District School Board filed a letter dated December 19, 2012 comparing the costs of being served by Hydro One and the applicant and concluding that its overall costs are higher if it is served by Hydro One.

(d) a) On what basis is the customer determined to be Sub Transmission customer rather than General Service customer?

(e) b) Is Hydro One able to provide an estimate for service of the customer as a General Service customer, so that costs can be directly compared with Horizon?

(f) c) Is there any reason why Hydro One is not able to serve the customer as a General Service customer?

(g) d) Please provide Hydro One's economic evaluation based on methodology and inputs described in Appendix B of the Distribution System code, and based on this customer being served as a General Service customer.

e) Please provide a detailed description of all capital costs included in the economic evaluation.

f) Please provide the capital contribution amount resulting from the economic evaluation, which will be required from the customer.

g) Please provide a clearly itemized table with a breakdown of all the costs (non-contestable and contestable) between Hydro One and Horizon (side by side) to connect the customer as a General Service customer.

h) Has there been any discussion between Hydro One and Horizon regarding the investment by Horizon in the transformation facilities being provided by Horizon for the school? If so, please provide such information.

Response

Please note that it appears that letters a) through c) have been reused in the question description above. The portions of the question after the first Part c) above have been relabeled to Parts d) through k).

a) There is an existing Hydro One 8.32kV/4.8kV circuit on Rymal Road East. This circuit will be converted to 27.6kV/16kV under the planned enhancement project currently underway to bring a new circuit from Nebo TS to Binbrook.

b) The new 27.6kV/16kV circuit is a planned enhancement project to bring a loop feed to Binbrook and hence will not be redundant.

c) Please refer to HONI IRR to Board Staff 3 d).

d) Please see HONI IRR to HUC 2 for a copy of the Hydro One Conditions of Service including the Board Approved Rate schedule. Included on Page 4-5 in Appendix "A" is the following description of a ST customer:

> *(Sub-Transmission Classification refers to:) ... (load which) ...*
> *ii) "is directly connected to and supplied from Hydro One Distribution Assets" ...*
> *iii) "is greater than 500kW"*

The demand forecast provided by the customer significantly exceeds the threshold noted above. Therefore, Bishop Ryan School must be classified as a ST customer. Therefore, no estimates, drawings, calculations or other analysis have been performed assuming a scenario wherein the customer was provided service under a General Service rate schedule.

e) Under Hydro One's Conditions of Service and consistent with the provisions of Section 3 of the DSC concerning connections and expansions, the school has been treated as a "lie along" customer for connection purposes because it can connect directly to Hydro One's adjacent 27.6 kV feeder. As such, the Code does not require completion of an Appendix B-style economic analysis as part of the connection process, nor is there a capital contribution required based on that analysis.

f) As noted in part d) above, the customer must be classified as a ST customer and would therefore benefit from the lower ST rate.

g) Please refer to part e) above.

h) As shown in Appendix D of Hydro One's evidence, page 1 of 2 in Hydro One's Offer, the capital costs are for the following work items:

Metal guards, terminators, surge arrestors, fused primary cable termination and flared cable guards.

i) Please refer to part e) above. There is no capital contribution required.

j) The cost for the work identified in part h) above is all non-contestable.

k) There has been no discussion between Hydro One and Horizon regarding the investment by Horizon in the transformation facilities to be provided by Horizon for the school as part of Horizon's OTC.

Horizon Utilities Corporation (HUC) INTERROGATORY #5 List 1

Interrogatory

Reference: Hydro One Pre-filed Evidence filed January 11, 2013, updated January 14, 2013 (hereinafter "**Hydro One Pre-filed Evidence**")

Preamble

Horizon Utilities' initial understanding was that Hydro One was proposing to construct a new 27.6 kV circuit along Rymal Road East ("**27.6 kV Rymal Road East Circuit**") with a connection to either the M3 and/or M4 express feeders which have always exclusively served Horizon Utilities. From Hydro One's pre-filed evidence filed January 11, 2013, Horizon Utilities now understands that Hydro One is no longer proposing to connect the new 27.6 kV Rymal Road East Circuit to either of the M3 and/or M4 feeder but rather to connect to the M5 feeder at or near the Nebo Transformer Station ("**Nebo TS**").

Please provide a detailed breakdown of all of the fully loaded costs associated with the 27.6 kV Rymal Road East Circuit, including, without limitation (whether incurred or forecast):

(a) the cost of connection to the M5 feeder;

(b) Hydro One's responsibility for the costs to replace, refurbish or repair Bell Canada telephone poles;

(c) the cost to reframe or refurbish poles;

(d) the cost to replace any Hydro One poles;

(e) the cost to install all wires, supports, conductors (including labour, equipment and materials);

(f) the cost to install the several "Rabbits" which currently provide power to the Summit Park 7 development;

(g) any other labour and materials associated with the design, acquisition, and construction of this proposed circuit; and

(h) the cost of the planned upgrades at the Nebo TS to provide additional load to the M5 feeder (or the 27.6 kV Rymal Road East Circuit).

In the event that the interconnection with the M3 or M4 express feeders remains a consideration by Hydro One, please respond to the same questions above detailing all

of the costs associated with the new 27.6 kV Rymal Road East Circuit with the connection at the M3 and/or M4 express feeder.

Response

(a) to (e) and part (g) To connect the 27.6kV feeder on Rymal Rd to the M5 for the short term, a feeder is being built on Glover Rd. between the current M5 and the 27.6kV feeder. The cost of this feeder is not in the scope of this proceeding as it is an enhancement project being built to provide back up to the existing feeder and serve a number of industrial loads in the area.

(f) The cost to install three step-up transformers (commonly referred to as 'rabbits') is approximately $24,000 in materials and $1,000 in labour. Once the 27.6kV feeder is energized, the rabbits can be removed and used elsewhere on Hydro One's system so the only incremental cost is labour.

(h) No additional work was required at Nebo TS for the 27.6 kV Rymal Road East Circuit.

Horizon Utilities Corporation (HUC) INTERROGATORY #6 List 1

Interrogatory

(a) Please confirm that Hydro One's current proposal is to extend the proposed 27.6 kV Rymal Road East Circuit from a point near the connection with the M3/M4 feeders west and south to a connection point at or near Nebo TS.

(b) What is the distance from the connection point at or near Nebo TS to the proposed connection to Summit Park 7?

(c) Please provide a detailed construction route map for the proposed 27.6 kV Rymal Road East Circuit from the Nebo TS to Summit Park 7.

Response

(a) Please refer to HONI IRR to HUC 11.

(b) The distance from the connection point to the M5 feeder near Nebo TS and Summit Park Phase 7 is 2.2 km.

(c) Please refer to Attachment 1 to HONI IRR to HUC 11.

Horizon Utilities Corporation (HUC) INTERROGATORY #8 List 1

Interrogatory

Reference: Hydro One Pre-filed Evidence

Preamble

Hydro One has stated on a number of occasions that the proposed 27.6 kV Rymal Road East Circuit is necessary to provide service to the Summit Park 7 development and to the Bishop Ryan SS. Given the capacity constraints at the Nebo TS, please respond to the following questions:

(a) Is an upgrade at Nebo TS necessary for the purposes of Hydro One providing service to the Bishop Ryan SS and to the Summit Park 7 development?

(b) Are any changes planned or forecast at the Nebo TS to provide load to supply these customers?

(c) Please produce copies of all documentation between Hydro One Distribution and Hydro One Transmission which relate to any reconfiguration or upgrading of the Nebo TS for the purposes of connecting the proposed 27.6 kV Rymal Road East Circuit to provide load to the Bishop Ryan SS and the Summit Park 7 development. Horizon Utilities requests that the documentation produced include all emails, memoranda, draft Cost Sharing Agreements and executed Agreements commencing as at the date when such reconfigurations or upgrades at Nebo TS were first contemplated.

Response

(a) No. The Nebo TS upgrade is required to address the overall long-term growth in the area.

(b) No. No changes planned or forecast at the Nebo TS are to provide load to supply these customers.

(c) Hydro One Distribution did not engage Hydro One Transmission to provide capacity for Bishop Ryan SS and Summit Park 7 development specifically, as these connections are accommodated on the distribution network. Hydro One Distribution worked with Hydro One Transmission to get additional capacity in order to meet the long-term need of the Ancaster and Glanbrook areas.

Horizon Utilities Corporation (HUC) INTERROGATORY #12 List 1

Interrogatory

Please provide a detailed history of the planning, execution and installation by Hydro One of the proposed 27.6 kV Rymal Road East Circuit. In addition, please provide a copy of all internal and external (such as Bell Canada) communications including, without limitation, all memoranda, plans, emails, studies, work orders.

Response

Please refer to HONI IRR to HUC 16.

Horizon Utilities Corporation (HUC) INTERROGATORY #14 List 1

Interrogatory

Please provide a complete copy of all earlier versions and iterations (whether draft or otherwise) of the Distribution Area Study for Ancaster and Glanbrook Areas 2010-2022, found at Appendix A of Hydro One's pre-filed evidence.

Response

Please refer to HONI IRR to Board Staff 7 part d).

Horizon Utilities Corporation (HUC) INTERROGATORY #15 List 1

Interrogatory

Please provide a complete copy of all earlier versions and iterations (whether in draft or otherwise) of the document entitled "Hydro One - Dundas Area Loop Feed to Binbrook", filed as Appendix B of Hydro One's pre-filed evidence.

Response

Please refer to HONI IRR to Board Staff #7 part d).

Ontario Energy Board (Board Staff) INTERROGATORY #7 List 1

Interrogatory

Ref: Hydro One Evidence, Page 8

a) In the first paragraph, Hydro One claims as a strategic advantage, the availability of underground locates through Ontario One Call service. Why would such access not be available to Horizon?

b) Please explain why service reliability in Hydro One's urban areas would necessarily be "the same or better than service in HUC's" area.

c) Please explain how reliability of the Horizon 27.6 kV system might be affected by the addition of the Hydro One Rymal Road leg to the NEBO TS circuits, including how faults on the Hydro One Rymal Road leg would be isolated from Horizon's system, and how the Horizon section would be isolated from Hydro One's feeders for faults on the Horizon section.

d) Hydro One refers to Appendix A, which is an Area Study for Hydro One's service territory, and Appendix B, regarding the Loop Feed to Binbrook. These documents are undated. Please provide a copy of the covering letter or email which accompanied issue of this document, or other evidence of when the document was created.

Response

d) The Area Study and Loop Feed to Binbrook documents were created based on a culmination of data collections, multiple network models, meeting discussions and other documents related to the specific issues in the Ancaster and Glanbrook areas. As the need in a particular area escalates a report typically is written to bring together the above information and set the stage for a series of investments designed to maintain reliability and capacity in the area. Therefore the above-referenced reports are a culmination of work that took place from 2010 through to the end of 2012. The Area Study document was finalized and the Loop Feed to Binbrook document was created in December 2012 for the purposes of filing with Hydro One's evidence to assist the Board in understanding the full scope and rationale of Hydro One's plans for its distribution system in the SAA and surrounding areas.

Horizon Utilities Corporation (HUC) INTERROGATORY #49 List 1

Interrogatory

Reference: Hydro One Pre-filed Evidence, Hydro One's OTC to Multi-Area dated July 27, 2012

Preamble

Hydro One has not included any costs for upstream expansion work in its OTC to Multi-Area. Horizon Utilities takes the position that the proposed 27.6 kV Rymal Road East Circuit which Hydro One must necessarily construct to provide service to the Summit Park 7 development and to the Bishop Ryan SS constitutes upstream expansion work.

Should the Board conclude that the proposed 27.6 kV Rymal Road East Circuit is upstream expansion work, what amount would Hydro One have included in its OTC to Multi-Area? Please provide a breakdown of this figure and a detailed explanation as to how it has been calculated.

Response

Hydro One has not included expansion costs in the OTC as the 27.6kV feeder on Rymal Road is not expansion work. It is part of an enhancement project to provide a loop feed to Binbrook. Once the feeder is built on Rymal Road, Summit Park Phase 7 and the School can be served with no expansion facilities required. Please see the response to HONI IRR to Board Staff 3 d).

Horizon Utilities Corporation (HUC) INTERROGATORY #62 List 1

Interrogatory

Reference: Hydro One Pre-filed Evidence, page 7 of 15 and Hydro One's OTC to the School Board dated December 14, 2012

Preamble

Hydro One has not included any costs for upstream expansion work in its OTC to the School Board. Horizon Utilities takes the position that the proposed 27.6 kV Rymal Road East Circuit which Hydro One must necessarily construct to provide service to the Bishop Ryan SS and to Summit Park 7 constitutes upstream expansion work.

(a) Should the Board conclude that the proposed 27.6 kV Rymal Road East Circuit is upstream expansion work, what amount would Hydro One have included in its OTC to Multi-Area? Please provide a breakdown of this figure and a detailed explanation as to how it has been calculated.

Response

(a) Hydro One has indicated that the proposed 27.6 kV circuit currently under construction along Rymal Road East constitutes an Enhancement project, as its primary purpose is to reinforce the radial line that currently serves the Town of Binbrook. Additionally, the new line is also designed to reinforce service for other customers along its proposed route, including the Elfrida Industrial Park. As an enhancement project that has been planned for some time and is required to be built regardless of the outcome of this SAA application, none of its costs are attributable to Summit Park Phase 7 or the new school.

Horizon Utilities Corporation (HUC) INTERROGATORY #17 List 1

Interrogatory

Please provide the Hydro One construction standards in 2012 for the design of a 3-phase 27.6KV distribution line, as per Ontario Regulation 22/04 under the *Electricity Act,* Sections 6 and 7. Please include the standards for pole heights, framing and conductor sizing, including the associates bills of material.

Response

This interrogatory is outside the scope of this proceeding. O. Reg. 22/04 is entitled "Electrical Distribution Safety" and is the regulation that deals with the electrical safety of the facilities of all LDCs. HUC's and HONI's compliance with O. Reg. 22/04 is not a matter within the scope of this proceeding or part of the Board's mandate. Compliance with O. Reg. 22/04 is the mandate of the Electrical Safety Authority.

Horizon Utilities Corporation (HUC) INTERROGATORY #18 List 1

Interrogatory

Please produce the approved design plans that were used to construct the line modifications that have been undertaken on the south side of Rymal Road East between Trinity Church and Summit Park 7 (being part of the proposed 27.6 kV Rymal Road East Circuit), as per Regulation 22/04, Sections 6 and 7, evidencing the bill of material, pole heights of new poles installed by Hydro One, and the height of existing Bell poles that have been re-framed. Please produce the credentials of the individual who signed-off on the Certificate of Approval as per Regulation 22/04, Section 7.

Response

Please refer to HONI IRR to HUC 17.

Horizon Utilities Corporation (HUC) INTERROGATORY #19 List 1

Interrogatory

Please provide the Hydro One Construction Verification Program for the work undertaken on the south side of Rymal Road East between Trinity Church Road and Summit Park 7, as per O. Reg. 22/04, Section 8. Please specify if, prior to commencing this new construction, the Construction Verification Program was used to sign-off, or if the sign-off was provided by the ESA or a Professional Engineer.

Response

Please refer to HONI IRR to HUC 17.

Horizon Utilities Corporation (HUC) INTERROGATORY #20 List 1

Interrogatory

Please provide the Records of Inspection and Certificates for the construction of the line modifications undertaken on the south side of Rymal Road East between Trinity Church Road and Summit Park 7, as per O. Reg. 22/04, Section 8. Please provide the credentials of the individual(s) who signed-off the Records of Inspection and Certificates.

Response

Please refer to HONI IRR to HUC 17.

Ontario Energy Board (Board Staff) INTERROGATORY #6 List 1

Interrogatory

Ref: Hydro One Evidence, Page 7

In Section 7.1.2 of the Application, Horizon states that there is sufficient capacity on its existing underground distribution facilities, which are located in the adjacent phases bordering on the new phase development, to supply the load for the proposed sub-division (Part One of the Application) whereas Hydro One's distribution facilities in the area are currently not sufficient to supply the load for the development and would require additional investment. Horizon has stated that Hydro One's network of lines in the area is essentially the same as for the previous six phases of the Summit Park development. Hydro One did not contest applications by Horizon Utilities that allowed the earlier phases of the development to be connected to Horizon's system.

a) Please provide a detailed description of the assets that Hydro One will rely upon to provide service to:
   i. the proposed sub-division (Part One of the Application);
   ii. the new school development (Part Four of the Application).

b) Please confirm whether these assets are currently available to provide service. If not, please provide a detailed explanation of when these assets will be available to provide the required service.

c) Please describe the density of Hydro One's distribution system in the areas adjacent to all the proposed amendment areas listed in the Application and provide a comparison to the density of Horizon's distribution system in these same areas.

d) Please provide the following information:
   i. Nameplate Rating of the NEBO TS supply transformer and summer and winter Long Term and Short Term ratings.
   ii. Minimum ratings of each section of the relevant line sections of 27.6 kV M3 feeder, including the express section, the proposed Hydro One section, and the Horizon section.
   iii. The location of sectionalizing assets on the Hydro One feeder, including breakers, disconnects, fuses etc. which would provide protection discrimination and ensure that faults on the proposed Hydro One section would not affect the integrity of the Horizon section of the line, and vice versa.

Response

a) i and ii) For both the proposed sub-division (Part I of the Application) and the new school development (Part IV of the Application) Hydro One will connect the customers to the new 27.6 kV circuit which is being constructed along Rymal Road as part of the Enhancement Project to bring a loop feed to Binbrook and reinforce the distribution system for other industrial customers along the route. Other details can be found in the Offers to Connect for these customers.

b) These assets will be available to provide the required service by April 2013 which meets the required connection date of each customer.

c) Hydro One does not have access or knowledge of any density studies undertaken in Horizon Service area, so comparison is difficult; however, as the density in the area increases with the addition of subdivisions like Summit Park, Hydro One plans to introduce a new urban cluster in the area from Rymal Road East between Fletcher Road and Regional Road 56 continuing down Regional Road 56 to Binbrook.

d)

i. The Nameplate Rating of the NEBO TS supply transformer and summer and winter Long Term and Short Term ratings.

- Voltage rating: T1 (220/28 KV), T2= (225.5/28KV)
- Name plate Rating for T1 and T2 MVA: 50/67/83 MVA (ONAN /ONAF /OFAF)
- Continuous MVA= 83.3 MVA for each transformer
- 10 day LTR: 106 MVA (Summer)*, 121MVA(Winter)

**For planning purposes, the summer 10 day LTR shall be regarded as a guideline on Nebo TS. The actual limited time ratings will be determined by Operations based on the pervading ambient temperature conditions, equipment constraints and limitations.*

ii. Please refer to Page 4 of the "Ancaster and Glanbrook Area Study" found in Appendix A of Hydro One's evidence. The planning loading limit (PLL) on the M3 and M5 is 350A. The feeder loading could exceed this rating for shorter periods of time. The PLL is used as a guideline for longer term planning purposes.

iii. No utility protection discrimination has been proposed since Hydro One is intending on servicing the load via the M5 circuit, which is entirely Hydro One Distribution load.

Horizon Utilities Corporation (HUC) INTERROGATORY #3 List 1

Interrogatory

Has the Board approved for 2013 any changes to the rate class descriptions in respect of the density thresholds for the residential rate classes? If so, please detail the changes. Please confirm which residential rate class Hydro One submits is applicable to Parts I, II and III of the SAA Application.

Response

No changes in rate class descriptions were approved for 2013. The residential customers in the affected area are generally expected to be billed as UR customers.

Horizon Utilities Corporation (HUC) INTERROGATORY #48 List 1

Interrogatory

Reference: Hydro One OTC dated July 27, 2012

Which rate class did Hydro One use for the purposes of its OTC dated July 27, 2012?

Responsee

Hydro One assumed that the 286 residential customers in Summit Park Phase 7 would be UR customers and the 1 commercial customer would be in the GSe class.

Ontario Energy Board (Board Staff) INTERROGATORY #8 List 1

Interrogatory

Ref: Hydro One Evidence, Page 11

a) Please provide a detailed description of the Hydro One assets being used to serve the customers listed in Part Two and Part Three of the Application.

b) Please provide a more detailed breakdown of the estimated stranded costs of assets of $15,000. Please distinguish the stranded costs related to the customers in Part Two of the Application from the customers in Part Three of the Application.

Response

a) Hydro One confirms that the existing supply to these customers is primarily by the F-class feeder system. However, as detailed in Hydro One's evidence in Appendices A and B, in recognition of the growing load in the area, Hydro One is currently upgrading its distribution system to 27.6 kV supply, and when completed that will form the primary supply to the SAA lands, replacing the F-class system. For further details on assets currently servicing Part Three see (b) below.

b) Given the age of the assets related to the customers in Part II of the application there were no stranded costs related to these assets as part of the $15,000. There would be removal costs incurred, which have not been included here.

In relation to the customers in Part III of the Application, there would be fifteen transformers stranded if Horizon were successful in their request to service the customers along Rymal Road. This is comprised of the following:

- The section east of Fletcher Rd has 12 transformers operating at 4800v, three single phase and three 3-phase. The average age of these transformers is 25 years old and the average size is 25kva. The cost for the three single phase transformers is approximately $455 each, for a total of $1365 and the cost for the three banks is approximately $3,276 each bank, for a total of $9,828.
- The section between Trinity Church Rd and Fletcher has three transformers operating at 16000v. The average age of these transformers is one year and the average size is 25kva. The cost is approximately $1008 ea for a total of $3024.

In addition to the stranded assets there would be removal costs that were not included in the $15,000 stranded asset costs.

Part II - Attachment 4 – Email from Hydro One

From: rob.davidson@HydroOne.com [mailto:rob.davidson@HydroOne.com]
Sent: September 26, 2012 12:11 PM
To: Bassindale, Richard
Cc: Tammy.O'Sullivan@HydroOne.com
Subject: Summit Park Phase 7: transfer of 3 Customers

Richard:

We would like to move forward ASAP with Horizon regarding the taking over of the 3 customers on Fletcher Road which Horizon has previously agreed to do.

Ideally once a project gets going the speediest way forward is for the field people to talk directly and keep us cc'd on any correspondence.

Can you provide the name of the contact Tammy should talk to at Horizon (possibly Jaime Gribbon) to get this process started or should we continue to correspond through you ?

Robert Davidson
Account Executive
Customer Business Relations
Burlington T.S. N03
Office (905) 681-4281
Mobile (905) 517-8638

Horizon Utilities Corporation (HUC) INTERROGATORY #50 List 1

Interrogatory

Hydro One requested by email dated September 26, 2012 from Robert Davidson to Horizon Utilities that it agree to the transfer of the 3 legacy homes on the west side of Fletcher Road. Is Horizon Utilities' evidence that Hydro One subsequently orally rescinded this request correct? If so, please provide a detailed explanation for Hydro One's rescission of its request that Horizon Utilities assume the transfer of these customers.

Response

On October 22, 2012 Hydro One received a call from Horizon requesting consent for the transfer of 3 existing Hydro One customers on Fletcher Road, which is now known as Part II of the SAA application. At that time Horizon advised that they intended to file a revised SAA application the next day that would include Summit Park Phase 7, as well as the 3 Hydro One customers on Fletcher Road and possibly other properties. In the context of a greatly enlarged scope of territory being sought by Horizon, the "one-off" transaction of three customers is a matter that now needs to be determined in conjunction with all the other matters.

Horizon Utilities Corporation (HUC) INTERROGATORY #51 List 1

Interrogatory

Does Hydro One acknowledge that either Multi-Area or Hydro One is required to remove the several legacy poles on Fletcher Road as part of the Site Plans approved by the City of Hamilton in respect of its streetscape requirements?

Response

Multi-Area has advised Hydro One that they have a commitment to the City of Hamilton to remove several existing poles and overhead line on Fletcher Road used to service existing Hydro One customers.

Horizon Utilities Corporation (HUC) INTERROGATORY #52 List 1

Interrogatory

Assuming Part II of Horizon Utilities' SAA Application is not approved, please detail Hydro One's plans to provide service to these 3 legacy homes on the west side of Fletcher Road after the poles are removed. Please include in your answer:

(a) a map or plan depicting the route Hydro One proposes to take to provide service to these customers and the details of how the necessary wires/transformers will be installed.

(b) a detailed breakdown of the costs to undertake all of the work contemplated by (a); and

(c) who will be responsible to pay for these costs (i.e., from its stakeholders, Multi-area, the customers, or some other entity) and how will these costs be recovered.

Response

(a) Hydro One is already serving the customers on Fletcher Road that are included in Part II of this SAA application. Hydro One does not have a map or plan depicting the route Hydro One proposes to use to provide underground service to the customers at this time.

(b) See response to (a) above.

(c) Multi-Area Development has advised that they will be covering the costs to remove the overhead pole line feeding 3 existing Hydro One customers and move the service underground.

Summit Park Phase 7 and all future phases of the development as per the City of Hamilton's Urban plan included with HUC's additional material submitted on December 17, 2012, are inside HONI's service territory. The culmination of the next phase of development in the area would result in a new urban cluster within HONI's territory, thereby lowering or helping to contain the rates for existing HONI customers in this area and across the Province.

If, however, the Application were to be successful in carving out the Application areas (especially vacant land with future growth potential) out of HONI's service territory, existing HONI customers would continue to be held responsible, subject to any compensation as noted above, for the total costs of upstream reinforcement costs outlined in the Area Plan (Appendix A hereto) without benefit of offsetting future customer revenue and/or developer contributions, thereby negatively impact the rates of existing HONI customers.

The Board has recognized this problem. At paragraph 179 of its Decision in RP-2003-0044, the Board stated:

> *If a new embedded distributor targets service to lower cost customers (usually small dense areas), the remaining customers served by the host distributor may well face higher rates than if the embedded distributor did not exist. Loss of such loads will necessarily have implications for the customers of the host distributor. Is it equitable and fair to all customers that an embedded distributor can take advantage of this regulatory arbitrage to create a two-tiered rate structure, one for customers of the embedded distributor, and one for the remaining customers of the incumbent distributor? In the view of the Board, this would not be in the public interest.*

Inaccuracies and/or Missing Information in HUC's Evidence, excluding the Burman Report

(a) Allegation

At s. 7.1.5 of Part III of the Application, statements are made regarding the costs of connecting HONI's existing customers in the Application area.

Fact

The cost for HONI to retain the existing customers is $0, whereas the estimated costs for HUC to connect ten of HONI's existing customers is $123,000. Clearly and logically, HONI is the more economical and efficient LDC to continue to service the existing customers. There is no cost justification for transferring these customers to HUC, and there certainly are no regulatory efficiencies as alleged by HUC.

The fact is that there were no consultations or discussions between the author of the Report and the planning group at HONI, nor did the author provide a copy to Hydro One for review and comment prior to its being filed. Understandably, the Report is replete with inaccuracies and misunderstandings regarding HONI's assets and plans and cannot be considered as helpful, nor can it be considered a comprehensive and accurate assessment of HONI's distribution system or HONI's capability to efficiently and reliably supply new development in the area.

Facts regarding the Burman Report

- Page 7 of the Report states that HONI is undertaking an expansion project along Rymal Road. As shown in HONI's Area Study described above and attached as Appendix A (see also the Loop Feed to Binbrook Plan attached as Appendix B), the feeder being built by HONI on Rymal Road is part of a larger enhancement project to bring a loop feed to the HONI's Binbrook area. As the Report states, HONI is optimizing the use of existing assets in the design of the enhancement project by utilizing existing poles where possible, based on HONI design standards.

- Although the current 8 kV line is not suitable to service the new customers in the subject area, it was never HONI's intention to use that line for that purpose. As shown by HONI's Area Study and Loop Feed Plan, HONI will be using a new 27.6kV line to service all customers in the Application area.

- The slide included as Appendix A in the Report has been taken out of context and therefore misunderstood. This slide was part of a presentation given by HONI to other LDCs regarding the procedures for handling Distributed Generators (not load customers) on varying types of feeders. HONI always strives to optimize the use of existing infrastructure to meet changing needs over time, and HONI does not have any feeders that are contractually or otherwise "dedicated" to a single LDC. The M3 and M4 feeders are owned by HONI and, like other feeders, can be used to supply any customers that HONI deems appropriate to supply, based on sound engineering and economic considerations. This is now an irrelevant point, given HONI plans to use the M5 feeder to supply the customers along Rymal Road as stated in the Facts section above.

- The review of the Dickenson and F Class feeders is not relevant to this Application because, as per HONI's Area Study described above, there is neither an expansion nor an enhancement on this infrastructure. Again on pages 24-25, the Report uses the F Class system in the infrastructure comparative analysis, but the F Class system is irrelevant.

- In the connection of Summit Park Phase 7, HONI has no intention to request HUC to reduce its load on M3/M4, as referenced at page 23 of the Report.

Horizon Utilities Corporation (HUC) INTERROGATORY #53 List 1

Interrogatory

In the event that Part III of Horizon Utilities' SAA Application is not approved, please detail Hydro One's plans to provide service to the 3 legacy Hydro One customers on the south side of Rymal Road East. Please include in your answer:

(a) a map or plan depicting the route Hydro One proposes to take to provide service to these customers and the details of the equipment (i.e., wires, transformers) that will be installed to connect the customers to the proposed 27.6 kV Rymal Road East Circuit.

(b) a detailed breakdown of the costs to undertake all of the work contemplated by (a); and

(c) who will be responsible to pay for these costs (i.e., from its stakeholders, Multi-area, the customers, or some other entity) and how will these costs be recovered.

Response

(a) Horizon has not specified which three Hydro One customers on Rymal Road East included in Part III to which they are referring in this question. There are ten existing Hydro One connections on Rymal Road East included in Part III, seven residential and three commercial. To be helpful Hydro One will answer the question for all ten customers.

All ten properties will be fed from the 27.6/16 kV line along Rymal Road East. The following list of equipment will be used to connect the customers to the new 27.6/16 kV line:

- Six 16kv/25 kva transformers
- Three banks = Nine -16kv/600v25kva transformers
- Fifteen 21kv arresters

(b) The estimated costs for the material and installation of the items in part (a) are $20,300:

- Six 16kv/25 kva transformers = $6800
- Three banks = Nine -16kv/600v25kva transformers = $12000
- Fifteen 21kv arresters = $1500

(c) Please refer to HONI IRR to HUC 62. All ten existing Hydro One connections included in Part III of the SAA application will be converted to 27.6/16 kV service as part of the Enhancement project. The conversion will phase out the HONI 8.32kV/4.8kV on Rymal Road East.

Horizon Utilities Corporation (HUC) INTERROGATORY #62 List 1

Interrogatory

Reference: Hydro One Pre-filed Evidence, page 7 of 15 and Hydro One's OTC to the School Board dated December 14, 2012

Preamble

Hydro One has not included any costs for upstream expansion work in its OTC to the School Board. Horizon Utilities takes the position that the proposed 27.6 kV Rymal Road East Circuit which Hydro One must necessarily construct to provide service to the Bishop Ryan SS and to Summit Park 7 constitutes upstream expansion work.

(a) Should the Board conclude that the proposed 27.6 kV Rymal Road East Circuit is upstream expansion work, what amount would Hydro One have included in its OTC to Multi-Area? Please provide a breakdown of this figure and a detailed explanation as to how it has been calculated.

Response

(a) Hydro One has indicated that the proposed 27.6 kV circuit currently under construction along Rymal Road East constitutes an Enhancement project, as its primary purpose is to reinforce the radial line that currently serves the Town of Binbrook. Additionally, the new line is also designed to reinforce service for other customers along its proposed route, including the Elfrida Industrial Park. As an enhancement project that has been planned for some time and is required to be built regardless of the outcome of this SAA application, none of its costs are attributable to Summit Park Phase 7 or the new school.

Horizon Utilities Corporation (HUC) INTERROGATORY #64 List 1

Interrogatory

In the event that Parts I and IV of the SAA Application are granted by the Board, does Hydro One accept that it would make no practical sense to build the proposed 27.6kV Rymal Road East Circuit to serve the lands included in Part V of the SAA Application?

If Hydro One disagrees, please provide a detailed explanation detailing how Hydro One will recover the costs of the Rymal Road East Circuit, from whom, and over what period of time.

Response

Hydro One does not agree with the assertions above. As stated in numerous other Interrogatory Responses and in Hydro One's evidence at Appendices A and B, the construction of the Binbrook loop will occur along the proposed route regardless of the outcome of this application.

As with other enhancement projects, the costs will be included in ratebase and recovered from all customers, consistent with the DSC.