OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-18

Ref: Exhibit 3, page 26

In its Residential Class, OPUCN has assumed an annual customer growth rate of 3.0% over the 5 year test period, after showing customer growth of just over 1% for the previous 5 year period. In its Distribution System Plan (Exhibit 2/Tab B/page 7) OPUCN indicates a number of factors for assuming this additional growth:

a) Phase One of the 407 extension to be completed in 2015, with Phase Two complete in 2019/2020. Please provide any updated forecast for the completion of Phase One. Please provide additional rationale for how the completion of Phase One of this highway will provide additional residential customers? How will the completion of Phase Two of this project affect customer numbers over the course of this application if complete in 2019?

b) On page 8, Oshawa refers to a demonstrated increase in large residential subdivisions and commercial developments confirms the need for load requirements. Please provide further information on this demonstrated need and relate this to the forecast increase in Residential customer connections.

Response:

a) OPUCN has not received an update to the 407 expansion plans. The official position is that development is still on track to complete Phase 1 by December, 2015, however, in OPUCN's estimation, development is behind plans by between 3 and 6 months.

407 ETR improves transportation arteries and expansion generally is expected to attract new residential and commercial development. In addition to expectations related to the expansion of the 407 ETR Highway, existing new development near the main 407 ETR interchange in Oshawa have already been sold out. The expected construction of this new development is planned for completion over the next three. OPUCN's forecast growth in residential customers is primarily based on development currently underway and the amount of additional

development expected in the area. There are currently two major developers with activity in the area and OPUCN is anchoring their forecast on them.

b) Based on actual permit applications and planning documents provided by the City of Oshawa, OPUCN has forecasted customer connections increase. Most of the developments being proposed are shown to concentrate in the north part of Oshawa and according to current City's "Residential Subdivision Activity Map (December 2014)", planning documents and City correspondence, the following residential developments are expected to materialize:

- 1,255 permits issued as of December 2014 for future residential developments.

- Kedron Part II projects a planned population of around 22,000 people (accounting for 8,271 customers to be connected using City's occupancy unit of 2.66 occupants per house)

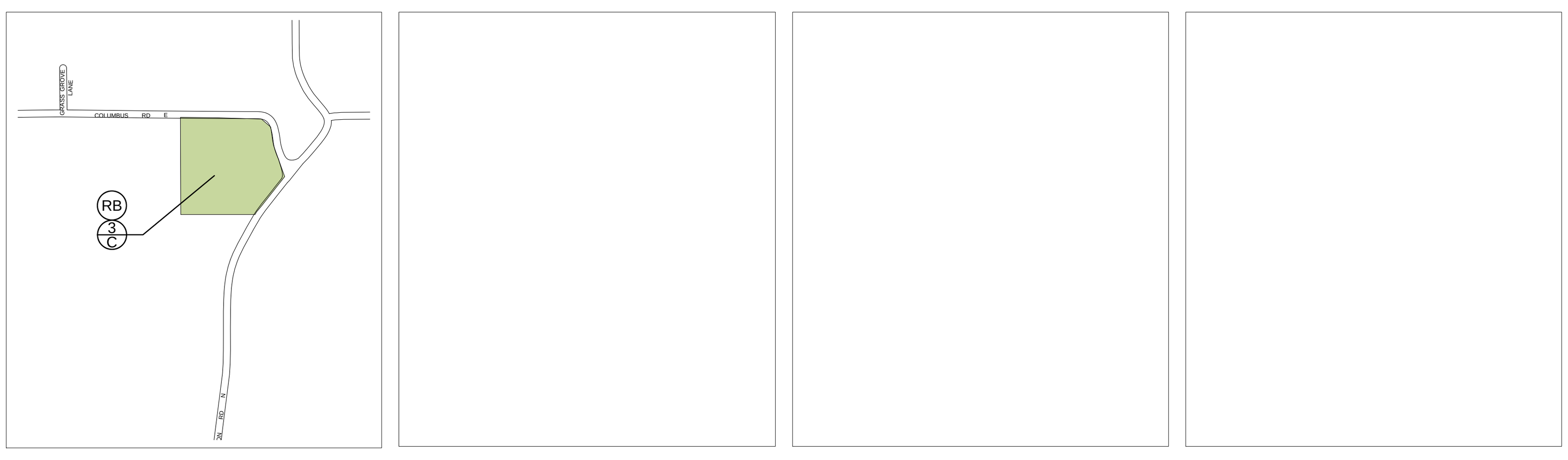
Also, OPUCN is currently working with developers for new connections with 2,258 lots expected to connect in the coming years, 30% of which are already sold-out according to two main developers.

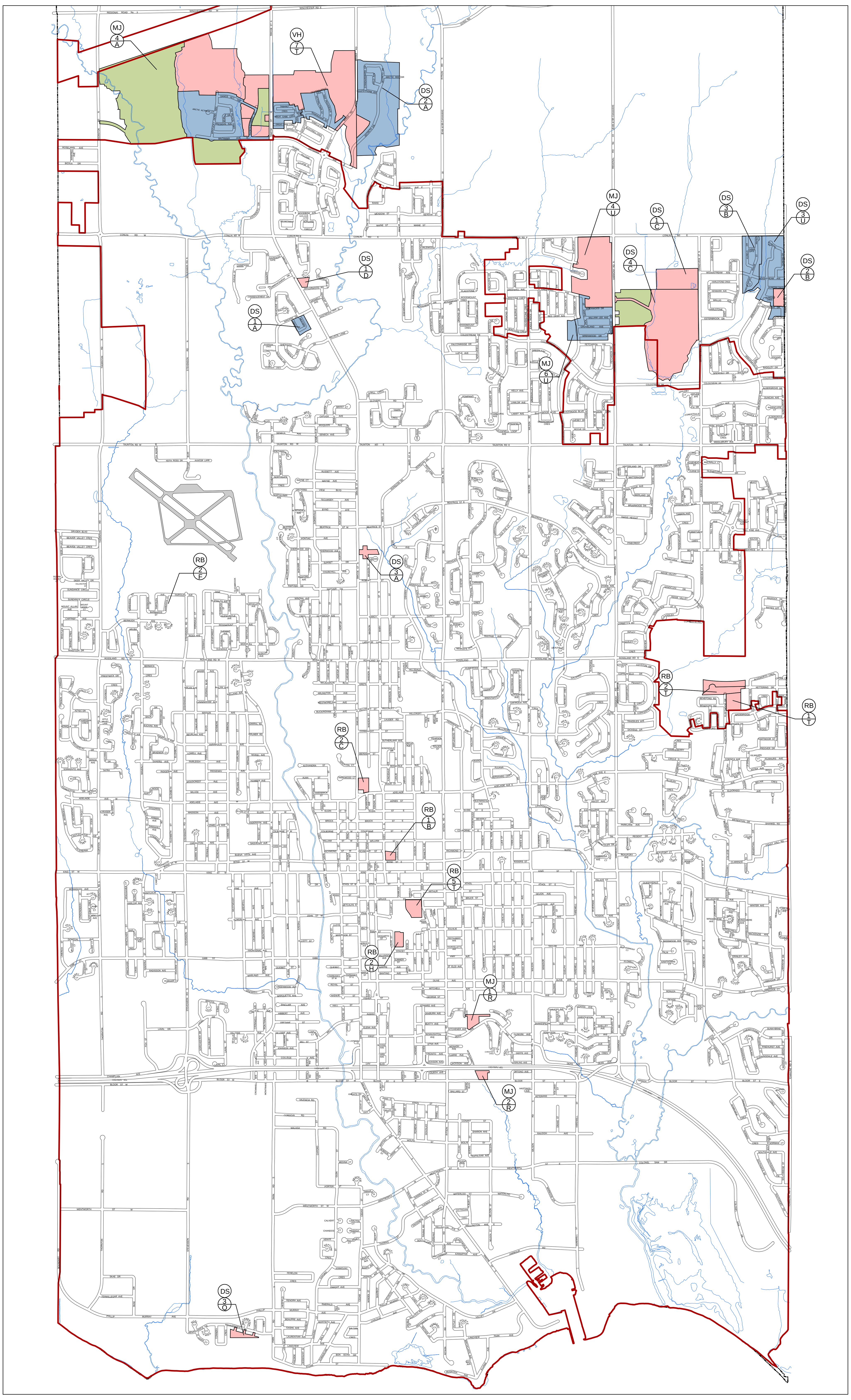
OPUCN is providing the following attachments to its response:

BS_3_18_RSD_Dec; BS_3_18_Re City of Oshawa Future Developments Documentation; and BS_3_18_site plan data sp_app_file.

Residential Subdivision Development Activity

City of Oshawa
Development Services Department





Legend

CONDIMINIUM/ SUBDIVISION PLAN APPROVAL STAGES	LEGEND	NUMBER OF UNITS					
		S.D.	Semi	Th.	S. Th.	Apt.	Total
PROPOSED DRAFT PLAN		265 37.27%	178 25.03%	210 29.54%	0 0%	58 8.16%	711 100%
DRAFT APPROVED		1317 38.08%	88 2.54%	355 10.26%	378 10.93%	1321 38.19%	3459 100%
REGISTERED		944 75.22%	54 4.30%	78 6.22%	179 14.26%	0 0%	1255 100%
REGISTERED NO PERMITS ISSUED	R.N.P.I.	651 68.38%	52 5.46%	78 8.19%	171 17.97%	0 0%	952 100%

Effective Date:
December 31, 2014

Abbreviations:
S.D. - Single Detached
Semi - Semi-Detached
Th. - Townhouses
S. Th. - Street Townhouses
Apt. - Apartments
R.N.P.I. - Registered No Permits Issued

Planner	Init
Valerie Hendry	VH
Robert Bedic	RB
Morgan Jones	MJ
David Sappleton	DS

Notes

1. Units are considered built when the building permit is issued.
2. Plans having five (5) or less units for which no building permit has been issued are not shown on this map.
3. Development — 1 / R — RB: Column Number; Planner Responsible; Row Letter
4. ##/##/#### — Day, Month, Year

A1
REGISTERED PLAN No. 40M-2511 — FILE No. S-O-2011-01
DEVELOPER'S NAME: COUNTRY GATE HOMES LTD.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	32					32	03/06/14
R.N.P.I.	29					29	

A2
REGISTERED PLAN No. 40M-2530 — FILE No. S-O-2011-02
DEVELOPER'S NAME: CHARING CROSS INVESTMENTS INC. (METRUS)

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	26					26	16/08/12
	231		78			309	17/12/14
R.N.P.I.	231		78			309	

A3
REGISTERED PLAN No. CONDO CONVERSION — FILE No. C-O-2004-02
DEVELOPER'S NAME: ROTH CONSTRUCTION LTD

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
					69	69	22/08/06
R.N.P.I.							

A4
REGISTERED PLAN No. 40M-2533 — FILE No. S-O-2012-01
DEVELOPER'S NAME: TRIBUTE COMMUNITIES

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	232	178	210			620	13/04/12
	194	22	355		171	742	19/06/13
	122	54				176	22/12/14
R.N.P.I.	117	52				169	

B1
REGISTERED PLAN No. — FILE No. C-O-2014-02
DEVELOPER'S NAME: BOND AND MARY DEVELOPMENTS

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
					239	239	08/08/14
R.N.P.I.							

B2
REGISTERED PLAN No. — FILE No. S-O-2012-02
DEVELOPER'S NAME: 1494339 ONTARIO LTD. (FOLEY GROUP)

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	33					33	28/05/13
R.N.P.I.							

B3
REGISTERED PLAN No. 40M-2534 — FILE No. S-0-2006-01
DEVELOPER'S NAME: SILWELL DEVELOPMENTS

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	117					117	22/12/14
R.N.P.I.	117					117	

C1
REGISTERED PLAN No. — FILE No. S-O-2013-02
DEVELOPER'S NAME: NORTH GRANDVIEW INC.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	84					84	22/10/14
R.N.P.I.							

C2
REGISTERED PLAN No. — FILE No. C-O-2013-02
DEVELOPER'S NAME: 255 SIMCOE STREET HOLDINGS INC.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
					152	152	01/08/14
R.N.P.I.							

C3
REGISTERED PLAN No. — FILE No. S-O-2007-01
DEVELOPER'S NAME: E.L.M. MANAGEMENT LIMITED

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	10					10	25/04/08
R.N.P.I.							

C4
REGISTERED PLAN No. — FILE No. S-O-2012-03
DEVELOPER'S NAME: SILWELL DEVELOPMENT LTD. & 1229403 ONTARIO LTD.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	23				58	81	21/12/12
	373					373	22/10/14
R.N.P.I.							

D1
REGISTERED PLAN No. CONDO CONVERSION — FILE No. C-O--2014-01
DEVELOPER'S NAME: 2 TAYLORWOOD ROAD LIMITED

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
			9		73	82	08/08/14
R.N.P.I.							

H2
REGISTERED PLAN No. — FILE No. 18T-96004
DEVELOPER'S NAME: MEDALLION CORPORATION

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	27					27	23/08/97
R.N.P.I.							

Q3
REGISTERED PLAN No. — FILE No. S-O-2005-02
DEVELOPER'S NAME: DURHAM HOMES

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	22					22	15/08/06
R.N.P.I.							

R1
REGISTERED PLAN No. — FILE No. 18T-95007
DEVELOPER'S NAME: 755593 ONTARIO INC.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	2	4		21		27	05/07/96
R.N.P.I.							

R2
REGISTERED PLAN No. CONDO CONVERSION — FILE No. C-O-2005-03
DEVELOPER'S NAME: CHERBROOK PROPERTIES

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
					42	42	18/06/13
R.N.P.I.							

T1
REGISTERED PLAN No. — FILE No. S-O-2013-01
DEVELOPER'S NAME: BEECHNUT DEVELOPMENT CORPORATION LTD.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	39					39	25/06/14

T2
REGISTERED PLAN No. — FILE No. 18T-97027
DEVELOPER'S NAME: BEECHNUT DEVELOPMENTS LTD.

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	17			115		132	06/18/09

(40M-2078, 40M-2126, 40M-2204 BUILT OUT)

T5
REGISTERED PLAN No. — FILE No. S-O-2005--03/C-O-2007-05
DEVELOPER'S NAME: MEDALLION CORPORATION

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
					320	320	24/03/06

T7
REGISTERED PLAN No. — FILE No. S-O-2006-02
DEVELOPER'S NAME: Minto Metropia (Windfields) Limited Partnership

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	191			208	129	528	24/06/13
40M-2525	105			8		113	03/09/14
40M-2525 R.N.P.I.	39			0		39	
40M-2532	10			171		181	22/12/14
40M-2532 R.N.P.I.	10			171		181	

(40M-2503 BUILT OUT)

U3
REGISTERED PLAN No. — FILE No. S-O-2001-03
DEVELOPER'S NAME: SILWELL DEVELOPMENTS

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
40M-2507	154					154	?/12/13
40M-2507 R.N.P.I.	8					8	

(40M- 2432, 40M-2329, 40M-2262, 40M-2263, 40M-2471 BUILT OUT)

U4
REGISTERED PLAN No. — FILE No. 18T-94025
DEVELOPER'S NAME: 825901 ONTARIO LTD. etal (FKT)

LEGEND	S.D.	Semi	Th.	S. Th.	Apt.	Total	Date
	309	62		34	310	715	30/04/98
40M-2521	173					173	29/07/14
40M-2521 R.N.P.I.	100					100	

All other cards (rows A–U, columns 1–9) are blank forms: REGISTERED PLAN No. / FILE No. / DEVELOPER'S NAME / LEGEND / UNITS: S.D., Semi, Th., S. Th., Apt., Total, Date / R.N.P.I.

Oshawa

09-Aug-13

App. No.	Planner	Address	Project Type	Comment/Status
SPA-2006-03	Cambell Steuart x 2366	3309 SIMCOE STREET NORTH	NEW COMMERCIAL	GAS,CONVENIENCE, DRIVE THRU (COLUMBUS)
SPA-2007-12	David Sappleton x 2426	1011 SIMCOE STREET NORTH	ALTERATION RESIDENTIAL - APARTMENT BUILDING	CONVERSION OF EXISTING RENTAL TOWNHOUSES TO CONDOMINIUM
SPA-2007-26	Hena Kabir x 2402	41 MARY STREET NORTH, 100 BOND ST	NEW RESIDENTIAL/COMMERCIAL	APARTMENT BUILDING
SPA-2009-02	Robert Bedic x 2401	750 ALBERT STREET	NEW RESIDENTIAL - APARTMENT BUILDING	ORIGINALLY SUBMITTED FOR LODGING HOUSE. LATEST PLAN FOR TRI-PLEX.
SPA-2009-07	Cambell Steuart x 2366	720 ELDERBERRY	NEW COMMERCIAL	COMMERICAL DEVELOPMENT. DEVON BIDDLE.
SPA-2010-12	Morgan Jones x 2536	23 HARMONY RD SOUTH	ALTERATION RESIDENTIAL - TOWN HOUSE	CONDO CONVERSION. EXTENSION GRANTED UNTIL DEC 31 2013.
SPA-2011-16	Morgan Jones x 2536	394-400 BLOOR ST EAST	ALTERATION RESIDENTIAL - APARTMENT BUILDING	AMEND AGREEMENTS TO REMOVE 3RD BLDG. CONDO EXPIRES DEC. 31, 2013
SPA-2012-01	Cambell Steuart x 2366	122 CENTRE ST NORTH	NEW RESIDENTIAL - APARTMENT BUILDING	VACANT TO 3 STOREY RESIDENTIAL 10 UNIT LODGING HOUSE.
SPA-2012-07	Hena Kabir x 2402	1720-1750 SIMCOE ST NORTH	NEW RESIDENTIAL - MIXED	STUDENT HOUSING. ADDRESS REVISED TO 1720-1750 SIMCOE STREET NORTH
SPA-2012-08	Hena Kabir x 2402	1569 SIMCOE ST NORTH	NEW RESIDENTIAL - APARTMENT BUILDING	STUDENT HOUSING. PROPOSED 2 PHASES. APPROVED AND SITE PREPARED FOR CONSTRUCTION
SPA-2012-19	Hena Kabir x 2402	301 RITSON RD NORTH	NEW INDUSTRIAL	CANADA POST FACILITY. PROJECT ON HOLD . CONSTRUCTION ANTICIPATED IN SPRING 2014.
SPA-2012-20	Cambell Steuart x 2366	235 BLOOR ST EAST	NEW COMMERCIAL	VACANT TO RETAIL FOR TRAILER PARTS AND TRAILER SALES

App. No.	Planner	Address	Project Type	Comment/Status
SPA-2012-22	Cambell Steuart x 2366	22 & 26 GRENFELL ST	NEW RESIDENTIAL - APARTMENT BUILDING	SINGLE-DETACHED RESIDENCE TO 8 UNIT APT BUILDING.
SPA-2012-23	Cambell Steuart x 2366	160-162 STEVENSON RD SOUTH	NEW COMMERCIAL	MEDICAL OFFICE. C OF A COMPLETE, TEAR DOWN OF EXISTING HOUSE AND CONSTRUCTION OF OFFICE.
SPA-2012-25	Hena Kabir x 2402	2 TAYLORWOOD	NEW RESIDENTIAL - APARTMENT BUILDING	RESIDENTIAL STACKED TOWNHOUSES DEVELOPMENT. CIP APPROVED. APPROVED
SPA-2012-26	Hena Kabir x 2402	1418 SIMCOE ST SOUTH	NEW RESIDENTIAL - APARTMENT BUILDING	APARTMENT BUILDING
SPA-2012-27	Hena Kabir x 2402	1909 SIMCOE ST NORTH	NEW RESIDENTIAL - APARTMENT BUILDING	VACANT LAND TO STUDENT HOUSING APARTMENT. C OF A APPROVED
SPA-2012-28	Cambell Steuart x 2366	953-973 FAREWELL	NEW INDUSTRIAL	1 STOREY INDUSTRIAL WAREHOUSE WITH OFFICE. C OF A MTG - NOV.28/12, END OF APPEAL - DEC 18/12
SPA-2012-40	Hena Kabir x 2402	NE BENSON & GLENBOURNE	NEW RESIDENTIAL - APARTMENT BUILDING	VACANT TO RETIREMENT DEVELOPMENT - 206 FULLY INDEPENDENT RETIREMENT AND SUITE FULL SERVICE RETIREMENT UNITS. C OF A PPAORVED FOR MINOR VARIANCE FOR PARKING IN FRONT YARD.
SPA-2012-41	Hena Kabir x 2402	BENSON AND GLENBOURNE	NEW RESIDENTIAL - APARTMENT BUILDING	TWO, 8 STOREY APARTMENT BUILDINGS WITH 144 UNITS. APPROVED, UNDER CONSTRUCTION
SPA-2012-42	Cambell Steuart x 2366	787 BLOOR ST WEST	ADDITION INDUSTRIAL	TRANSPORT TRUCK MAINTENANCE GARAGE - BUILDING EXPANSION. APPROVED
SPA-2012-43	Cambell Steuart x 2366	611 KING ST WEST	ADDITION INSTITUTIONAL	KING STREET PENTECOSTAL CHURCH
SPA-2012-44	Cambell Steuart x 2366	815 KING ST WEST	ALTERATION COMMERCIAL	FRASER FORD - CAR SALES AND SERVICE EXPANSION
SPA-2012-46	Cambell Steuart x 2366	1260 AIRPORT BLVD	NEW COMMERCIAL	AIRCRAFT HANGER/OFFICE. EXTENSION TO DEC. 31/13

App. No.	Planner	Address	Project Type	Comment/Status
SPA-2013-01	Morgan Jones x 2536	71 & 75 EMMA STREET	NEW RESIDENTIAL - APARTMENT BUILDING	VACANT LAND TO APARTMENT BUILDING
SPA-2013-03	Robert Bedic x 2401	416 TAUNTON RD WEST	NEW COMMERCIAL	PARKING LOT EXPANSION FOR CHURCH.
SPA-2013-04	Morgan Jones x 2536	1310 KING ST EAST	NEW COMMERCIAL	COMMERICAL PLAZA TD BANK. APPROVED
SPA-2013-05	Morgan Jones x 2536	306 KITCHENER AVE	NEW COMMERCIAL	SELF STORAGE UNITS
SPA-2013-06	Cambell Steuart x 2366	151 ATHOL ST	NEW INSTITUTIONAL	OFFICE BUILDING - ABORIGINAL RESOURCE CENTER
SPA-2013-07	Valerie Hendry x 2125	323 KING ST WEST	ALTERATION COMMERCIAL	DEMOLITION AND CONSTRUCTION OF NEW WENDY'S RESTAURANT
SPA-2013-08	Cambell Steuart x 2366	193 KING ST EAST	NEW COMMERCIAL	DEMOLITION OF EXISTING BUILDING AND CONSTRUCTION OF NEW OFFICE BLDG. APPROVED.
SPA-2013-09	Morgan Jones x 2536	481 RITSON RD SOUTH	ALTERATION RESIDENTIAL/COMMERCIAL	USED CAR LOT
SPA-2013-10	David Sappleton x 2426	755 THORNTON RD SOUTH	NEW COMMERCIAL	COMMERCIAL PARKING LOT FOR GO TRAIN STATION.
SPA-2013-11	Valerie Hendry x 2125	610 TAYLOR AVE	NEW INSTITUTIONAL	DEMOLITION OF OLDER SCHOOL, CONSTRUCTION OF NEW CLARA HUGHES PUBLIC SCHOOL
SPA-2013-12	Cambell Steuart x 2366	419 KING ST WEST	ADDITION COMMERCIAL	OSHAWA CENTRE EXPANSION
SPA-2013-13	Hena Kabir x 2402	200-292 RITSON RD NORTH	NEW COMMERCIAL	SPECIAL PURPOSE COMMERICAL - RICE COMMERCIAL, 152,000 SQ FT COMMERCIAL
SPA-2013-14	Valerie Hendry x 2125	184 BOND ST WEST	NEW COMMERCIAL	PARKING LOT TO RETAIL PLAZA

App. No.	Planner	Address	Project Type	Comment/Status
SPA-2013-15	Morgan Jones x 2536	64 PARK ROAD NORTH	ALTERATION COMMERCIAL	EXPANSION OF PARKING AREA FOR EXISTING CLINIC
SPA-2013-16	Robert Bedic x 2401	1472 THORNTON RD NORTH	NEW INDUSTRIAL	INDUSTRIAL UNITS
SPA-2013-17	Robert Bedic x 2401	255 SIMCOE ST NORTH	NEW RESIDENTIAL - DETACHED	TO BUILD A 152 UNIT SENIORS APARTMENT BUILDING IN ADDITION TO THE EXISTING 118 UNIT SENIORS APARTMENT BUILDING.
SPA-2013-18	David Sappleton x 2426	67-75 SIMCOE ST NORTH	NEW COMMERCIAL	NEW HOTEL, RESTAURANT AND CONFERENCE CENTRE
SPA-2013-19	Cambell Steuart x 2366	1661 HARMONY RD NORTH	NEW COMMERCIAL	PUBLIC MOBILE TELECOMMUNICATION TOWER
SPA-2013-20	Cambell Steuart x 2366	55 LAKEVIEW PARK	ALTERATION COMMERCIAL	ALTERATIONS TO JUBILEE PAVILLION
SPA-2013-21	David Sappleton x 2426	710 KING ST WEST	NEW RESIDENTIAL - APARTMENT BUILDING	4 STOREY APARTMENT BUILDING
SPA-2013-22	Robert Bedic x 2401	20 PARK RD SOUTH	NEW COMMERCIAL	AUTOMOBILE SERVICE STATION, GAR BAR, CONVENIENCE STORE WITH RETAIL AND TIM HORTON'S USES, CARWASH, MR. LUBE
SPA-2013-23	Cambell Steuart x 2366	1645 & 1655 SIMCOE ST NORTH	NEW RESIDENTIAL - APARTMENT BUILDING	STAND ALONE APARTMENT BUILDING

22-Apr-15

LIST OF SITE PLAN FILES IN PROCESS

App. No.	Planner	Address	Project Type	Circ.No.	Comment/Status
200700012	David Sappleton x Ext. 2426	1011 SIMCOE STREET NORTH	ALTERATION RESIDENTIAL - APARTMENT BUILDING	4	CONVERSION OF EXISTING RENTAL TOWNHOUSES TO CONDOMINIUM. NEW OWNER.
201200020	Cambell Steuart, Ext. 2366	235 BLOOR ST E	NEW COMMERCIAL	3	VACANT TO RETAIL FOR TRAILER PARTS AND TRAILER SALES. AGMT W/ OWNER FOR SIGNING.
201200027	Cambell Steuart, Ext. 2366	1909 SIMCOE	NEW RESIDENTIAL - APARTMENT BUILDING	5	VACANT LAND TO STUDENT HOUSING APARTMENT. C OF A APPROVED. ACCESSIBILITY PLAN APPROVED. CIP CONDITION - FOUNDATION COMPLETE BY AUG 31, 2015, OPEN DEC 31, 2015. AGMT W/ OWNER FOR SIGNING.
201300005	Morgan Jones, Ext. 2536	306 KITCHENER AVE	NEW COMMERCIAL	3	SELF STORAGE UNITS. WITH APPLICANT.
201300009	Morgan Jones, Ext. 2536	481 RITSON RD S	ALTERATION RESIDENTIAL/COMMERCIAL	2	USED CAR LOT. WITH APPLICANT.
201300010	David Sappleton x Ext. 2426	755 THORNTON RD S	NEW COMMERCIAL	2	GO PARKING LOT. DRAFT LETTER OF UNDERTAKING SENT TO GO AND OWNER FEBRUARY 11, 2015.
201300014	Cambell Steuart, Ext. 2366	184 BOND ST W	NEW COMMERCIAL	3	PARKING LOT TO RETAIL STORES.
201300015	Morgan Jones, Ext. 2536	64 PARK ROAD N	ALTERATION COMMERCIAL	2	PROPOSED EXPANSION TO PARKING LOT AND INTERNAL ALTERATIONS TO EXPAND OFFICE SPACE. DRAWINGS ARE ACCEPTABLE & HAVE BEEN SIGNED BY PLANNING SERVICES & ENGINEERING SERVICES. AGREEMENT WITH OWNER FOR SIGNING
201300020	Cambell Steuart, Ext. 2366	55 LAKEVIEW PARK	ALTERATION COMMERCIAL	4	ALTERATIONS AND EXPANSION TO EXISTING JUBILEE PAVILLION. PRESENTATION TO DSC APR 14/14. LETTER OF UNDERTAKING PROPOSED
201300023	Cambell Steuart, Ext. 2366	1645&1655 SIMCOE ST N	NEW RESIDENTIAL - APARTMENT BUILDING	6	STAND ALONE STUDENT APARTMENT BUILDING. CIP - FDN COMPLETE AUG 31/15, BLDG COMPLETE DEC 31/15
201300027	Cambell Steuart, Ext. 2366	604 TAUNTON RD W	NEW COMMERCIAL	3	CONVERSION OF HOUSE TO OFFICE. MINOR VARIANCE APPROVED.

201300029	Robert Bedic, Ext. 2401	1200 THORNTON RD N	NEW INSTITUTIONAL	3	AGMT WITH OWNER WEEK OF MAR 16/15.
201300035	Robert Bedic, Ext. 2401	1658 RITSON RD N	NEW RESIDENTIAL - APARTMENT BUILDING	3	VACANT TO RESIDENTIAL APT 75 UNIT. REVISED PERMIT DRAWING REC'D BY BUILDINGS FEB 25/15.
201400001	Robert Bedic, Ext. 2401	5151 SIMCOE ST N	ADDITION INDUSTRIAL	3	MANUFACTURING - 1114.8 SQM ADD TO RAGLAN WELDING. AGMT WITH OWNER AS OF MARCH 16/15.
201400005	Cambell Steuart, Ext. 2366	600 KING ST E	NEW COMMERCIAL	4	RETAIL/COMMERCIAL/OFFICE - REDEVELOPMENT OF EXISTING PLAZA
201400006	Cambell Steuart, Ext. 2366	211 HARMONY RD N	ADDITION INSTITUTIONAL	3	ELEMENTARY SCHOOL
201400008	Robert Bedic, Ext. 2401	RITSON RD N & ADELAIDE AVE E	NEW COMMERCIAL	1	MULTI-TENANT BUILDINGS CONSISTING OF MIXED-USE RETAIL. OWNER ADVISED THAT PLANS HAVE BEEN REVISED BUT THEY ARE WAITING FOR INFO FROM LEASING BEFORE RE-SUBMITTING AS TENANTS COULD AFFECT PLANS
201400009	David Sappleton x Ext. 2426	1701 SIMCOE STREET NORTH	ALTERATION COMMERCIAL	3	RESIDENTIAL TO DENTIST OFFICE. DRAFT AGREEMENT IS IN THE ROUNDS. WAITING FOR 4TH SUBMISSION.
201400011	Robert Bedic, Ext. 2401	550 TAUNTON RD W	ADDITION COMMERCIAL	2	
201400012	Robert Bedic, Ext. 2401	235 COLUMBUS RD E	NEW COMMERCIAL	1	ROGERS TELECOMMUNICATION TOWER. NEXT SUBMISSION EXPECTED LATE APRIL. TARGETING JUNE FOR PUBLIC MEETING.
201400013	Robert Bedic, Ext. 2401	417/437 STORNGO BLVD	NEW COMMERCIAL	1	ROGERS TELECOMMUNICATION TOWER. APPROVED BY DSC FEB 2/15. REVISED SITE PLAN PROVIDED BY EMAIL TO RB ON APR 10/15. RB TO PREPARE LETTER OF UNDERTAKING AND LETTER TO INDUSTRY CANADA.
201400014	Robert Bedic, Ext. 2401	1345 WINCHESTER RD	NEW COMMERCIAL	1	ROGERS TELECOMMUNICATION TOWER. APPROVED BY DSC FEB 2, 2015. REVISED SITE PLAN PROVIDED TO RB BY EMAIL ON APR 10/15. RB TO PREPARE LETTER OF UNDERTAKING AND LETTER TO INDUSTRY CANADA.
201400015	David Sappleton x Ext. 2426	2021-2023 SIMCOE ST N	NEW RESIDENTIAL - TOWN HOUSE	2	SINGLE FAMILY TO STACKED TOWNHOUSE (APTS). HAVE APPLIED TO C OF A. REDESIGNING SITE TO SATISFY REGION ON DRIVEWAY ENTRANCE. C OF A APRIL 22. ALSO NEED CIP APPLICATION, LIFTING OF 'H' APPLICATION, ACCESSIBILITY PLAN.

201400016	Cambell Steuart, Ext. 2366	710 RALEIGH AVE	NEW INDUSTRIAL	1	NEW TRANSIT MAINTENANCE BUILDING TO BE CONSTRUCTED ON THE SAME PROPERTY AS EXISTING MAINTENANCE BUILDING FOR DURHAM REGION TRANSIT
201400017	Morgan Jones, Ext. 2536	501 RITSON RD S	ALTERATION COMMERCIAL	1	LETTER OF UNDERTAKING - PROPOSED DRIVE THRU AND SITE MODIFICATIONS TO EXISTING MCDONALDS
201400018	Robert Bedic, Ext. 2401	950 COLDSTREAM DR	NEW INSTITUTIONAL	2	NEW ELEMENTARY SCHOOL.
201500001	Cambell Steuart, Ext. 2366	285 GRANDVIEW ST S	NEW INSTITUTIONAL	1	ELEMENTARY SCHOOL
201500002	Cambell Steuart, Ext. 2366	2339 SIMCOE ST N	NEW INSTITUTIONAL	1	NEW FIRE STATION AT NE CORNER OF BRITANNIA & SIMCOE ST N
201500003	David Sappleton x Ext. 2426	1051 SIMCOE ST N (BEATRICE ST E)	NEW RESIDENTIAL - APARTMENT BUILDING	1	VACANT TO APARTMENT BUILDING. 1ST SUBMISSION IN. ROC READY. SITE WALK NEEDED AND REVISIONS TO PLANS AND REPORTS. NEW STUDIES REQUIRED.
201500004	Cambell Steuart, Ext. 2366	THOROUGHBRED ST & DANCE ACT AV	NEW RESIDENTIAL - TOWN HOUSE	01	161 TOWNHOUSES, TO BE CONDOMINIUM DEVELOPMENT
201500005	Cambell Steuart, Ext. 2366	THOROUGHBRED ST & BRITANNIA AV	NEW RESIDENTIAL - TOWN HOUSE	01	317 TOWNHOUSES, TO BE CONDOMINIUM DEVELOPMENT
201500006	Robert Bedic, Ext. 2401	441 GIBB ST	ADDITION COMMERCIAL	1	AS-BUILT SITE PLAN DRAWINGS AND AGREEMENT FOR EXISTING LOBLAWS SUPERSTORE.
201500007	Robert Bedic, Ext. 2401	139-143 CELINA ST	NEW RESIDENTIAL - APARTMENT BUILDING	1	PROPOSED 6 UNIT APARTMENT BUILDING
201500008	Robert Bedic, Ext. 2401	2375 RITSON RD N	NEW COMMERCIAL	1	PROPOSED BELL TELECOMMUNICATION TOWER. PUBLIC MEETING SCHDULED FOR MAY 4, 2015.
201500009	Cambell Steuart, Ext. 2366	1818 SIMCOE ST N	ADDITION COMMERCIAL	1	SMALL PLAZA PROPOSED AT REAR OF EXISTING GAS STATION
201500010	David Sappleton x Ext. 2426	205 KING ST W	NEW COMMERCIAL	1	VACANT TO USED CAR DEALERSHIP

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-19

Ref: Exhibit 3, page 26

In its General Service <50kW class, OPUCN has assumed an annual customer growth rate of 3.0% over the 5 year test period, after showing virtually no customer growth in the previous 5 year period. Notwithstanding its reference to the two examples of commercial developments in its service territory, please provide more specific evidence that would justify 3.0% growth over the course of this application for this class.

Response:

As per City's "Oshawa's 12th Annual Realtor & Development" and City Correspondence, the following are examples of small commercial developments that are expected in Oshawa:

1. Kedron Part II plan spans approximately 1,151 acres of residential, commercial and institutional usage.
2. RioCan will be developing 1.3 million square feet of commercial space.
3. Commercial developments (stores, recreational facilities, etc) as a result of increase in subdivision developments in north Oshawa.
4. Oshawa Centre expansion.
5. Rice Group developments – 158,500 square feet of retail space in single and multi-unit buildings.
6. Other planned commercial development as per City.

OPUCN is providing the following attachments to its response:

BS_3_19_Notes-Nov 7 Realtor Breakfast.

Oshawa's 12th Annual Realtor & Developer Breakfast
Notes – November 7, 2013

Welcome

Good morning and welcome to our **12th Annual Realtor and Developer Breakfast**. We are very excited to see all of you here. As many of you may have noticed from our correspondence for this event, we've referred to Oshawa's market as being HOT and with the amount of headway the city has made in locking in new developments and working with the Region of Durham to promote our area around the globe – Oshawa's forecast for continued growth has never looked better.

Introduce the staff members here from the City's Development Services branch – from our Economic Development Services team we have Rhonda Keenan (BDM), David Tuley (DDO), and Chelsa Mayhew (BIC). We also have Tom Hodgins, the City's Commissioner of Development Services, Paul Ralph, Director of Planning Services, Gary Carroll, Director of Engineering Services, Mike Leonard, Chief Building Official.

Introduction

As in past years, this morning's presentation will highlight various developments taking place throughout Oshawa's 5 main growth nodes: Rural North, Uptown, Midtown, Downtown and Lakeshore. We will also go over a variety of our city's competitive advantages as well as the many services offered through Economic Development Services.

Rural North

In the North area of Oshawa, the prominent project taking place is the **Highway 407 extension** – the project is currently set for completion in 2015, phase 1 currently on track with some overpass structures under construction. This development will extend the 407 from Brock Road in Pickering to Harmony Road in Oshawa and will open up new employment lands. Phase 2 from Harmony road to the 115/35 Highway is expected to be complete in 2019/2020.

The **Kedron Part II Plan** is intended to be the next major residential community in Oshawa – the plan spans approximately 1,151 acres and projects a planned population of around 22,000 people with a mix of residential, commercial, and institutional uses.

Regional Official Plan Amendment 128 (ROPA) allows the urban area of Oshawa to extend north to Howden Road and re-designates 855 acres from Major Open Space and Prime Agriculture to Employment Area, 514 Acres from Employment Area to Living Area and 1,337 acres from Deferred and Major Open Space to Living Area. There are still about 420 acres of residential area that remain before the OMB.

Uptown

In Oshawa's Uptown area, **UOIT** and **Durham College** are both on a steep trajectory of growth – In October of this year, Durham College announced that it has the highest enrolment growth in the province. Adding 1,128 students in fall 2012, the college's total growth rate is 14.2% relative to the Ontario college system average of 3.3%. For the 2013-2014 academic year, Durham College has enrolled more than 10,900 full-time students to its Oshawa and Whitby campuses and Pickering Learning Site and UOIT has enrolled more than 9,700 FT students. Including Trent University Oshawa, UOIT and Durham College, more than 18,000 students are attending FT programs in Oshawa.

With growth in academia comes demand for **student housing developments**. Oshawa created a new community improvement plan for the Simcoe Street Spine in the college/university area to help encourage purpose built student housing. To date, there are well over 2,000 beds built or in the Site Plan Approval process. In 2012, the Village Suites student housing development project was awarded a Brownie from the Canadian Urban Institute in recognition of the project's creative financing strategy, which involved City financing under the new CIP.

Also in the Uptown area, several new projects have developed at the **Oshawa Airport** – construction on 150,000 ft² of hangarminium properties is now complete. Other business activity has included:

- **The opening of Optech International in a new hangar:** Optech is a global market leader in the development, manufacture and support of advanced, laser-based survey systems; and
- **Corporate Aircraft Restoration constructed a new larger hangar.** They do mechanical and restoration work on a variety of general aviation and corporate aircraft.
- **Aviation Unlimited:** will start construction on their new Diamond & Piper Aircraft Sales and Service facility in 2014.

Staff, in conjunction with an advisory committee of aviation users, community neighbours and council members are developing a new airport business plan that will be presented to Council in early 2014. This Business Plan will respond to the closure of the Buttonville Airport in 2015. Already, our airport is getting busier and we are seeing an increased take up in hangarminium sales and hangar rentals as well as general corporate traffic as Toronto-based corporations bring their corporate aircraft to Oshawa. The Pickering Airport, re-announced in June by Minister Flaherty is still a moving target. It is unknown when the airport will be built, only that it will be built at some point.

In **health care** – the Oshawa Clinic's new 30,000-ft² Taunton Surgical Centre is now complete and houses a variety of medical specialists, surgical facilities and the Rothbart Centre for Pain Care.

Across from the Airport, The City recently amended its official plan to add approximately 200 acres of new industrially designated lands in the Northwood Industrial Park. In close proximity to UOIT and Durham College, it is hoped that these lands will become home to businesses that need the synergies of educational institutions as you often see in research parks.

Minto, Metrus and Tribute will add 1,782 new residential units in the area of Conlin Road and Simcoe Street. Minto sold out their first phase within weeks and Tribute sold 40 units the first weekend that

their sales office was opened. Oshawa remains an affordable community and clearly residential development continues to do well.

RioCan – will be developing a 1.3 million square foot commercial node on the south side of Conlin Road at Simcoe Street. Timing of this development is intended to coincide with the opening of Highway 407. In the City's Uptown east side, construction has commenced on the 206-unit Harmony Hills retirement centre with an expected completion date of 2015. Construction is also underway for the Grand Vista Luxury Apartments development.

Development continues in the Smart Centres project at Harmony and Taunton including Marshalls, Mastermind, Kids Foot Locker and other major retailers.

Midtown

In Oshawa's Midtown area, one of the most noteable announcements this year has been the $230-million redevelopment and expansion project at the **Oshawa Centre**. With construction already underway, the fashion centre will be expanding by an additional 260,000 ft² - once complete, the total gross leasable area will exceed 1.25 million ft² (additional space will allow the centre to introduce over 60 new retailers). Completion is slated for 2016.

Trent University Oshawa, now in the third year in their facility on Thornton Road, has launched a new strategic and business plan for 2013 through to 2017. The plan includes a number of key development areas covering academic programming, student experience, enhanced campus identity and profile, and governance.

This past July, the city played host to the **Women's Lacrosse 2013 World Cup** – for this event, Oshawa welcomed more than 500 athletes representing teams from 19 nations around the world – not only did this event give some amazing profile to the city, but it also opens the door to other large scale tournaments in the future. In support of future sport tourism activities, Durham Regional Council approved a sport tourism strategy in June of this year. Spearheaded by Durham Region's Economic Development and Tourism team - a regional sport tourism advisory group has been created to implement the strategy throughout the coming year and beyond.

In August of this year, **Metrolinx announced its intent to expropriate the former Knob Hill Farms** property on First Street to build a new GO station. It was also released that GO Transit completed an environmental assessment for the extension of rail service from Oshawa to Bowmanville and the selected property in Oshawa was a preferred location. There is no funding in GO's plans for the development of property at this time however.

Across the street from the former Knob Hill Farms property is 155 First Street. This was purchased a couple of years ago by a Toronto-based Developer and has undergone extensive renovations for conversion into commercial space.

Several commercial developments are continuing to grow throughout the Midtown area – at this time last year, **Costco** officially opened to the public. Costco is part of the Rice Group's development which

includes an additional 158,500ft² of retail space in single and multi-unit buildings. The steel is going up on the No Frills store and we will soon see Panera Bread, Panda Express and Dollarama as a start. There are a number of other developments in the Midtown Area including the new 2,100ft² Remax Jazz office building on King Street, a new 1,800ft² Aboriginal Centre on Athol Street being built by UOIT adjacent to the Alger Press campus building and a 10,000ft² addition to Fraser Ford. In order to maximize space at the dealership given the small lot size, they will be introducing a new vehicle storage system that will be able to store 72 vehicles on four levels. In addition, the Midtown Mall has been sold and the new owners have plans for refurbishment of the property.

Downtown

Simply put, you really cannot miss all of the positive changes that are continuing in the downtown core. Currently, more than **2,500 students** are attending classes through UOIT's Faculty of Social Sciences and Humanities and Faculty of Education. UOIT's total footprint in downtown is now in five buildings including Bordessa Hall at 50 Bond Street East, 11 Simcoe Street North, 2 Simcoe Street South, The Alger Press Building at 61 Charles Street and the recently restored Regent Theatre at 50 King Street East.

UOIT's Administrative staff recently moved into the third floor of the Alger Press Building in order to accommodate student growth at the main campus. An RFP for a new Admin building has been issued. This past summer, our office's **pedestrian count project** continued for the third consecutive year. Historical data is available and highlights pedestrian traffic growth trends in key areas throughout the downtown area. If you have a client interested in locating in the downtown, be sure to talk to David about the pedestrian counts. They paint a very interesting picture of how people move in and around the downtown core throughout the day.

New business! It is amazing to see a number of new establishments choosing downtown for their business location – new businesses include a collaborative arts centre, authentic Indian restaurants, a poutinerie, live music clubs, cafés, one of the area's newest co-working office facilities and so much more.

I want to take a minute and talk about the Co-working space, **CORE 21**. This was an idea developed and nurtured by David Tuley to create a space in downtown Oshawa where entrepreneurs could work side by side with support agencies and others with the goal to growing business. With no government funding available to start a venture like this, David approached the private sector. The idea stuck with one developer and CORE 21 was created. This dynamic co-working facility at 21 Simcoe Street south has filled nearly all the space on the ground floor and is now going to expand to the second floor. The SPARK Centre which is Durham Region's Regional Innovation Centre, UOIT, Durham College as well as others now occupy the space.

Two new hotels will be opening in the downtown - the 120 room Holiday Inn Express and Oshawa Convention Centre with an expected construction start in spring, 2014 at the corner of Richmond and Simcoe Street and LaQuinta, a 49-room boutique hotel at 67 King Street East. LaQuinta expects to open within the next month.

The City continues to support new and existing businesses in the downtown area and offers **community improvement incentives** to assist with the improvement of the appearance, accessibility and infrastructure of properties in the area.

One of the downtown aspects that we really wanted to place emphasis on from a promotional perspective is the increase in restaurants over the last couple of years. Now, with over 60 food-related establishments, many with a core focus of catering to vegetarian, vegan, organic and other specialty palates (including BBQ ☺), the area has truly grown into a mini district for foodies. David is currently working on his latest **Downtown Dining Guide**, which will include a comprehensive inventory along with select insights, quotes and stories from business owners themselves.

Coming up in the summer of 2015, the **Pan Am and Parapan Am Games** will be hitting the streets of downtown Oshawa with both Boxing and Weightlifting events taking place at the GM Centre. The Games will be a significant opportunity for the Oshawa community to get involved through pre-planning and many volunteer opportunities.

Speaking of the **GM Centre**, not many people know how highly ranked and popular this facility is – in 2012 alone, the Centre hosted 318,809 guests and was ranked 14th in the world by Venues Today Magazine for venues of 5,001 – 8,000 capacity. Recently the GM Centre has attracted internationally recognized acts such as Cirque du Soleil, Reba McIntyre, the Dixie Chicks and the ever-popular Dora the Explorer. Over the next few months, Great Big Sea, the Barenaked Ladies, The Band Perry and other notables will perform.

We have also seen some interesting redevelopment and infill projects downtown as well. On Centre Street, Andy Kozier demolished two older underutilized buildings and constructed a new 7800 square foot office building. Peter Traicus demolished an old building on Bond Street a few years ago and this year completed construction of a new attractive building with ground floor commercial and second floor residential.

Genosha not much can be said about the Genosha other than that it is still there, and there are no active plans for redevelopment. We continue to meet with prospective developers to discuss opportunities but to date, nothing has come to fruition. We will be reaching out to the development community in the New Year to help us and the owner of the building generate options.

Lakeshore

In August, it was announced that **Fresh Del Monte** will open its first Canadian plant in Oshawa by the end of the year. Del Monte will operate out of the former 108,000ft² Automodular facility located on Thornton Road S. Del Monte expects to employ approximately 100 people and will prepare fresh cut fruits and vegetables for the Canadian Market. The facility will also include a banana-ripening centre.

In other news, with world headquarters in Oshawa, **EHC Global**, the world's largest producer of escalator handrails, has recently expanded additional operations into Brazil and opened a second operations facility in China.

In recent news, **GM Canada** not only has been recognized with J.D. Power awards for quality at the Oshawa-based manufacturing plants, but has also announced that because of the popularity of the Impala and the Equinox, production on the consolidated line will run until 2016, 2 years longer than originally planned.

The Oshawa Port Authority announced earlier this year that 2012 was a record-breaking year with almost twice the amount of cargo the port would have seen a decade ago. A rail spur is under construction at the harbor, which will increase business opportunity and competitiveness by allowing direct sea to rail shipments.

Metal Traders is currently working through the final details of a new industrial building on Farewell Street close to the harbor. The building will be 165,000ft² with an additional 7,200ft² of office. Metal Traders chose this location because of its proximity to the harbor.

Talman Truck Centres on Bloor Street recently completed a 10,600ft² expansion of their dealership and have now decided to expand again by building 7,800ft² of office space.

There are various amounts of vacant industrial land in the **Marwood and Stevenson Industrial Parks** – ranging from 1 acre to 29 acres. These locations offer multi-modal access through rail, port and highway.

The Quality Suites (formerly Holiday Inn) on Bloor Street and the 401 has announced that it will become a Marriott Courtyard and will be undergoing extensive renovations for this new brand.

Tomorrow, Council will consider staff's recommendation to accept the transfer of the Marina Lands from the Oshawa Port Authority. This is the last piece of land remaining to be transferred as part of the Settlement Agreement reached with the Federal Government in 2010.

Focus on the Opportunity

When you see how far this city has come, there is no better time to focus in on the opportunity…

Opportunities

Some of the highlights and new developments that have a positive impact to the city and potential investors:

Incentives – we offer a number of Community Improvement Plans to support activities from façade improvements to brownfield redevelopments. These include the Central Business District, Downtown Shoulder Area, Simcoe Street North, Simcoe Street South, King Street West and the Brownfield CIP's. For industrial development, we charge NO industrial DCs.

Highway 407 – will provide much needed additional transportation infrastructure and will open up new employment lands in the City.

In the North end, the **Kedron Part II Plan** currently has growth estimates of approximately 22,000 people and will open opportunities for residential, commercial and institutional growth.

ROPA 128 will open up significant employment and residential areas and extend the City's urban area further north.

In the downtown area, there are **student housing** opportunities with student numbers in the area having grown to 2,500.

The **Region of Durham's Economic Development team** is currently working on a new brand, a new website and an aggressive investment attraction strategy to spread the word and attract new businesses and new jobs to the region. Oshawa is part of the **Durham Economic Development Partnership (DEDP)**, a joint initiative between the Region's Economic Development office and the Economic Development Offices in the lakeshore municipalities. Together, we undertake activities to promote the Region and work on initiatives to strengthen the Region's economy.

The Darlington nuclear refurbishment project in nearby Clarington will create 2000 jobs – people who will live, shop and play throughout Durham Region. Although the new nuclear at Darlington has been postponed, it still remains the approved site for new nuclear in Ontario.

Advantages

You need to have the building blocks in place in order to be an attractive community for people to live, work and play in. In Oshawa, those building blocks are in place. We have:

Innovative Post-Secondary

Oshawa is home to truly **innovative post-secondary institutions** – from industry capstone projects, programs in renewable energy, information technology, gaming & entrepreneurship, skilled trades, engineering across many specialties and so much more. Notably in the health care field, Queen's

University's Family Medicine Residency Program at Lakeridge Health Oshawa has welcomed its second cohort of future physicians.

Health Care

Oshawa is home to a number of groundbreaking research studies and developments taking place at **Lakeridge Health**. Most notably, the R.S. McLaughlin Durham Regional Cancer Centre was rated #1 in Ontario for patient care by Cancer Care Ontario. Lakeridge Health is also the first hospital in Canada to launch a fully integrated digital pathology system to improve quality, wait times and stress for patients waiting for biopsy results. As mentioned in our Uptown update, the **Oshawa Clinic's** state-of-the-art Taunton Surgical Centre was also completed this year.

Transportation

Oshawa's **transportation networks** make doing business convenient and efficient.

From an infrastructure perspective – Oshawa offers:

- Road connections through Highway 401, Regional Highway 2 and the extension of Highway 407
- Rail networks through CN and CP
- Air service through the Oshawa Airport
- and access to sea through the Port of Oshawa

Oshawa is also connected to an efficient passenger transportation network that provides services within the city, throughout the GTA and across the country.

- GO Transit provides ½-hour train service in Oshawa to other GTA municipalities with additional trains covering peak times.
- Durham Region Transit is an integrated system serving all communities in Durham Region – In May 2013, DRT launched a new fleet of 26 bus rapid transit (BRT) vehicles to operate the **new DRT Pulse service**, which runs on Highway 2 from the University of Toronto campus in Scarborough to Downtown Oshawa seven days a week. Pulse also offers 7-minute peak service across Highway 2, PRESTO Card convenience and one low fare for riders.
- VIA Rail – also provides regularly scheduled passenger services from the Oshawa Station.
- Oshawa Airport offers charter service for executives and business travelers.

IT Connects

Oshawa PUC Networks offers over 90km of high capacity dark fibre connections throughout the city that are available to service new, existing and expanding business operations.

Entrepreneurship

Every year we work with a number of businesses, large and small – whether it be a large company expansion, a relocation into Oshawa or assisting a small business move from home-based to store-front. A couple of weeks ago, Oshawa were recognized by the Canadian Federation of Independent Business as the 11th best place to run a business in Canada, in the large cities category. Among the top 11, we were the second Ontario municipality to make the list and we could not agree more that Oshawa is one of the most welcoming cities in Ontario for new business.

In addition, this year we sponsored Spark Centre's inaugural Ignite Program for entrepreneurs. This "Dragon's Den" type program mentored over 130 entrepreneurs from across Durham Region culminating in two finalists that won $25,000 each to grow their business.

What we do:

Beyond facilitating and advocating projects through the development process, Oshawa's Economic Development Services team:

Site Selection – we track available land and buildings throughout the city for growth, expansion and relocation needs.

Statistical Market Data – we keep tabs on the most recent stats that relate to our city's economy
Promotional programming – we market Oshawa extensively to Site Selectors and Corporate Realtors and we work closely with partners across Durham Region to attract new investment.

Opportunity connections - We are a liaison between federal, provincial and regional governments for funding opportunities, business events, strategic plan development and program creation.

Trade missions - In partnership with the Region of Durham, we help identify global trade missions for local companies.

Consultation and networking with local businesses, industry and educators.

Downtown development and business support.

Business events – we host several events every year with topics ranging from information on Oshawa (like this breakfast) to specific topics that support business development.

Workforce intelligence - We are a liaison with employment and labour force agencies.

Understanding our clusters
We have recently embarked upon a new Cluster study that will identify Oshawa's new and emerging employment clusters. This will help guide our actions in 2014 and beyond and focus our efforts on those areas that will give us the most potential to grow investment and jobs.

Development Charge Update
We are currently in the process of updating our development charge bylaw. The new by-law will be passed before Council takes its summer break in 2014.

Conclusions

Lastly, the point that we want to leave you all with is that Oshawa has the right infrastructure, the right people and is the right city for you and your clients to invest.

Please feel free to connect with any member of our team, we can be reached online at oshawa.ca/business, through email at business@oshawa.ca and we are now on Twitter at @InvestOshawa.

Economic Development Services
City of Oshawa
50 Centre Street South
Oshawa, Ontario L1H 3Z7

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-20

Ref: Exhibit 3, page 26

In its General Service <50kW class, OPUCN has assumed an annual customer growth rate of 3.0% over the 5 year test period, with customer numbers forecast to grow to 4,529 in 2019, from 3,924 in 2014, an increase of 16%. In the kWh forecast, consumption for this class is growing by only 7.4% over this period. Please provide more specific detail explaining this difference.

Response:

OPUCN's load forecast methodology can be found in Exhibit 3, page 22. Using the methodology used therein, OPUCN determined that Weather Corrected Consumption for the GS < 50 kW customer category decreased from 135,450,260 kWh to 134,228,410.

From the baseline computation of Weather Corrected Consumption: 1) OPUCN added consumption (17,072,663 kWh in 2019) from incremental new customer connection growth due to City expansion activities (513 customer connections from 2014 to 2019) using the average consumption determined in its load forecast methodology; and 2) deducted the impact of CDM activities (6,637,063 kWh in 2019) based upon the customer class prorated share of overall consumption.

By way of a comparison, residential customer connections is expected to increase by a similar margin (16%) however forecast consumption is increasing by less than 1% over the same period. OPUCN speculates the impact of higher efficiency homes, appliances, etc. plus future CDM activities contribute to these results.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-21

Ref: Exhibit 3, page 26

Similarly, in its General Service 50 kW to 999 kW class, OPUCN has assumed an annual customer growth rate of 3.0% over the 5 year test period, after showing negative growth in the previous 5 year period. Notwithstanding its reference to the two examples of commercial developments in its service territory, please provide more specific evidence that would justify 3.0% growth over the course of this application for this class.

Response:

As per City's "Oshawa's 12th Annual Realtor & Development" and City Correspondence, the following are examples of small industrial developments that are expected in Oshawa:

1. Kedron Part II plan spans approximately 1,151 acres of residential, commercial and institutional usage.
2. RioCan will be developing 1.3 million square feet of commercial space.
3. Student Housing Developments – Apartment Buildings as a result of academia growth at UOIT.
4. Oshawa Centre expansion.
5. Holiday Inn Hotel.
6. Other planned commercial development as per City.

Please refer to 3.0-Staff-18 and 3.0-Staff-19 for attachments to this response.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-22

Ref: Exhibit 3, page 26

Since this application was prepared and filed, has any additional information come to light to indicate that the forecast for 2015 is inappropriate in any way?

Response:

No.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-23

Ref: Exhibit 3, page 26

If these forecast customer numbers and kWh loads are not accurate, is it the intention of OPUCN to update these numbers as part of its annual adjustment proposal as shown at Exhibit 1/Tab B/page 2?

Response:

Yes. OPUCN outlines its proposed Annual Adjustment Mechanisms in Exhibit 10, Tab D. Please refer to 1.0-CCC-12 response for additional information.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-24

Ref: Exhibit 2/Tab B/, page 36

OPUCN has indicated that its OM&A cost per customer is forecast to remain at 2013 level of $208 per customer at the end of the 5 year plan. However, Board staff notes that if customer numbers are forecast to grow at only 1.5% per year, the 2019 customer number is 58,718 and the OM&A per customer number will grow to $224 or 8% higher than the current OPUCN forecast. What confidence can the OEB have in this demonstration of efficiency given this risk of optimistic customer growth over the plan term?

Response:

OPUCN provided the following slides in its OPUCN_OEB_Presentation_20150331 filed with the Board on March 31, 2015:

Current Efficiencies

* OPUCN has the second lowest OM&A cost per Customer and the lowest Net Fixed Assets per Customer compared with similar size LDCs.

Net OM&A Per Customer	Kitchener	Oshawa	Newmarket	Veridian	Brantford	Halton Hills	Waterloo
2013	186	208	215	221	230	241	244

Net OM&A Per Customer	Milton	Burlington	Whitby	Oakville	Cambridge	Guelph	Industry Average
2013	248	260	266	270	275	298	325

Net Fixed Assets Per Customer	Oshawa	Brantford	Burlington	Newmarket	Whitby	Veridian	Milton
2013	1,436	1,547	1,553	1,597	1,671	1,720	1,784

Net Fixed Assets Per Customer	Cambridge	Kitchener	Halton Hills	Oakville	Guelph	Waterloo	Industry Average
2013	1,999	2,011	2,125	2,422	2,561	3,279	3,080

[Exhibit 1, Tab C, pages 29 and 32]

Please refer to the last bullet on page 27 above where it reads as follows:

- 2019 metrics at historical trend in customer growth rate: [Exhibit 1, Tab C, page 26]
    - $226 OM&A per customer – 4th among comparable LDCs in 2013.
    - $1,978 net fixed assets per customer – median level with comparable LDCs in 2013.
    - 718 customers per FTE – more than all comparable LDCs in 2013.

OPUCN used these comparisons as an indicator that even with normal growth patterns for customer connections which are approximately 1% per year, OPUCN remains relatively efficient when compared to like LDCs at 2013 levels.

If OPUCN applied only an inflationary factor to its comparable LDCs from 2013 to 2019, the degree of implicit efficiency levels for OPUCN would be more evident to the readers of its application.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-25

Ref: Exhibit 3, page 33

OPUCN has indicated that its kWh load forecast for the Intermediate class (GS>1,000 kW) will be falling from 72,223,027 in the 2014 bridge year to 47,307,974 in 2019, a drop of 35%. At the same time customer numbers are growing only slightly. Please provide additional rationale for the significant drop in load for this class over the 5 year test period.

Response:

As outlined in the response to 3.0-Staff-20, OPUCN's load forecast methodology can be found in Exhibit 3, page 22. OPUCN applied the same methodology to the GS>1,000 kW customer category.

In this case however, the geometric mean derived from the actual historical consumption trends was .9064 which indicates that average consumption for this customer category has been declining by a fairly significant margin.

Upon determining the baseline load forecast using the regression model, and adjusting the resulting consumption for incremental customer growth and future CDM activities in the same fashion described in the response to 3.0-Staff-20, the forecast results were determined for this customer category.

OSHAWA PUC NETWORKS INC.

Response to Board Staff Interrogatory 3.0-Staff-26

Ref: Exhibit 3, page 39

At Table 3-21 on this page, OPUCN has shown the Predicted kWh Purchases compared to Actual kWh Purchases from 2003 to 2013, showing the differences from in each year. Are the Predicted Purchases using the 10 year Normalization or the 20 Year Normalization? If the 10 year, please provide a similar chart showing the differences using the 20 year normalization.

In addition, at Table 3-22 the 10 and 20 Year Normalized Columns show exactly the same results for all years. Please explain why these results do not differ depending on the normalization period.

Response:

The predicted purchases from 2003 to 2013 in Table 3-21 are not normalized. The predicted purchases reflect actual weather history using actual heating degree days and cooling degree days.

The predicted purchases from 2003 to 2013 in Table 3-22 are not normalized. The predicted purchases from 2003 to 2013 presented in the last three columns reflect actual weather history using actual heating degree days and cooling degree days. The column headings in Table 3-22 should not have “Normalized” attached.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-30

Ref: Exhibit 3, page 13

Please update Table 3-11 to reflect actual data for 2014.

Response:

OPUCN to file updated models on RESS.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe)
Interrogatory 3.0-Energy Probe-31

Ref: Exhibit 3, page 19

a) Please show mathematically how the figures in the "Estimated Operating Revenue at IRM Annual Increase of 1.45% in the table at the top of page are estimated for each of 2016 through 2019.

b) How has the factor of 1.45% been determined?

Response:

The rates determined under rebasing for 2015 were adjusted by 1.45% and then applied to customer connections and electricity deliveries found in OPUCN's load forecast – Exhibit 3, beginning on page 22.

The 1.45% is the latest IRM rate adjustment of 1.6% for 2015 less OPUCN's assigned stretch factor of 0.15%.

The Board released the following - "Consistent with the policy determinations set out in the Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors (EB-2010-0379) (Issued November 21, 2013 and updated December 4, 2013), the Board has calculated the value of the inflation factor for incentive rate setting under the Price Cap IR and Annual Index plans, for rate changes effective in 2015, to be 1.6%."

As reported in the Board's *Empirical Research in Support of Incentive Rate-Setting: 2013 Benchmarking Update for determination of Stretch Factor Assignments for 2015 - Board File No.: EB-2010-0379*, OPUCN achieved Cohort 2 efficiency status which is assigned a stretch factor of 0.15%.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-32

Ref: Exhibit 3, Table 3-17A

a) How are the average annual numbers in Table 3-17A calculated? Are they the average of the opening and closing number of customers in the year, or are they the average of the number of customers at the end of each month in the year, the average of the monthly average number of customers or some other calculation?

b) For each month in 2010 through 2014 actuals, please provide the number of customers for each rate class.

Response:

a) They are the average of the opening and closing number of customers in the year.

b) See table below.

Customer Counts	January	February	March	April	May	June	July	August	September	October	November	December
R Residential	47,822	47,929	47,981	48,073	48,165	48,234	48,264	48,303	48,348	48,388	48,425	48,460
C1 Commercial	3,899	3,902	3,904	3,905	3,919	3,923	3,928	3,927	3,943	3,951	3,954	3,961
I1 Industrial > 50 <200	388	386	388	388	388	388	388	388	388	389	390	393
I4 Industrial >200 <1000	120	120	120	121	121	122	122	124	124	125	125	125
I2 Industrial > 1000 < 5000	10	10	10	10	10	10	10	10	10	10	10	10
I3 Industrial > 5000	1	1	1	1	1	1	1	1	1	1	1	1
S Street Lights	11,946	12,017	12,051	12,098	12,098	12,098	12,098	12,098	12,098	12,098	12,098	12,109
Sent Lights	24	24	24	24	24	24	24	24	24	24	24	24
UN Unmetered	308	308	306	306	306	306	306	306	306	307	309	309
Total	64,518	64,697	64,785	64,926	65,032	65,106	65,141	65,181	65,242	65,293	65,336	65,392

Customer Counts	January	February	March	April	May	June	July	August	September	October	November	December
R Residential	48,492	48,513	48,584	48,612	48,687	48,641	48,672	48,705	48,746	48,780	48,812	48,841
C1 Commercial	3,962	3,963	3,966	3,969	3,974	3,812	3,811	3,810	3,807	3,810	3,811	3,816
I1 Industrial > 50 <200	396	397	398	399	399	397	397	397	397	397	397	398
I4 Industrial >200 <1000	125	125	125	125	125	123	123	123	123	125	125	125
I2 Industrial > 1000 < 5000	10	10	10	10	10	10	10	10	10	10	10	10
I3 Industrial > 5000	1	1	1	1	1	1	1	1	1	1	1	1
S Street Lights	12,109	12,109	12,129	12,132	12,132	12,132	12,132	12,132	12,137	12,137	12,146	12,146
Sent Lights	24	24	24	24	24	24	24	24	24	24	24	24
UN Unmetered	309	309	310	310	310	297	296	296	295	295	295	296
Total	65,428	65,451	65,547	65,582	65,662	65,437	65,466	65,498	65,540	65,579	65,621	65,657

Customer Counts	January	February	March	April	May	June	July	August	September	October	November	December
R Residential	48,868	48,878	48,886	48,890	48,930	48,970	48,983	49,027	49,040	49,081	49,113	49,201
C1 Commercial	3,819	3,835	3,838	3,845	3,864	3,865	3,864	3,866	3,868	3,870	3,876	3,885
I1 Industrial > 50 <200	402	393	390	386	376	375	373	373	374	375	377	376
I4 Industrial >200 <1000	120	120	122	122	121	121	122	123	123	124	124	124
I2 Industrial > 1000 < 5000	10	10	10	10	10	10	10	10	10	11	11	11
I3 Industrial > 5000	1	1	1	1	1	1	1	1	1	1	1	1
S Street Lights	12,154	12,209	12,209	12,209	12,209	12,209	12,214	12,231	12,231	12,231	12,275	12,280
Sent Lights	24	24	24	24	24	24	24	24	24	24	24	24
UN Unmetered	297	297	297	297	297	297	297	296	296	296	296	295
Total	65,695	65,767	65,777	65,784	65,832	65,872	65,888	65,951	65,967	66,013	66,097	66,197

Customer Counts	January	February	March	April	May	June	July	August	September	October	November	December
R Residential	49,228	49,269	49,337	49,429	49,493	49,529	49,593	49,640	49,706	49,770	49,821	49,831
C1 Commercial	3,896	3,895	3,902	3,913	3,916	3,914	3,908	3,911	3,914	3,914	3,919	3,924
I1 Industrial > 50 <200	377	377	375	375	374	373	371	370	373	373	376	376
I4 Industrial >200 <1000	124	125	125	125	125	126	126	127	125	126	124	124
I2 Industrial > 1000 < 5000	11	11	11	11	11	11	11	11	11	11	11	11
I3 Industrial > 5000	1	1	1	1	1	1	1	1	1	1	1	1
S Street Lights	12,280	12,287	12,287	12,287	12,287	12,287	12,361	12,361	12,367	12,375	12,375	12,385
Sent Lights	24	24	24	24	24	24	24	24	24	24	24	24
UN Unmetered	295	295	295	295	295	295	295	295	296	296	295	295
Total	66,236	66,284	66,357	66,460	66,526	66,560	66,690	66,740	66,817	66,890	66,946	66,971

Customer Counts	January	February	March	April	May	June	July	August	September	October	November	December
R Residential	49,844	49,876	49,940	49,961	50,032	50,102	50,183	50,251	50,320	50,423	50,530	50,574
C1 Commercial	3,922	3,917	3,919	3,921	3,927	3,933	3,934	3,945	3,952	3,960	3,973	3,981
I1 Industrial > 50 <200	376	377	376	376	376	376	376	377	376	376	376	376
I4 Industrial >200 <1000	124	125	126	126	127	128	128	128	128	128	128	129
I2 Industrial > 1000 < 5000	11	11	11	11	11	11	11	11	11	11	11	11
I3 Industrial > 5000	1	1	1	1	1	1	1	1	1	1	1	1
S Street Lights	12,385	12,385	12,385	12,424	12,458	12,458	12,511	12,511	12,511	12,511	12,511	12,544
Sent Lights	24	24	24	24	24	24	24	24	24	24	24	24
UN Unmetered	295	295	295	295	294	294	295	295	295	295	295	296
Total	66,982	67,011	67,077	67,139	67,250	67,327	67,463	67,543	67,618	67,729	67,849	67,936

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-33

Ref: Exhibit 3

a) Please expand/update Tables 3-23, 3-24 and 3-25 to include actual data for 2014.

b) Please updates Tables 3-31, 3-32 and 3-33 to include actual data for 2014.

Response:

OPUCN to file updated models on RESS.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-34

Ref: Exhibit 3, pages 36, 49-51

a) Please provide the historical and forecasted unemployment rates from the Conference Board of Canada if they are different from the figures shown on pages 49 through 51.

b) Please explain why the historical figures used are different from the unemployment rates available from Statistics Canada in CANSIM Table 282-0135. If some smoothing or averaging has been applied, please explain fully.

c) Please explain why there is no change in the forecasted unemployment rates from the level recorded in the fourth quarter of 2013.

Response:

a) OPUCN has subscribed to the Conference Board of Canada Data Service (Municipalities version) to obtain data used in its rate application. The following table presents the unemployment rates as of April 28, 2015 compared with the rates available when used for OPUCN's load forecast.

Year.Quarter	Current (As of 2015 04 28)	Original	Change
2003.01	4.7%	4.7%	0.0%
2003.02	5.6%	5.6%	0.0%
2003.03	5.2%	5.2%	0.0%
2003.04	4.7%	4.7%	0.0%
2004.01	5.0%	5.0%	0.0%
2004.02	5.4%	5.4%	0.0%
2004.03	5.5%	5.5%	0.0%
2004.04	5.8%	5.8%	0.0%
2005.01	7.2%	7.2%	0.0%
2005.02	6.4%	6.4%	0.0%
2005.03	5.8%	5.8%	0.0%
2005.04	6.7%	6.7%	0.0%
2006.01	6.6%	6.6%	0.0%
2006.02	6.5%	6.5%	0.0%
2006.03	6.7%	6.7%	0.0%
2006.04	6.8%	6.8%	0.0%
2007.01	6.1%	6.1%	0.0%
2007.02	6.0%	6.0%	0.0%
2007.03	6.5%	6.5%	0.0%
2007.04	6.3%	6.3%	0.0%
2008.01	6.4%	6.4%	0.0%
2008.02	7.4%	7.4%	0.0%
2008.03	6.8%	6.8%	0.0%
2008.04	7.9%	7.9%	0.0%
2009.01	8.5%	8.5%	0.0%
2009.02	8.7%	8.7%	0.0%
2009.03	9.2%	9.2%	0.0%
2009.04	9.9%	9.9%	0.0%
2010.01	10.3%	10.3%	0.0%
2010.02	9.9%	9.9%	0.0%
2010.03	10.4%	10.4%	0.0%
2010.04	9.3%	9.3%	0.0%
2011.01	8.7%	8.7%	0.0%
2011.02	9.3%	9.3%	0.0%
2011.03	7.2%	7.1%	-0.1%
2011.04	7.2%	7.4%	0.2%
2012.01	8.0%	8.0%	0.0%
2012.02	8.4%	8.4%	0.0%
2012.03	9.3%	9.1%	-0.2%
2012.04	9.4%	9.6%	0.2%
2013.01	8.4%	8.6%	0.2%
2013.02	7.1%	7.8%	0.7%
2013.03	6.3%	6.7%	0.4%
2013.04	7.0%	7.6%	0.5%

b) I cannot explain the differences between the data provided by the Conference Board of Canada and Statistics Canada CANSIM Table 282-0135.

c) Consistent with past practice, OPUCN applied only historical data to its load forecast model and allowed the regression model to calculated predicted results.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe)
Interrogatory 3.0-Energy Probe-35

Ref: Exhibit 3, pages 49-51 and Excel Spreadsheet

In the Excel spreadsheet the "Economic Indices" tab includes two sets of forecasts for the unemployment rate, both of which are lower than the 7.55% used for 2014 through 2019 as shown on pages 49-51.

a) Please explain the difference in the two columns in the spreadsheet (columns C and G).

b) Which of the two columns noted above contains the most recent actual and forecasted values?

c) Please calculate the load forecast based on the unemployment forecast that reflects the most recent actual and forecasted values as requested in part (b) above, and please provide a live Excel spreadsheet that shows the impact of this change.

d) Based on the load forecasted requested in part (c) above, what is the impact on the revenue deficiency in each of 2015 and 2016?

Response:

a) OPUCN has subscribed to the Conference Board of Canada Data Service (Municipalities version) to obtain data used in its rate application. The two columns represent data retrieved on different dates. Column C represents the data retrieved and used in completing OPUCN's load forecast. Column G was obtained afterward.

b) Column G represents the more recent data.

c) The table compares the predicted purchases included in the Application with the Adjusted results based upon the request.

Purchased Energy (kWh) - Year		Actual Purchases	Application	Adjusted	Difference
Historical	2003	1,232,724,170	1,214,096,287	1,211,690,589	-2,405,698
	2004	1,178,441,190	1,198,833,047	1,196,646,165	-2,186,882
	2005	1,174,501,350	1,207,050,039	1,205,944,624	-1,105,415
	2006	1,151,360,440	1,170,881,308	1,169,689,426	-1,191,882
	2007	1,191,153,590	1,147,471,681	1,145,843,175	-1,628,505
	2008	1,158,881,926	1,110,172,412	1,109,131,625	-1,040,788
	2009	1,128,390,785	1,126,724,654	1,127,286,523	561,869
	2010	1,148,489,332	1,129,720,236	1,131,141,202	1,420,965
	2011	1,148,632,387	1,164,987,380	1,165,365,591	378,212
	2012	1,136,211,953	1,150,628,520	1,151,172,228	543,709
	2013	1,130,407,042	1,158,628,601	1,165,283,015	6,654,414
2014 Bridge Year	2014		1,146,348,132	1,153,947,130	7,598,998
2015 Test Year	2015		1,161,409,406	1,169,183,922	7,774,516
2016 Test Year	2016		1,179,453,259	1,187,403,416	7,950,156
2017 Test Year	2017		1,191,117,842	1,199,261,089	8,143,248
2018 Test Year	2018		1,205,768,874	1,214,105,213	8,336,339
2019 Test Year	2019		1,220,192,559	1,228,726,569	8,534,010

d) The impact on the revenue deficiency is not material.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-36

Ref: Exhibit 3

Please provide all planning documents from the City of Oshawa and any other documents that have been used to forecast an increase in the number of customers of 3% per year.

Response:

Please refer to 3.0-Staff-18 and 3.0-Staff-19 for response.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe) Interrogatory 3.0-Energy Probe-37

Ref: Exhibit 3

a) Does Table 3-36 include revenues and costs (accounts 4375 and 4380) associated with CDM activities?

b) Do the figures include any LRAM related revenues or costs?

c) Please update Table 3-36 to include actual data for 2014. Please exclude, if applicable, revenues and costs associated with CDM activities and amounts recovered through the LRAM mechanism.

Response:

a) Yes, acct 4375 includes revenues from CDM of $1,042,995, and acct 4380 includes CDM costs of $850,787. Net amount of $192,208 represents an estimated cost efficiency incentive of $187,749.50 for the 2011-2014 CDM program, and the remaining $4,458 represents OPA incentive for 2011 Peaksaver program.

b) Yes, acct 4375 includes revenues from LRAM of $11,475 relating to LRAM recovered in 2013.

c) See two tables below. A: is Table 3-36 updated for actual 2014. B: is Table 3-36 with 2014 actuals and excluding CDM & LRAM activity.

Table A: with 2014 actuals:

TABLE 3-36 - SUMMARY OF OTHER OPERATING REVENUE

Account	Account Description	Board-Approved	Actual		Bridge Year	Test Years at Proposed Rates				
		2012	2012	2013	2014	2015	2016	2017	2018	2019
4080	Distribution Services Revenue (SSS Charge)	133,400	141,981	147,901	152,552	158,568	164,872	172,185	179,242	186,125
4082	Retail Services Revenue	0	0	0	0	0	0	0	0	0
4084	Retailed Transaction Requests (ST) Revenue	3,563	1,725	1,324	1,087	1,326	1,327	1,328	1,330	1,331
4210	Rent From Electric Property	150,320	200,944	179,439	181,365	176,388	176,388	176,388	176,388	176,388
4225	Late Payment Charges	279,117	282,631	266,827	261,037	290,256	299,847	309,754	319,989	330,562
4235	Miscellaneous Service Revenue	940,286	828,161	817,279	896,305	810,965	834,340	858,487	883,432	909,201
4325	Revenue From Merchandise - Jobbing	925,000	259,036	182,811	142,941	1,388,670	1,388,670	1,388,670	1,388,670	1,388,670
4330	Costs From Merchandise - Jobbing	(925,000)	(233,462)	(174,759)	(118,844)	(1,375,610)	(1,375,610)	(1,375,610)	(1,375,610)	(1,375,610)
4355	Gain on Disposal of Utility and Other Property	0	(78,877)	5,283	(0)	0	0	0	0	0
4357	Gain on Retirement of Utility and Other Property	0	0	0	0	0	0	0	0	0
4360	Loss on Disposal of Utility and Other Property	0	0	(213,702)	(186,801)	(396,446)	(265,096)	(182,214)	(403,265)	(381,240)
4362	Loss on Retirement of Utility and Other Property	0	0	0	0	0	0	0	0	0
4375	Revenues from Non-Utility Operations	10,000	1,077,322	2,756,926	1,054,470	2,376,719	2,376,719	2,376,719	2,376,719	2,376,719
4380	Expenses of Non-Utility Operations	0	(719,442)	(2,369,144)	(850,787)	(2,369,144)	(2,369,144)	(2,369,144)	(2,369,144)	(2,369,144)
4390	Miscellaneous Non-Operating Income	91,000	107,242	182,424	187,354	146,629	146,629	146,629	146,629	146,629
4405	Interest and Dividend Income	184,371	162,774	152,039	153,049	128,000	128,000	128,000	128,000	128,000
Total Other Distribution Revenue		1,792,057	2,030,035	1,934,649	1,873,725	1,336,319	1,506,940	1,631,192	1,452,379	1,517,631

Table B: with 2014 actuals and with CDM and LRAM revenues and costs excluded:

TABLE 3-36 B - SUMMARY OF OTHER OPERATING REVENUE with CDM and LRAM activities excluded

Account	Account Description	Board-Approved	Actual		Bridge Year	Test Years at Proposed Rates				
		2012	2012	2013	2014	2015	2016	2017	2018	2019
4080	Distribution Services Revenue (SSS Charge)	133,400	141,981	147,901	152,552	158,568	164,872	172,185	179,242	186,125
4082	Retail Services Revenue	0	0	0	0	0	0	0	0	0
4084	Retailed Transaction Requests (ST) Revenue	3,563	1,725	1,324	1,087	1,326	1,327	1,328	1,330	1,331
4210	Rent From Electric Property	150,320	200,944	179,439	181,365	176,388	176,388	176,388	176,388	176,388
4225	Late Payment Charges	279,117	282,631	266,827	261,037	290,256	299,847	309,754	319,989	330,562
4235	Miscellaneous Service Revenue	940,286	828,161	817,279	896,305	810,965	834,340	858,487	883,432	909,201
4325	Revenue From Merchandise - Jobbing	925,000	259,036	182,811	142,941	1,388,670	1,388,670	1,388,670	1,388,670	1,388,670
4330	Costs From Merchandise - Jobbing	(925,000)	(233,462)	(174,759)	(118,844)	(1,375,610)	(1,375,610)	(1,375,610)	(1,375,610)	(1,375,610)
4355	Gain on Disposal of Utility and Other Property	0	(78,877)	5,283	(0)	0	0	0	0	0
4357	Gain on Retirement of Utility and Other Property	0	0	0	0	0	0	0	0	0
4360	Loss on Disposal of Utility and Other Property	0	0	(213,702)	(186,801)	(396,446)	(265,096)	(182,214)	(403,265)	(381,240)
4362	Loss on Retirement of Utility and Other Property	0	0	0	0	0	0	0	0	0
4375	Revenues from Non-Utility Operations	10,000	1,077,322	2,756,926	0	2,376,719	2,376,719	2,376,719	2,376,719	2,376,719
4380	Expenses of Non-Utility Operations	0	(719,442)	(2,369,144)	0	(2,369,144)	(2,369,144)	(2,369,144)	(2,369,144)	(2,369,144)
4390	Miscellaneous Non-Operating Income	91,000	107,242	182,424	187,354	146,629	146,629	146,629	146,629	146,629
4405	Interest and Dividend Income	184,371	162,774	152,039	153,049	128,000	128,000	128,000	128,000	128,000
Total Other Distribution Revenue		1,792,057	2,030,035	1,934,649	1,670,043	1,336,319	1,506,940	1,631,192	1,452,379	1,517,631

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe)
Interrogatory 3.0-Energy Probe-38

Ref: Exhibit 3 &
Exhibit 10, Tab D

a) Does OPUCN propose to include updated forecasts of other operating revenue as part of the annual adjustment mechanism? If not, please explain why not.

b) Given that the forecast for account 4360 (loss on disposal of utility and other property) is closely related to the retrofit work related to the expansion of Highway 407, which is a major driver in the capital expenditures, please explain why there should not be a variance account similar to the DPRCVA proposed on page 5 of Exhibit 10, Tab D for distribution plant relocations in response to 3rd party requests.

Response:

a) UPUCN has not proposed updated forecasts of other operating revenue as part of the annual adjustment mechanism. In accordance with the Board's guidance under the RRFE – "Ability to manage within the rates set, given that actual costs and revenues will vary from forecast…" there is an expectation that utilities are able to manage, to a degree, the risks associated with actual results varying from forecast. OPUCN believes other operating revenue forecast can be managed appropriately within the Board's guidelines.

b) The reason cited above also addresses the question regarding an adjustment mechanism for losses on disposal of utility and other property.

OSHAWA PUC NETWORKS INC.

Response to Energy Probe Research Foundation (Energy Probe)
Interrogatory 3.0-Energy Probe-39

Ref: Exhibit 3, Table 3-36

a) Please explain why there is no forecast of retail services revenue.

b) Please explain why there is gain shown for the disposition of vehicles that are forecast to be replaced over the 2015 through 2019 period?

c) What is the expected value of vehicles scheduled to be replaced over the IR period?

d) Where has OPUCN included revenues from MicroFit customers?

e) Please show the derivation of the MicroFit revenues based on the monthly fixed charge and the average number of connections per year for each of 2010 through 2019, including actual figures for 2014.

f) How has OPUCN forecast the amounts in account 4360 loss on disposal of utility and other property? In particular, please explain the ups and downs forecast for 2015 through 2019.

g) Please explain why rent from electric property is forecast to be lower in 2014 through 2019 than that recorded in 2012 or 2013.

Response:

a) Retail Services Revenue is captured in USA Account 4235 - Miscellaneous Service Revenues, one of the accounts included in the Revenue Offset Schedule.

b) OPUCN does not have any certainty that there will be a gain on the disposition of vehicles over the period.

c) The expected value of vehicles scheduled to be replaced over the IR period is assumed to be zero. OPUCN does not have evidence to suggest otherwise.

d) MicroFit Revenues are captured in USA Account 4080 - Distribution Revenue. $5,081 in 2013, $7,176 in 2014.

e) MicroFit revenues are not considered material. See part d) for annual revenues.

f) The process involved reviewing forecast capital projects which involved replacement of existing plant. Operations provided Finance with information relating to the description, nature and age of plant and equipment being replaced. Finance matched or identified, as closely as was possible, this plant and equipment in the Fixed Assets Register along with cost/accumulated depreciation information. The ups/downs reflect the capital projects being done – the rebuild of a 60 year old pole-line will yield zero loss on disposal, but the rebuild of a 20 year old pole-line will have a significant loss.

g) The average rent from electric property for the past five years was $172 thousand and OPUCN has forecast $176 thousand for each year of the plan term.

OSHAWA PUC NETWORKS INC.

Response to Greater Oshawa Chamber of Commerce (GOCC) Interrogatory 3.0-GOCC-9

Please provide actual customer connections and energy consumption for 2014 by rate class.

Response:

Billed Consumption

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
Total	485,504,357	133,729,082	336,406,114	42,700,435	81,400,346	9,155,875	34,962	2,711,219	1,091,642,390

Connections

Customer Counts	2014
R Residential	50,209
C1 Commercial	3,952
I1 Industrial > 50 <200	376
I4 Industrial >200 <1000	127
I2 Industrial > 1000 < 5000	11
I3 Industrial > 5000	1
S Street Lights	12,465
Sent Lights	24
UN Unmetered	296
Total	67,459

OSHAWA PUC NETWORKS INC.

Response to Greater Oshawa Chamber of Commerce (GOCC) Interrogatory 3.0-GOCC-10

Customer connections for GS>50 to 999kW are increasing by 3% but the historical trend from 2009 to 2013 was a reduction in the number of customers.

a) Please provide the basis for 3% growth in this rate class.

b) Please provide the 2014 actual customer count for this rate class.

c) Please provide year to date additions for this rate class.

Response:

a) Please refer to 3.0-Energy Probe-36 for response.

b) From 3.0-GOCC-9, 503.

c) There has been an increase of 1.

OSHAWA PUC NETWORKS INC.

Response to Greater Oshawa Chamber of Commerce (GOCC)
Interrogatory 3.0-GOCC-11

Table 3-18 shows billed energy for the GS>50 to 999kW rate class increasing by more than 3% during the application.

a) Please advise why the average use per customer for the GS>50 to 999kW rate class is increasing while residential and GS>50kW are decreasing?

b) Has Oshawa PUC targeted any CDM programs to the GS>50 to 999kW rate class? If so, please provide details and the intended benefits for the customers.

Response:

a) The geometric mean determined in the load forecast model for the GS>50 to 999kW rate class is 1.0297 and 0.9810 for the residential class. This is representative of an increasing consumption trend for GS>50 to 999kW customers and a decreasing trend for residential. This trend is projected in relation to predicting future consumption for the two customer classes.

b) The IESO has provided targets for OPUCN's CDM activities in the years 2015 through 2019. Other than savings projected for the City installing LEDs in its street lights, OPUCN has allocated the remaining projected CDM savings based upon each customer classes proportionate share of total projected non-weather normalized consumption.

OSHAWA PUC NETWORKS INC.

Response to School Energy Coalition (SEC) Interrogatory 3.0-SEC-25

[Ex.3, p.21]

Please provide the underlying calculation for the 'Forecast Net Income Under IRM' amount in Table 3-14 for each year of the plan.

Response:

The following table outlines the underlying calculations for the *Forecast Net Income Under IRM* amounts in Table 3-14. The calculations have been updated to reflect deemed interest as opposed to funded interest which was used in the original calculations. The results of each calculation method are shown below however deemed interest is the appropriate input to the calculation.

	2016	2017	2018	2019	
Distribution revenue	22,205	22,943	23,735	24,546	Exhibit 3, page 19
Other revenue	1,507	1,631	1,452	1,518	Exhibit 3, Table 3-1
Total revenue	23,712	24,574	25,187	26,064	
OM&A	12,614	12,887	13,110	13,183	Exhibit 1, Tab C, page 31
Depreciation	4,847	5,001	5,203	5,371	Exhibit 4, page 77
Deemed interest	2,996	3,193	3,393	3,558	Exhibit 5, page 18
PILs	132	186	224	332	Estimate based on cash taxes
	20,589	21,267	21,930	22,444	
Forecast Net Income Under IRM	3,123	3,307	3,257	3,620	
Forecast Net Income Under IRM from Table 3-14	3,253	3,435	3,419	3,884	

The *Deemed ROE Deficiency* resulting from the corrected data compared to the originally filed amounts are summarized as follows:

	2016	2017	2018	2019
Deemed ROE Deficiency	-2.38%	-2.40%	-2.90%	-2.51%
Deemed ROE Deficiency from Table 3-14	-2.09%	-2.14%	-2.58%	-2.01%

As per OPUCN's response to 3.0-Energy Probe-31, the rates determined under rebasing for 2015 were adjusted by 1.45% and then applied to customer connections and electricity deliveries found in OPUCN's load forecast – Exhibit 3, beginning on page 22.

The 1.45% is the latest IRM rate adjustment of 1.6% for 2015 less OPUCN's assigned stretch factor of 0.15%.

The Board released the following - "Consistent with the policy determinations set out in the Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors (EB-2010-0379) (Issued November 21, 2013 and updated December 4, 2013), the Board has calculated the value of the inflation factor for incentive rate setting under the Price Cap IR and Annual Index plans, for rate changes effective in 2015, to be 1.6%."

As reported in the Board's *Empirical Research in Support of Incentive Rate-Setting: 2013 Benchmarking Update for determination of Stretch Factor Assignments for 2015 - Board File No.: EB-2010-0379*, OPUCN achieved Cohort 2 efficiency status which is assigned a stretch factor of 0.15%.

OSHAWA PUC NETWORKS INC.

Response to School Energy Coalition (SEC) Interrogatory 3.0-SEC-26

[Ex.3, X]

Please provide copies (or hyperlinks if available online) to any documents used by the Applicant to forecast customer growth in its service territory.

Response:

Please refer to 3.0-Energy Probe-36 for the response.

OSHAWA PUC NETWORKS INC.

Response to School Energy Coalition (SEC)
Interrogatory 3.0-SEC-27

[Ex.3, p.32]

Please provide actual 2014 average customer connections.

Response:

Based upon the chart provided in response to 3.0-Energy Probe-32, the 2014 average customer counts are summarized in the following table:

Average Customer Counts	2014
R Residential	50,209
C1 Commercial	3,952
I1 Industrial > 50 <200	376
I4 Industrial >200 <1000	127
I2 Industrial > 1000 < 5000	11
I3 Industrial > 5000	1
S Street Lights	12,465
Sent Lights	24
UN Unmetered	296
Total	67,459

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-19

Reference: E3/pg. 9

a) What were the "weather normal" values for HDD and CDD that were used in preparing the 2012 Board approved load forecast?

b) What were the actual HDD and CDD values for 2012?

Response:

Refer to the following table:

	2012 COS		Actual	
	HDD	CDD	HDD	CDD
Jan-12	570.07	-	611.00	-
Feb-12	475.50	-	536.20	-
Mar-12	334.76	-	399.40	-
Apr-12	198.74	-	336.90	-
May-12	99.12	15.01	109.30	21.80
Jun-12	15.80	30.15	28.20	64.30
Jul-12	2.85	80.23	-	155.30
Aug-12	2.61	62.63	4.40	102.80
Sep-12	69.64	11.97	84.00	24.40
Oct-12	201.83	-	229.00	-
Nov-12	317.00	-	427.90	-
Dec-12	512.07	-	451.10	-

There would have been an increase in predicted purchases of approximately 40 million kWhs resulting from the actual HDD and CDD. As per Table 3-15, OPUCN's actual electricity purchases were remained lower than the 2012 Board-Approved amount through 2014 resulting in lower revenues.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-20

Reference: E3/pg. 10-11

a) At page 10, Table 3-9 is titled "Forecast 2014 and Actual 2013 Billing Determinants" (emphasis added). However the heading in the table columns reads "2014 Actual Results". Please clarify whether the 2014 values set out in the table are actual 2014 results or a forecast for 2014.

b) Similarly, in Table 3-10 please clarify whether the table's values for 2014 are forecast or actual values and confirm that the column for 2015 should read "2015 Forecast Results".

Response:

a) Forecast.

b) Forecast.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-21

Reference: E3/pg. 13

Do the allowed depreciation expense values set out in the table for 2013-2015 also take into account load growth that has occurred since 2012? If not, please re-do the table to also incorporate the impact of load growth.

Response:

The table does not include the load growth. Based upon average revenue per customer the impact on allowed depreciation would be immaterial. In addition, OPUCN did not reach 2012 Board-Approved customer connections, demand and consumption levels until 2014/2015 timeframes which is an indication that allowed depreciation was not being recovered through rates in any event.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-22

Reference: E3/pg. 20

At the bottom of the page is a table comparing annual capital expenditures to depreciation expense for the forecast years. Please provide a similar table for the years 2012-2014.

Response:

	2012 Board-Approved	2012	2013	2014
Capital expenditures	$ 10,216	$ 10,942	$ 10,734	$ 10,657
Depreciation expense	$ 3,076	$ 3,269	$ 3,852	$ 3,942
Multiple	3	3	3	3

The erosion in earnings resulting from the multiple highlighted in the chart above is the main driver for OPUCN having to rebase a year earlier than scheduled.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-23

Reference: E3/pg. 25
Excel Load Forecast Model, Economic Indices Tab

a) What are the sources for both the actual and forecast quarterly increases in the City of Oshawa population values set out in the Economic Indices Tab of OPUCN's Excel Load Forecast Model? Please also indicate which values are actual and which are forecast.

b) Please provide the absolute historical and forecast population values over the 2003-2019 period used to determine the quarterly increases. Please also explain what these values represent (i.e. are they the population level at the beginning, the mid-point or the end of the quarter?).

c) If there is an official City of Oshawa population forecast, please provide a copy of the document.

d) Please provide the most recent Regional Municipality of Durham short-term Household Estimates for 2014-2019.

Response:

a) The source of the information noted is the Conference Board of Canada however, it includes jurisdictions outside of OPUCN's territory and was not determined to be useful.

b) OPUCN does not have this information.

c) Please use the following link:

http://www.oshawa.ca/eco_dev/profile.asp

d) Please use the following link:

http://www.durham.ca/departments/planed/planning/stats-n-facts/2014-P-56.pdf

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-24

Reference: E3/pg. 25-26
Excel Load Forecast Model, City Expansion Tab

a) The text on page 25 (1st paragraph) suggests the 3% growth rate for customer connections was the result calculated after the incremental customer connections were established. However, in the City Expansion Tab, a 3% growth rate is used to determine the number of new connections per year during the forecast period. Please clarify whether the 3% was an input to or a result of the determination of new connections over the forecast period.

b) If the 3% was an "input", please explain how the 3% was derived from the forecast population growth.

c) If the 3% was a "result", please explain how the incremental customer connection forecast on page 25 was determined.

d) Please provide a schedule that sets out for both the historical and the forecast period (2003-2019) the following :

- The average annual population of the City of Oshawa
- The average number of connections (inclusive of the incremental connections) for the Residential, GS<50, GS 50-999, GS >1000 and Streetlight classes for each year.
- For the Residential, GS<50, GS 50-999, GS >1000 and Streetlight classes, the ratio of the average number of connection/average annual population for each year.

Response:

a) The regression model resulted in a "natural" growth rate which was adjusted to 3% for certain customer categories. The incremental growth to achieve the 3% has been identified in the table found at the bottom of page 25.

b) The 3% growth rate was developed based upon plans received from the City of Oshawa, Region of Durham and local Developers which has been provided in response to 3.0-Energy Probe-36.

c) See response to part a).

d) Responses:

- OPUCN does not have this data.
- The following table:

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Total
Incremental Average Annual Customer Connection Count							
2003							
2004	660	-63	-29	0	1	203	770
2005	619	36	-9	-1	2	237	884
2006	841	79	4	0	1	333	1,258
2007	881	9	-2	0	1	450	1,339
2008	738	45	11	1	0	341	1,134
2009	545	66	-9	-1	1	180	784
2010	512	70	-13	-1	1	195	766
2011	536	-41	8	0	0	132	631
2012	371	-38	-9	0	1	86	403
2013	490	52	-12	0	1	115	645
2014 Bridge Year (Regression)	666	22	0	0	0	253	941
2015 Test Year (Regression)	1,505	118	15	0	0	377	2,015
2016 Test Year (Regression)	1,550	121	16	0	0	389	2,076
2017 Test Year (Regression)	1,597	125	16	0	0	400	2,138
2018 Test Year (Regression)	1,645	129	16	0	0	412	2,202
2019 Test Year (Regression)	1,694	132	17	0	0	425	2,268

- We do not have the population data to process the calculations.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-25

Reference: E3/pg. 26

a) How was the 4.86% loss factor established?

b) What was the average annual loss factor over the years 2003-2013?

Response:

a) The 4.86% is calculated using the Board provided model – tab "App.2-R_Loss Factors" in Chapter 2 Appendices model, and is an average of the loss factor calculated for each of the last 5 years. Detailed explanations/instructions are included below the calculation as to how inputs are determined. This model was filed as part of the application on Jan 29 2015. See "OPUCN_APPL_Chapter2_Appendices_for_2015_to_2019_RUN_1_20150129.xlsx".

b) The average for the period 2006-2013 is 4.59%. Data for the years 2003-2005 is not available.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-26

Reference: E3/pg. 27

Has OPUCN submitted its CDM plan to the IESO (OPA)? If yes, please provide a copy.

Response:

The CDM Plan has been attached. This plan has not been approved as of the date of this filing.

OVERVIEW OF CDM PLAN
This CDM Plan must be used by the LDC in submitting a CDM Plan to the IESO under the Energy Conservation Agreement between the LDC and the IESO The CDM Plan will consist of the information provided in this document and any additional information and supporting documents provided by the LDC to the IESO in support of this CDM Plan. Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Energy Conservation Agreement as may be applicable.
Complete all fields within the CDM Plan that are applicable. Where additional space is required to complete a section of the CDM Plan, please append additional pages as required. The LDC should indicate that additional information has been attached in the related question field on the CDM Plan. Please refer to the CDM Plan Submission and Review Criteria Rules for further information.

A. General Information

1.

CDM Plan Submission Date: ***(DD-Mon-YYYY)***	
CDM Plan Version	1

2.

LDC INFORMATION										
	LDC 1	**LDC 2**	**LDC 3**	**LDC 4**	**LDC 5**	**LCD 6**	**LCD 7**	**LCD 8**	**LCD 9**	**LCD 10**
LDC Name:	Oshawa PUC Networks Inc.									
Company Representative:										
Name:	Nadeige Carter									
Title:	Conservation Officer									
Email Address:	ncater@opuc.on.ca									
Phone Number (XXX-XXX-XXXX):	905-743-5207									

3.

Primary Contact for CDM Plan	
Name:	Nadeige Carter
LDC Name:	Oshawa PUC Networks Inc.
Title:	Conservation Officer
Email Address:	ncater@opuc.on.ca
Phone Number (XXX-XXX-XXXX):	905-743-5207

Estimated Start Date of CDM Plan: ***(DD-Mon-YYYY)***	1-Jan-2016

LDC CONFIRMATION FOR CDM PLAN	
Each LDC to this CDM Plan has executed the Energy Conservation Agreement.	Yes
A completed Cost-Effectiveness Tool is attached and forms part of the CDM Plan.	Yes
A completed Achievable Potential Tool is attached and forms part of the CDM Plan.	Yes
All customer segments in each LDC's service area are served by the Programs set out in this CDM Plan.	Yes
The CDM Plan includes all electricity savings attributable to all Programs and pilot programs that have in-service dates between Jan 1, 2015 and December 31, 2020.	Yes
The CDM Plan Budget for each LDC includes all eligible funding under the full cost recovery and pay-for-performance mechanisms for Programs under its CDM Plan.	Yes
Frequency of LDC Invoicing to IESO (subsequent changes to the frequency should be notified to us by email).	Monthly

COMPLETE FOR CDM PLAN AMENDMENTS ONLY		
Select the reason(s) for CDM Plan amendment, as per ECA.		
One time each calendar year of the term		
LDC wishes to request an adjustment to the CDM Plan Budget		
The amendments to a provision of the ECA or any Rules will have a material effect on the CDM Plan		
LDC's actual spending under CDM Plan has exceeded (or is reasonably expected to exceed) the portion of the CDM Plan Budget allocated to the current year of the term		
Under a joint CDM Plan, LDCs that are parties to a joint CDM Plan reallocate any portion of their respective CDM Plan Targets and CDM Plan Budgets [*Reallocation not subject to IESO approval*]		
IESO has triggered remedies under Article 5 of the ECA		
LDC seeking to change its selection of the type of funding that it wishes to receive for each Program in the CDM Plan [ECA, section 4.1]		
Other (Please specify reason)		

B. LDC Authorization

LDC DECLARATION
Please complete the declaration for each LDC that is listed in this CDM Plan. A separate page with each LDC's signed declaration should be included as part of the CDM Plan submission.

LDC	
I represent that the information contained in this CDM Plan as it relates to the LDC is complete, true, and accurate in all respects. I acknowledge and agree to the following terms and conditions: (1) if this CDM Plan is approved by the IESO and accepted by each LDC to this CDM Plan, the CDM Plan together with any conditions to that approval is incorporated by reference into the Energy Conservation Agreement between the LDC and the IESO (2) the LDC will offer the Programs set out in Table 2 of this CDM Plan to customers in its service area; and (3) the LDC of will implement this CDM Plan in accordance with the CDM Plan Budget.	
LDC's Legal Name:	Oshawa PUC Networks Inc.
Company Representative:	Atul Mahajan - President and CEO
Signature	
	I/We have the authority to bind the Corporation.
Date (DD-Mon-YYYY)	

C. CDM Plan Summary

TABLE 1: SUMMARY OF CDM PORTFOLIO SAVINGS AND BUDGET

		CDM PLAN TOTAL	LDC 1	LDC 2	LDC 3	LDC 4	LDC 5	LCD 6	LCD 7	LCD 8	LCD 9	LCD 10
a.	**Allocated LDC CDM Plan Target (MWh)** *Indicate total CDM Plan Target allocated to LDC(s)*	**73,010**	73,010.0									
b.	**CDM Plan MWh Savings** *Calculated as part of CDM Plan*	**73,010**	73,010	0	0	0	0	0	0	0	0	0
c.	**Allocated LDC CDM Plan Budget ($)** *Indicate total budget allocated to LDC*	**$19,963,922**	$19,963,922.00									
d.	**Total CDM Plan Budget ($)** *Calculated as part of CDM Plan*	**$19,963,922**	$19,963,922	0	0	0	0	0	0	0	0	0

f.	**CDM Plan Cost Effectiveness** *Indicate annual portfolio-level Cost Effectiveness for CDM Plan as determined by LDC(s) using output from Cost-Effectiveness Tool*		Total Resource Cost (TRC)			Program Administrator Cost (PAC)			Levelized Cost
		Program Year	Benefits ($)	Costs ($)	Ratio	Benefits ($)	Costs ($)	Ratio	($/kWh)
		2015	$15,014,940.72	$6,255,165.41	2.4	$12,948,123.45	0	622446084.4	$0.000
		2016	$5,952,723.28	$4,071,085.01	1.5	$5,061,348.44	$3,480,142.84	1.5	$0.037
		2017	$6,215,866.65	$3,679,329.12	1.7	$5,282,924.24	$2,552,906.84	2.1	$0.032
		2018	$12,234,123.01	$7,937,458.29	1.5	$10,508,221.65	$4,273,669.33	2.5	$0.025
		2019	$12,377,348.34	$7,817,492.63	1.6	$10,632,591.82	$4,234,530.74	2.5	$0.025
		2020	$12,429,700.22	$7,680,688.34	1.6	$10,678,115.19	$4,201,945.51	2.5	$0.026
		CDM Plan Total	**$64,224,702**	**$37,441,219**	1.7	**$55,111,325**	**$18,743,195**	2.9	**$0.021**
g	**Plan Cost Effectiveness-Exceptions Rationale** *Complete this section if proposed plan <u>does not</u> meet minimum Cost-Effectiveness Thresholds set out in CDM Plan Submission and Review Criteria Rules.*								

D. CDM Plan Detailed List of Programs, Election of Funding Mechanism, and Annual Milestones

NOTES	
1. CDM Plan	Complete Table 2 for all Programs for which will contribute towards the CDM Plan Target.
2. Program Name	Province-wide LDC Program names are found in the applicable Program Rules. Regional & local Program names should be consistent with those included in approved business cases (if applicable) and consistent throughout this CDM Plan.
3. Anticipated Annual Budget	Include annual budgets for each Program to be allocated against the CDM Plan Budget by funding mechanism. Note: LDC Eligible Expenses incurred in 2014 for programs delivered in 2015 (and not funded as part of the 2011-2014 Master CDM Program Agreement) should be included in 2015 Annual anticipated budget amounts.
4. Target Gap	Portion of the CDM Plan Target that the LDC reasonably expects, based on qualified independent third party analysis as accepted by the IESO could only be achieved with funding in addition to the CDM Plan Budget.

LDC 1:	Oshawa PUC Networks Inc.

TABLE 2. PROGRAM AND MILESTONE SCHEDULE

Funding Mechanism	Approved Province Wide Programs	Approved Local, Regional, or Pilot Programs	Proposed Pilots or Programs	Program Start Date (DD-Mon-YYYY)	Customer Segments Targeted by Program							Program Implementation Schedule (Annual Anticipated Budget & Incremental Annual Milestones by Program)													
												2015		2016		2017		2018		2019		2020		Total 2015 - 2020	
					Residential	Low-income	Small business	Commercial (inc. Multi-Fa	Agricultural	Institutional	Industrial	Anticipated Annual Budget ($)	Energy Savings (MWh)	Anticipated Annual Budget ($)	Energy Savings (MWh)	Anticipated Annual Budget ($)	Energy Savings (MWh)	Anticipated Annual Budget ($)	Energy Savings (MWh)	Anticipated Annual Budget ($)	Energy Savings (MWh)	Anticipated Annual Budget ($)	Energy Savings (MWh)	Total CDM Plan Budget ($)	Total Persisting Energy Savings in 2020 (MWh)
Full Cost Recovery Programs	Retrofit			1-Jan-2016			Yes	Yes	Yes	Yes	Yes			$2,013,978	6,408.0	$1,051,233	4,026.8	$1,211,581	4,678.9	$1,215,754	4,688.0	$1,219,357	4,688.0	**$6,711,902**	**24,489.8**
	Heating and Cooling Program			1-Jan-2016	Yes	Yes								$519,601	528.9	$541,897	552.9	$544,542	552.9	$547,266	552.9	$550,072	552.9	**$2,703,377**	**2,740.7**
	Coupon Program			1-Jan-2016	Yes	Yes								$293,650	633.7	$251,850	633.7	$255,377	633.7	$259,010	633.7	$262,751	633.7	**$1,322,639**	**3,168.5**
	New Construction Program			1-Jan-2016	Yes									$15,587	9.2	$19,692	18.4	$20,058	18.4	$20,435	18.4	$20,823	18.4	**$96,594**	**82.8**
	High Performance New Construction			1-Jan-2016				Yes						$107,018	171.0	$145,980	285.0	$147,552	285.0	$149,171	285.0	$150,838	285.0	**$700,560**	**1,311.0**
	Audit Funding Program			1-Jan-2016				Yes		Yes	Yes			$82,428	303.4	$84,262	303.4	$86,150	303.4	$88,095	303.4	$90,099	303.4	**$431,034**	**1,213.7**
			SMB Future Program	1-Jan-2016			Yes	Yes	Yes					$329,136	540.3	$330,996	540.3	$370,411	540.3	$372,384	540.3	$411,916	540.3	**$1,814,843**	**2,701.4**
			HAP Future Program	1-Jan-2016		Yes								$147,011	193.4	$147,859	193.4	$148,732	193.4	$149,631	193.4	$150,558	193.4	**$743,791**	**966.9**
	Process and Systems Upgrades Program			1-Jan-2016							Yes			$41,336	0.0	$82,276	0.0	$800,444	3,459.8	$831,442	3,459.8	$832,469	3,459.8	**$2,587,968**	**10,379.3**
			Unassigned Provincial Program	1-Jan-2018														$950,405	3,413.5	$950,405	3,413.5	$950,405	3,413.5	**$2,851,214**	**10,240.6**
FCR TOTAL												$0	0.0	$3,549,746	8,787.9	$2,656,044	6,554.0	$4,535,252	14,079.3	$4,583,592	14,088.5	$4,639,287	14,088.5	$19,963,922	57,294.7
Pay for Performance Programs																									
P4P TOTAL												$0	0.0	$0	0.0	$0	0.0	$0	0.0	$0	0.0	$0	0.0	$0	0.0
2011-2014 CDM Framework (and 2015 extension of 2011-2014 Master CDM Agreement) *(Not funded through 2015. 2020 CDM Framework)*	Retrofit Initiative												2,921												**2,921.0**
	Heating and Cooling Initiative												481												**480.8**
	Bi-Annual Retailer Event												440.7												**440.7**
	Conservation Instant Coupon Booklet												165.4												**165.4**
	Residential New Construction												0.0												**0.0**
	Low Income Home Assistance Program												196.1												**196.1**
	Direct Install Lighting												540.3												**540.3**
	High Performance New Construction												171.0												**171.0**
	Audit Funding												303.4												**0.0**
	Process and Systems Upgrades Program												10,800.0												**10,800.0**
2011-2014 CDM Framework (and 2015 extension) TOTAL												$0	16,018.7											0.0	15,715.3
TARGET GAP TOTAL																								0.0	
CDM PLAN TOTAL												$0	16,018.7	$3,549,746	8,787.9	$2,656,044	6,554.0	$4,535,252	14,079.3	$4,583,592	14,088.5	$4,639,287	14,088.5	$19,963,922	73,010.0
MINIMUM ANNUAL SAVINGS CHECK													True		True		True		True		True		True		

E. Proposed Local and Regional Pilot CDM Programs

Notes
Complete the following Table(s) for each proposed local and regional Program or Pilot Program in the CDM Plan for which a business case has NOT previously been approved by the IESO. Please refer to the Program Development and Rule Revision Guideline and the Business Case Template for full details on requirements and submission of a business case for approval of a local or regional Program. For the process for receiving funding for a Pilot Program, refer to the LDC Program Innovation Guideline.

TABLE 3a. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3b. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3c. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3d. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3e. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3f. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

E. Proposed Local and Regional Pilot CDM Programs

Notes
Complete the following Table(s) for each proposed local and regional Program or Pilot Program in the CDM Plan for which a business case has NOT previously been approved by the IESO. Please refer to the Program Development and Rule Revision Guideline and the Business Case Template for full details on requirements and submission of a business case for approval of a local or regional Program. For the process for receiving funding for a Pilot Program, refer to the LDC Program Innovation Guideline.

TABLE 3g. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3h. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3i. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

TABLE 3j. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS				
a.	**Program Name**		*Use same "Program name" included in other worksheets*	
b.	**Program Type**			
b.	**Estimated Business Case Submission Date *(DD-Mon-YYYY)***			
c.	**Customer Segment(s) Served by Programs**			
d.	**Participating LDCs *(if applicable)***			
e.	**Overview of Proposed Program or Pilot** *Provide overview of key objectives and elements of proposed program or pilot.*			

F. Detailed Information on Collaboration and Regional Planning

ADDITIONAL DETAILED INFORMATION	
Regional LDC(s) Collaboration *Description of how the LDC(s) will collaborate with other LDCs. If collaboration will not occur, description of why it will not occur.*	Oshawa Power and Utilities Corporation Networks Inc. (OPUCN) has had previous discussions with its neighbouring LDCs, Veridian and Whitby Hydro, regarding the potential to implement large CDM projects across the Durham region. While OPUC recognizes the benefits of collaboration, no formal agreements or intentions have been developed. Collectively, we believe there are several areas in which we feel collaboration opportunities exist. These areas are: 1. Marketing -Print -Radio Ads -Promotional Events 2. Joint Procurement -Shared Services -Program Oversight -Marketing 3. Program Design -Local or Regional Programming -Residential Sector -Low-Income Sector 4. Energy Managers -Energy Managers that span multiple LDC service territories. OPUCN will continue to discuss the potential to formally collaborate with its neighbours and update the IESO in future CDM Plans.
Gas Collaboration *Description of how the LDC(s) will collaborate with other gas utility programs delivered in service area (if applicable). If collaboration will not occur, description of why it will not occur.*	OPUCN has discussed large CDM projects in its region with representatives from Enbridge Gas at the meetings with other LDCs referred to above. Collaboration will initially be focused around outreach and account management collaboration in the following forms: 1. Access to program marketing materials a) Both OPUC and Enbridge Gas will have access to each other's marketing materials to provide to clients b) These materials can be used to promote Energy Efficiency incentives at site visits and electronically by Account Representatives 2. Both OPUCN and Enbridge Gas will familiarize themselves with each other's respective programs to inform customers when opportunities are identified 3. Account Representative interaction and communication a) Account Representatives that share similar territories will communicate to inform each other of opportunities identified during site visits, audits, or through other client interactions b) Account Representatives will combine efforts at regional tradeshows and events as and when applicable c) Account Representatives will share market intelligence and market potential reports i. Identify common target groups and coordinate accordingly Additionally as Enbridge Gas determines how they will collectively work with numerous LDCs across Ontario, OPUCN will be mindful to participate in initiatives that are rolled out to all LDCs, as appropriate. Currently the Enbridge Gas is being engaged by many LDCs and will need to determine how to work collectively without creating separate partnerships and plans for each LDC. If they are developed, OPUCN will evaluate how it can participate in any joint activities or initiatives that are rolled out when they overlap in the target territory and customer segments/types.
CDM Contribution to Regional Planning *Description of how the CDM Plan considers the electricity needs and investments identified in other plans or planned initiatives, completed or underway within the LDC(s)' service area or region. This may included Integrated Regional Resource Plans or Municipal Community Energy Plans.*	OPUCN is involved in GTA East Region planning activities and 'Needs Screening' process along with other LDCs in the region, transmitter and IESO. 2015-2020 Conservation Targets are being considered in the development of the Integrated Regional Resource Plan (IRRP) and Regional Infrastructure Plan (RIP) for the GTA East Region as well as OPUCN's Distribution System Plan.

G. Additional Documentation for CDM Plan (If applicable)

ADDITIONAL INFORMATION AND DOCUMENTATION	
Programs *Opportunity to provide any additional information on assumptions used for budgets and/or savings for approved 2015-2020 province-wide programs*	Please see Supporting Documentation
Approved Local and/or Regional Programs and Pilot Programs *Opportunity to provide any additional information on assumptions used for budgets and/or savings for approved 2015-2020 local or regional programs or pilot programs*	Please see Supporting Documentation
Proposed Local and/or Regional Programs and Pilot Programs *Opportunity to provide additional information on assumptions used for forecast budgets and/or savings for proposed programs or pilot programs*	
Programs from 2011-2014/2015 CDM Framework *Opportunity to provide any additional information on assumptions used for budgets and/or savings from existing 2011-2014/2015 CDM Programs*	Please see Supporting Documentation
Programs funded through Pay-for-Performance *Opportunity to provide any additional information on assumptions used for budgets and/or savings for Pay for Performance Programs*	
Other *Additional assumptions used in the CDM Plan*	

Summary of Changes to CDM Template

Version No.	Date	Tab	Change Summary
2	20-Jan-15	A. General Information	Inclusion of "Company Name" for Primary Contact
			Inclusion of frequency of invoicing (monthly vs. quarterly)
			Update date format to eliminate confusion
			Change reference to OPA
			Additional LDCs for joint plan
		B. LDC Authorization	Update date format to eliminate confusion
		D. CDM Plan Milestone LDC 1-10	Additional line items for FRC program names
			Additional LDCs for joint plan
			Update on the program names
			Update date format to eliminate confusion
			Update column headers: - "Province Wide Program Name" - "Proposed Regional or Local CDM Program or Pilot Program Name"
			Change reference to OPA
			Update Header and Footer
		E.. Proposed Program&Pilots	Additional boxes for proposed programs
			Update date format to eliminate confusion
		O. Detailed Information	Clarity if it is primary LDC or all LDCs in a joint CDM Plan.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-27

Reference: E3/pg. 28

a) Please provide a copy of the OPA/IESO's report on OPUCN's actual 2013 CDM results.

b) Please reconcile any differences between the results for 2011-2013 as set out in the OPA/IESO Report and those shown in Table 3-15 for the period 2011-2014?

c) Please confirm that Table 3-15 is based on billed energy and not purchased energy.

d) The CDM results obtained from 2011-2013 programs all show 100% persistence through to 2019. What is the basis for this assumption?

e) Please provide the full document that the second table on page 28 is taken from.

f) With respect to the second table on page 28, the totals shown for 2011, 2012 and 2014 all reconcile with the full annualize savings from CDM programs implemented in the respective years (per Table 3-15). However, the value for 2013 does not. Please reconcile.

g) The last paragraph on page 28 suggests that details regarding the updated CDM target for OPUCN are provided "below". However, supporting details have not been provided. Please provide the referenced material.

Response:

a) Final Verified Annual 2013 CDM Report Oshawa PUC Networks Inc. has been attached.

b) Table 3-15 has been corrected for 2013 programs beginning in 2014; corrected CDM savings are 5.2 GWH (form 2.6 GWH). The following table reconciles Table 3-15 (corrected) to OPUCN verified savings in OPA report:

	2014 (GWH)	2014 (taken from OPA report - Final 2013 Verified Results Report)	Variance	
Pre-2011	21.7			
2011	2.6	2.6	0.0	
2012	4.0	3.9	0.1	*Rounding*
2013	5.2	5.3	-0.1	*Rounding*

c) Confirmed – it is billed energy.

d) OPUCN has obtained persistence data from IESO and will adjust per the following table:

	2014	2015	2016	2017	2018	2019
2011	99%	95%	88%	84%	84%	83%
2012	97%	93%	89%	80%	77%	77%
2013	98%	97%	92%	81%	73%	73%

e) IESO's Report - *LDC Historical Performance Report and Final Target & Budget* has been attached.

f) Refer to part b).

g) Refer to part e).

Message from the Vice President:

The OPA is pleased to provide you with the enclosed Final 2013 Verified Results Report.

2013 Report highlights:

- We have achieved 86% of our cumulative energy savings target and 48% of our annual peak demand savings target to date (Scenario 2).

  By the end of 2013, 42 LDCs have exceeded 80% of their energy target and 19 LDCs have met or exceeded their 2011-14 energy target.
- In 2013, LDCs have achieved over 600 GWh in savings, representing an increase of 20% over the 2012 net incremental energy savings results.
- The BUSINESS PROGRAM continues to generate strong interest and participation amongst business customers with significant savings results. 71% of total energy savings in 2013 came from the BUSINESS PROGRAM and its momentum continues. Also, as the program matures, we are seeing more and more studies in the PROCESS AND SYSTEMS pipeline converting to completed projects.
- Within 4 cents per kWh, Conservation programs continue to be a valuable and cost effective resource for customers across the province.

2013 has been a year of significant operational advancements centered around creating a better customer and LDC experience:

- A number of operational changes were made in 2013 to enhance processes, such as payment of LDC invoices streamlined to an average of 20 days, enhanced reporting and iCon updates to improve users' experience.
- Proactive updates to measures incentivized through saveONenergy have allowed programs to stay ahead of changing market conditions. Specifically in 2013, LEDs became popular measures in both the Consumer and Business programs.
- Technical tools also played a significant role in 2013, which included an updated Measure and Assumptions List as well as new and improved engineering worksheets for RETROFIT which allow customers to more easily access programs by building strong business cases based on latest estimates of savings potential.
- The Conservation Fund introduced the LDC Fast Track stream to support LDCs with innovative program ideas. 2013 LDC pilots included Oshawa PUC Networks Inc.'s retro-commissioning program, Toronto Hydro-Electric System Limited multi-unit demand response, and Niagara-on-the-Lake Hydro Inc.'s electric vehicles load shifting program.
- Key market sectors were also engaged in 2013 through Capability Building programs targeted at Home Builders and HVAC Installers to build conservation knowledge with these partners. Energy Efficiency Services Programs (EESPs) also provided valuable support to a variety of sectors.

The format of this report was developed in collaboration with the Reporting Working Group and is designed to help LDCs populate their 2013 Annual Reports that will be submitted to the OEB by September 30th. Any additional 2013 program activity not captured here will be reported in your Final 2014 Verified Results Report.

Please continue to monitor saveONenergy E-blasts for any further updates and should you have any other questions or comments please contact LDC.Support@powerauthority.on.ca.

We appreciate your ongoing collaboration and cooperation throughout the reporting and evaluation process. We look forward to another successful year in 2014.

Sincerely,

Andrew Pride

Table of Contents

OPA-Contracted Province-Wide CDM Programs Final Verified 2013 Results

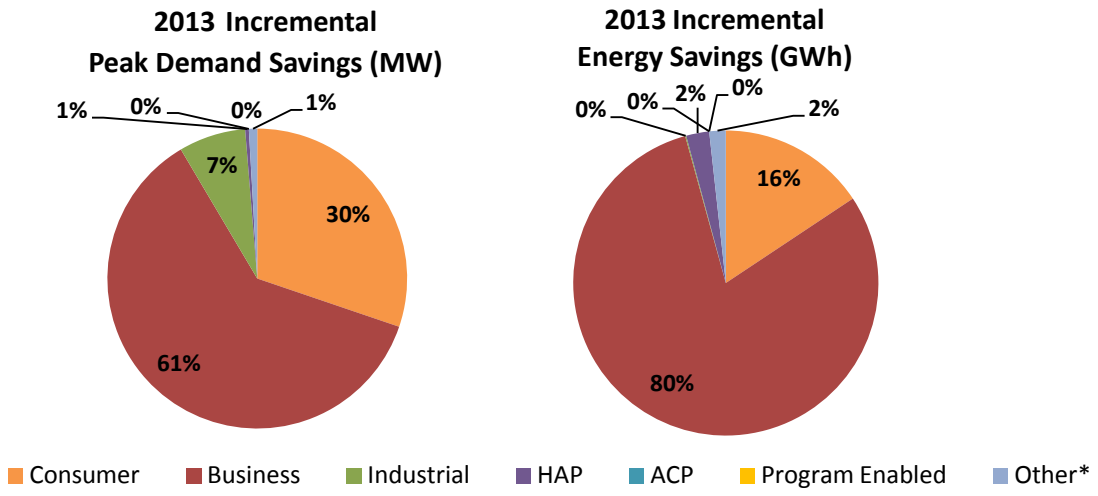
LDC: Oshawa PUC Networks Inc.

FINAL 2013 Progress to Targets	2013 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	2.6	2.8	**22.3%**	**33.4%**
Net Energy Savings (GWh)	5.4	33.3	**63.8%**	**63.8%**

Scenario 1 = Assumes that demand response resources have a persistence of 1 year

Scenario 2 = Assumes that demand response resources remain in the LDC service territory until 2014

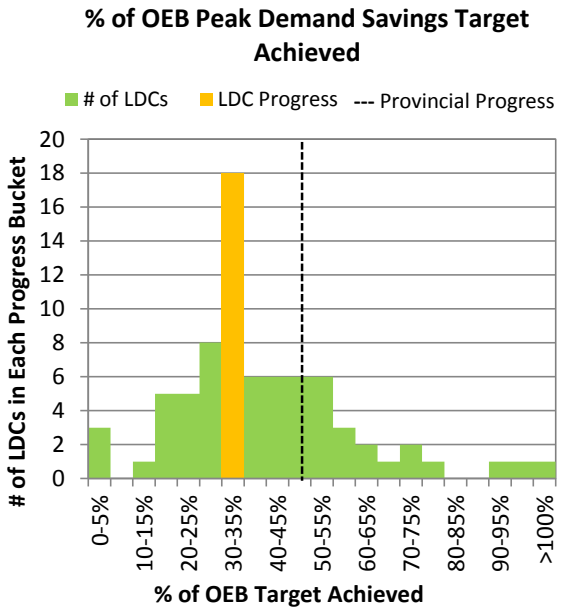
Achievement by Sector



**Other includes adjustments to previous years' results and savings from pre-2011 initiatives*

Comparison: LDC Achievement vs. LDC Community Achievement (Progress to Target)

The following graphs assume that demand response resources remain in the LDC service territory until 2014 (aligns with Scenario 2)



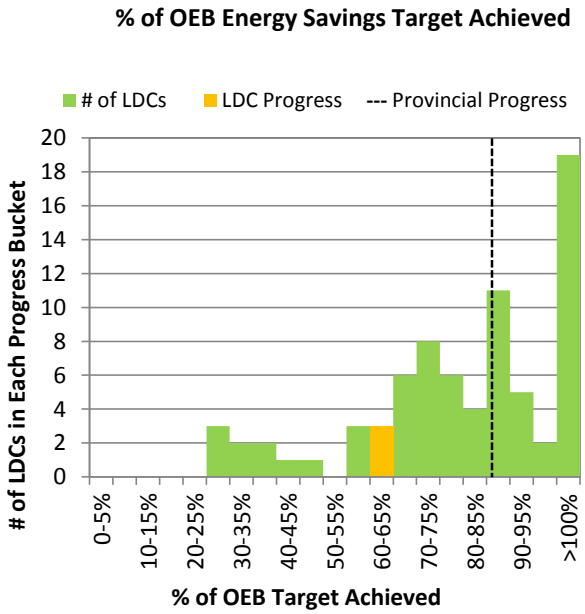


Table 1: Oshawa PUC Networks Inc. Initiative and Program Level Net Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	432	165	79		24	9	5		172,497	65,351	34,174		37	953,377
Appliance Exchange	Appliances	41	30	36		4	4	7		5,893	7,624	13,300		14	71,028
HVAC Incentives	Equipment	1,178	1,268	1,304		415	286	279		778,520	493,968	486,277		980	5,568,539
Conservation Instant Coupon Booklet	Items	6,228	379	4,261		14	3	6		229,012	17,174	94,672		23	1,156,914
Bi-Annual Retailer Event	Items	11,695	13,031	11,605		21	18	15		360,967	328,960	211,020		53	2,852,787
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	343	474	858		192	213	486		0	1,642	422		0	2,064
Residential Demand Response (IHD)	Devices	0	151	585		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Total						**671**	**533**	**799**		**1,546,889**	**914,719**	**839,865**		**1,108**	**10,604,708**
Business Program															
Retrofit	Projects	15	62	81		175	456	762		929,430	2,216,756	3,750,131		1,339	17,639,498
Direct Install Lighting	Projects	0	167	140		0	106	123		0	409,305	434,365		228	2,091,021
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0
Energy Audit	Audits	4	4	2		0	10	18		0	50,353	96,902		28	344,861
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	3	3	4		441	443	717		17,235	6,435	11,654		0	35,324
Business Program Total						**617**	**1,015**	**1,620**		**946,665**	**2,682,849**	**4,293,051**		**1,596**	**20,110,703**
Industrial Program															
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	1		0	0	0		0	0	1,660		0	1,660
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	1	0	1		82	0	190		4,799	0	4,336		0	9,134
Industrial Program Total						**82**	**0**	**191**		**4,799**	**0**	**5,996**		**0**	**10,795**
Home Assistance Program															
Home Assistance Program	Homes	0	0	263		0	0	10		0	0	130,871		10	261,101
Home Assistance Program Total						**0**	**0**	**10**		**0**	**0**	**130,871**		**10**	**261,101**
Aboriginal Program															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						**0**	**0**	**0**		**0**	**0**	**0**		**0**	**0**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	8	0	0		3	0	0		18,832	0	0		3	75,326
High Performance New Construction	Projects	3	0	0		17	1	0		88,416	1,345	0		19	357,697
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						**20**	**1**	**0**		**107,247**	**1,345**	**0**		**22**	**433,024**
Other															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
Other Total						**0**	**0**	**0**		**0**	**0**	**0**		**0**	**0**
Adjustments to 2011 Verified Results							**28**	**0**			**403,726**	**0**		**28**	**1,614,906**
Adjustments to 2012 Verified Results								**24**				**93,461**		**24**	**280,383**
Energy Efficiency Total						**675**	**894**	**1,226**		**2,583,566**	**3,590,835**	**5,253,372**		**2,736**	**31,373,809**
Demand Response Total (Scenario 1)						**715**	**656**	**1,394**		**22,033**	**8,077**	**16,411**		**0**	**46,522**
Adjustments to Previous Years' Verified Results Total						**0**	**28**	**24**		**0**	**403,726**	**93,461**		**51**	**1,895,289**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**1,390**	**1,577**	**2,644**		**2,605,600**	**4,002,638**	**5,363,245**		**2,787**	**33,315,620**
													Full OEB Target:	**12,520**	**52,240,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**22.3%**	**63.8%**

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated

Table 2: Adjustments to Oshawa PUC Networks Inc. Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program													
Appliance Retirement	Appliances	0	0			0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0			0	0		
HVAC Incentives	Equipment	-224	17			-65	4			-121,545	7,227		
Conservation Instant Coupon Booklet	Items	101	0			0	0			3,386	0		
Bi-Annual Retailer Event	Items	1,005	0			1	0			26,819	0		
Retailer Co-op	Items	0	0			0	0			0	0		
Residential Demand Response	Devices	0	0			0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0			0	0		
Residential New Construction	Homes	0	0			0	0			0	0		
Consumer Program Total						**-64**	**4**			**-91,340**	**7,227**		
Business Program													
Retrofit	Projects	2	0			0	0			29,838	0		
Direct Install Lighting	Projects	0	20			0	10			0	35,882		
Building Commissioning	Buildings	0	0			0	0			0	0		
New Construction	Buildings	0	0			0	0			0	0		
Energy Audit	Audits	2	2			10	10			50,353	50,353		
Small Commercial Demand Response	Devices	0	0			0	0			0	0		
Small Commercial Demand Response (IHD)	Devices	0	0			0	0			0	0		
Demand Response 3	Facilities	0	0			0	0			0	0		
Business Program Total						**10**	**20**			**80,191**	**86,234**		
Industrial Program													
Process & System Upgrades	Projects	0	0			0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0			0	0		
Energy Manager	Projects	0	0			0	0			0	0		
Retrofit	Projects	0	0			0	0			0	0		
Demand Response 3	Facilities	0	0			0	0			0	0		
Industrial Program Total						**0**	**0**			**0**	**0**		
Home Assistance Program													
Home Assistance Program	Homes	0	0			0	0			0	0		
Home Assistance Program Total						**0**	**0**			**0**	**0**		
Aboriginal Program													
Home Assistance Program	Homes	0	0			0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0			0	0		
Aboriginal Program Total						**0**	**0**			**0**	**0**		
Pre-2011 Programs completed in 2011													
Electricity Retrofit Incentive Program	Projects	0	0			0	0			0	0		
High Performance New Construction	Projects	2	0			81	0			414,876	0		
Toronto Comprehensive	Projects	0	0			0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0			0	0		
Pre-2011 Programs completed in 2011 Total						**81**	**0**			**414,876**	**0**		
Other													
Program Enabled Savings	Projects	0	0			0	0			0	0		
Time-of-Use Savings	Homes	0	0			0	0			0	0		
Other Total						**0**	**0**			**0**	**0**		
Adjustments to 2011 Verified Results						**28**				**403,726**			
Adjustments to 2012 Verified Results							**24**				**93,461**		
Total Adjustments to Previous Years' Verified Results						**28**	**24**			**403,726**	**93,461**		

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings

Table 3: Oshawa PUC Networks Inc. Realization Rate & NTG

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	n/a		0.50	0.46	0.42		1.00	1.00	n/a		0.51	0.47	0.44	
Appliance Exchange	1.00	1.00	1.00		0.52	0.52	0.53		1.00	1.00	1.00		0.52	0.52	0.53	
HVAC Incentives	1.00	1.00	n/a		0.60	0.50	0.48		1.00	1.00	n/a		0.60	0.49	0.48	
Conservation Instant Coupon Booklet	1.00	1.00	1.00		1.14	1.00	1.11		1.00	1.00	1.00		1.11	1.05	1.13	
Bi-Annual Retailer Event	1.00	1.00	1.00		1.13	0.91	1.04		1.00	1.00	1.00		1.10	0.92	1.04	
Retailer Co-op	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential New Construction	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Business Program																
Retrofit	0.93	0.89	0.95		0.74	0.76	0.76		1.26	1.10	1.04		0.76	0.77	0.73	
Direct Install Lighting	n/a	0.69	0.82		n/a	0.94	0.94		n/a	0.85	0.84		n/a	0.94	0.94	
Building Commissioning	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
New Construction	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Audit	n/a	n/a	1.02		n/a	n/a	0.66		n/a	n/a	0.97		n/a	n/a	0.66	
Small Commercial Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Small Commercial Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Demand Response 3	0.76	n/a	n/a		n/a	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a	
Industrial Program																
Process & System Upgrades	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Monitoring & Targeting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Manager	n/a	n/a	0.90		n/a	n/a	0.90		n/a	n/a	0.90		n/a	n/a	0.90	
Retrofit																
Demand Response 3	0.84	n/a	n/a		n/a	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a	
Home Assistance Program																
Home Assistance Program	n/a	n/a	1.18		n/a	n/a	1.00		n/a	n/a	0.87		n/a	n/a	1.00	
Aboriginal Program																
Home Assistance Program	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Direct Install Lighting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	0.77	n/a	n/a		0.52	n/a	n/a		0.77	n/a	n/a		0.52	n/a	n/a	
High Performance New Construction	1.00	1.00	1.00		0.50	0.50	0.50		1.00	1.00	1.00		0.50	0.50	0.50	
Toronto Comprehensive	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Multifamily Energy Efficiency Rebates	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
LDC Custom Programs	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Other																
Program Enabled Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Time-of-Use Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated

Summary Progress Towards CDM Targets

Results are attributed to target using current OPA reporting policies. Energy efficiency resources persist for the duration of the effective useful life. Any upcoming code changes are taken into account. Demand response resources persist for 1 year (Scenario 1). Please see methodology tab for more detailed information.

Table 4: Net Peak Demand Savings at the End User Level (MW) (Scenario 1)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	1.4	0.7	0.7	0.7
2012 - Verified†	0.0	1.6	0.9	0.9
2013 - Verified†	0.0	0.0	2.6	1.2
2014				
Verified Net Annual Peak Demand Savings Persisting in 2014:				2.8
Oshawa PUC Networks Inc. 2014 Annual CDM Capacity Target:				12.5
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				22.3%

Table 5: Net Energy Savings at the End User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	2.6	2.6	2.6	2.6	10.4
2012 - Verified†	0.4	4.0	3.9	3.9	12.2
2013 - Verified†	0.0	0.1	5.4	5.3	10.7
2014					
Verified Net Cumulative Energy Savings 2011-2014:					33.3
Oshawa PUC Networks Inc. 2011-2014 Annual CDM Energy Target:					52.2
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					63.8%

†Includes adjustments to previous Years' verified results

Table 6: Province-Wide Initiatives and Program Level Net Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	56,110	34,146	20,952		3,299	2,011	1,433		23,005,812	13,424,518	8,713,107		6,605	149,603,072
Appliance Exchange	Appliances	3,688	3,836	5,337		371	556	1,106		450,187	974,621	1,971,701		1,795	8,455,927
HVAC Incentives	Equipment	92,743	87,427	91,581		32,037	19,060	19,552		59,437,670	32,841,283	33,923,592		70,650	404,121,713
Conservation Instant Coupon Booklet	Items	567,678	30,891	346,896		1,344	230	517		21,211,537	1,398,202	7,707,573		2,091	104,455,900
Bi-Annual Retailer Event	Items	952,149	1,060,901	944,772		1,681	1,480	1,184		29,387,468	26,781,674	17,179,841		4,345	232,254,579
Retailer Co-op	Items	152	0	0		0	0	0		2,652	0	0		0	10,607
Residential Demand Response	Devices	19,550	98,388	171,733		10,947	49,038	93,076		24,870	359,408	390,303		0	774,582
Residential Demand Response (IHD)	Devices	0	49,689	133,657		0	0	0		0	0	0		0	0
Residential New Construction	Homes	26	19	86		0	2	18		743	17,152	163,690		20	381,811
Consumer Program Total						**49,681**	**72,377**	**116,886**		**133,520,941**	**75,796,859**	**70,049,807**		**85,506**	**900,058,189**
Business Program															
Retrofit	Projects	2,819	6,134	8,785		24,467	61,147	59,678		136,002,258	314,922,468	345,346,008		142,831	2,168,497,702
Direct Install Lighting	Projects	20,741	18,691	17,782		23,724	15,284	18,708		61,076,701	57,345,798	64,315,558		49,886	519,693,356
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	22	69	86		123	764	1,584		411,717	1,814,721	4,959,266		2,472	17,009,564
Energy Audit	Audits	198	345	319		0	1,450	2,811		0	7,049,351	15,455,795		4,261	52,059,644
Small Commercial Demand Response	Devices	132	294	1,211		84	187	773		157	1,068	373		0	1,597
Small Commercial Demand Response (IHD)	Devices	0	0	378		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	145	151	175		16,218	19,389	23,706		633,421	281,823	346,659		0	1,261,903
Business Program Total						**64,617**	**98,221**	**107,261**		**198,124,253**	**381,415,230**	**430,423,659**		**199,449**	**2,758,523,766**
Industrial Program															
Process & System Upgrades	Projects	0	0	3		0	0	294		0	0	2,603,764		294	5,207,528
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	42	205		0	1,086	3,558		0	7,372,108	21,994,263		3,194	54,888,570
Retrofit	Projects	433	0	0		4,615	0	0		28,866,840	0	0		4,613	115,462,282
Demand Response 3	Facilities	124	185	281		52,484	74,056	162,543		3,080,737	1,784,712	4,309,160		0	9,174,609
Industrial Program Total						**57,098**	**75,141**	**166,395**		**31,947,577**	**9,156,820**	**28,907,187**		**8,101**	**184,732,989**
Home Assistance Program															
Home Assistance Program	Homes	46	5,033	26,756		2	566	2,361		39,283	5,442,232	20,987,275		2,904	57,949,913
Home Assistance Program Total						**2**	**566**	**2,361**		**39,283**	**5,442,232**	**20,987,275**		**2,904**	**57,949,913**
Aboriginal Program															
Home Assistance Program	Homes	0	0	584		0	0	267		0	0	1,609,393		267	3,218,786
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						**0**	**0**	**267**		**0**	**0**	**1,609,393**		**267**	**3,218,786**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	2,028	0	0		21,662	0	0		121,138,219	0	0		21,662	484,552,876
High Performance New Construction	Projects	179	69	4		5,098	3,251	772		26,185,591	11,901,944	3,522,240		9,121	147,492,677
Toronto Comprehensive	Projects	577	0	0		15,805	0	0		86,964,886	0	0		15,805	347,859,545
Multifamily Energy Efficiency Rebates	Projects	110	0	0		1,981	0	0		7,595,683	0	0		1,981	30,382,733
LDC Custom Programs	Projects	8	0	0		399	0	0		1,367,170	0	0		399	5,468,679
Pre-2011 Programs completed in 2011 Total						**44,945**	**3,251**	**772**		**243,251,550**	**11,901,944**	**3,522,240**		**48,967**	**1,015,756,510**
Other															
Program Enabled Savings	Projects	14	56	13		0	2,304	3,692		0	1,188,362	4,075,382		5,996	11,715,850
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
Other Total						**0**	**2,304**	**3,692**		**0**	**1,188,362**	**4,075,382**		**5,996**	**11,715,850**
Adjustments to 2011 Verified Results							**1,406**	**641**			**18,689,081**	**1,736,381**		**1,797**	**80,864,121**
Adjustments to 2012 Verified Results								**6,260**				**41,947,840**		**6,180**	**126,287,857**
Energy Efficiency Total						**136,610**	**109,191**	**117,536**		**603,144,419**	**482,474,435**	**554,528,447**		**351,190**	**4,920,743,312**
Demand Response Total (Scenario 1)						**79,733**	**142,670**	**280,099**		**3,739,185**	**2,427,011**	**5,046,495**		**0**	**11,212,691**
Adjustments to Previous Years' Verified Results Total						**0**	**1,406**	**6,901**		**0**	**18,689,081**	**43,684,221**		**7,976**	**207,151,978**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**216,343**	**253,267**	**404,536**		**606,883,604**	**503,590,526**	**603,259,163**		**359,166**	**5,139,107,980**
													Full OEB Target:	**1,330,000**	**6,000,000,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**27.0%**	**85.7%**

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated

Table 7: Adjustments to Province-Wide Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program													
Appliance Retirement	Appliances	0	0			0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0			0	0		
HVAC Incentives	Equipment	-18,844	2,206			-5,271	452			-9,709,500	907,735		
Conservation Instant Coupon Booklet	Items	8,216	0			16	0			275,655	0		
Bi-Annual Retailer Event	Items	81,817	0			108	0			2,183,391	0		
Retailer Co-op	Items	0	0			0	0			0	0		
Residential Demand Response	Devices	0	0			0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0			0	0		
Residential New Construction	Homes	19	0			1	0			13,767	0		
Consumer Program Total						**-5,146**	**452**			**-7,236,687**	**907,735**		
Business Program													
Retrofit	Projects	303	529			3,204	4,443			16,216,165	28,739,635		
Direct Install Lighting	Projects	444	197			501	204			1,250,388	736,541		
Building Commissioning	Buildings	0	0			0	0			0	0		
New Construction	Buildings	12	0			828	0			3,520,620	0		
Energy Audit	Audits	95	65			492	337			2,391,744	1,636,457		
Small Commercial Demand Response	Devices	0	0			0	0			0	0		
Small Commercial Demand Response (IHD)	Devices	0	0			0	0			0	0		
Demand Response 3	Facilities	0	0			0	0			0	0		
Business Program Total						**5,025**	**4,984**			**23,378,917**	**31,112,632**		
Industrial Program													
Process & System Upgrades	Projects	0	0			0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0			0	0		
Energy Manager	Projects	0	3			0	68			0	719,235		
Retrofit	Projects	0	0			0	0			0	0		
Demand Response 3	Facilities	0	0			0	0			0	0		
Industrial Program Total						**0**	**68**			**0**	**719,235**		
Home Assistance Program													
Home Assistance Program	Homes	0	0			0	0			0	0		
Home Assistance Program Total						**0**	**0**			**0**	**0**		
Aboriginal Program													
Home Assistance Program	Homes	0	0			0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0			0	0		
Aboriginal Program Total						**0**	**0**			**0**	**0**		
Pre-2011 Programs completed in 2011													
Electricity Retrofit Incentive Program	Projects	12	0			138	0			545,536	0		
High Performance New Construction	Projects	34	0			1,407	0			2,065,200	0		
Toronto Comprehensive	Projects	0	0			0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0			0	0		
Pre-2011 Programs completed in 2011 Total						**1,545**	**0**			**2,610,736**	**0**		
Other													
Program Enabled Savings	Projects	14	40			624	824			1,673,712	9,927,473		
Time-of-Use Savings	Homes	0	0			0	0			0	0		
Other Total						**624**	**824**			**1,673,712**	**9,927,473**		
Adjustments to 2011 Verified Results						**2,047**				**20,426,678**			
Adjustments to 2012 Verified Results							**6,328**				**42,667,076**		
Adjustments to Previous Years' Verified Results Total						**2,047**	**6,328**			**20,426,678**	**42,667,076**		

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings

Table 8: Province-Wide Realization Rate & NTG

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	1.00		0.51	0.46	0.42		1.00	1.00	1.00		0.46	0.47	0.44	
Appliance Exchange	1.00	1.00	1.00		0.51	0.52	0.53		1.00	1.00	1.00		0.52	0.52	0.53	
HVAC Incentives	1.00	1.00	1.00		0.60	0.50	0.48		1.00	1.00	1.00		0.50	0.49	0.48	
Conservation Instant Coupon Booklet	1.00	1.00	1.00		1.14	1.00	1.11		1.00	1.00	1.00		1.00	1.05	1.13	
Bi-Annual Retailer Event	1.00	1.00	1.00		1.12	0.91	1.04		1.00	1.00	1.00		0.91	0.92	1.04	
Retailer Co-op	1.00	n/a	n/a		0.68	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential New Construction	1.00	3.65	0.78		0.41	0.49	0.63		3.65	7.17	3.09		0.49	0.49	0.63	
Business Program																
Retrofit	1.06	0.93	0.92		0.72	0.75	0.73		0.93	1.05	1.01		0.75	0.76	0.73	
Direct Install Lighting	1.08	0.69	0.82		1.08	0.94	0.94		0.69	0.85	0.84		0.94	0.94	0.94	
Building Commissioning	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
New Construction	0.50	0.98	0.68		0.50	0.49	0.54		0.98	0.99	0.76		0.49	0.49	0.54	
Energy Audit	n/a	n/a	1.02		n/a	n/a	0.66		n/a	n/a	0.97		n/a	n/a	0.66	
Small Commercial Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Small Commercial Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Demand Response 3	0.76	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Industrial Program																
Process & System Upgrades	n/a	n/a	0.85		n/a	n/a	0.94		n/a	n/a	0.87		n/a	n/a	0.93	
Monitoring & Targeting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Manager	n/a	1.16	0.90		n/a	0.90	0.90		1.16	1.16	0.90		0.90	0.90	0.90	
Retrofit	1.11	n/a	n/a		0.72	n/a	n/a		0.91	n/a	n/a		0.75	n/a	n/a	
Demand Response 3	0.84	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Home Assistance Program																
Home Assistance Program	1.00	0.32	0.26		0.70	1.00	1.00		0.32	0.99	0.88		1.00	1.00	1.00	
Aboriginal Program																
Home Assistance Program	n/a	n/a	0.05		n/a	n/a	1.00		n/a	n/a	0.95		n/a	n/a	1.00	
Direct Install Lighting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	0.80	n/a	n/a		0.54	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
High Performance New Construction	1.00	1.00	1.00		0.49	0.50	0.50		1.00	1.00	1.00		0.50	0.50	0.50	
Toronto Comprehensive	1.13	n/a	n/a		0.50	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Multifamily Energy Efficiency Rebates	0.93	n/a	n/a		0.78	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
LDC Custom Programs	1.00	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Other																
Program Enabled Savings	n/a	1.06	1.00		n/a	1.00	1.00		1.06	2.26	1.00		1.00	1.00	1.00	
Time-of-Use Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated

Summary Provincial Progress Towards CDM Targets

Table 9: Province-Wide Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012†	1.4	253.3	109.8	108.2
2013†	0.6	7.0	404.5	122.0
2014				
Verified Net Annual Peak Demand Savings in 2014:				359.2
2014 Annual CDM Capacity Target:				1,330
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				27.0%

Table 10: Province-Wide Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393.1
2012†	18.7	503.6	498.4	492.6	1,513.3
2013†	1.7	44.4	603.3	583.4	1,232.8
2014					
Verified Net Cumulative Energy Savings 2011-2014:					5,139.1
2011-2014 Cumulative CDM Energy Target:					6,000
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					85.7%

†Includes adjustments to previous Years' verified results

METHODOLOGY

All results are at the end-user level (not including transmission and distribution losses)

EQUATIONS	
Prescriptive Measures and Projects	**Gross Savings = Activity * Per Unit Assumption** **Net Savings = Gross Savings * Net-to-Gross Ratio** **All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)**
Engineered and Custom Projects	**Gross Savings = Reported Savings * Realization Rate** **Net Savings = Gross Savings * Net-to-Gross Ratio** **All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)**
Demand Response	**Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio** **Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW** **All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)**
Adjustments to Previous Years' Verified Results	All variances from the Final Annual Results Reports from prior years will be adjusted within this report. Any variances with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program			
Appliance Retirement	Includes both retail and home pickup stream; Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection.	Savings are considered to begin in the year the appliance is picked up.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year that the exchange event occurred.	
HVAC Incentives	Results directly attributed to LDC based on customer postal code.	Savings are considered to begin in the year that the installation occurred.	

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year in which the coupon was redeemed.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year in which the event occurs.	
Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Residential Demand Response	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists.	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any “snapback” in energy consumption experienced after the event. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Business Program			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
	Additional Note: project counts were derived by filtering out invalid statuses (e.g. Post-Project Submission - Payment denied by LDC) and only including projects with an "Actual Project Completion Date" in 2013)		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Industrial Program			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011, 2012 or 2013.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Home Assistance Program			
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Aboriginal Program			
Aboriginal Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Pre-2011 Programs completed in 2011			
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012 or 2013 assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported. A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation.		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation.		

Retrofit Sector (C&I vs. Industrial Mapping)	
Building Type	**Sector**
Agribusiness - Cattle Farm	C&I
Agribusiness - Dairy Farm	C&I
Agribusiness - Greenhouse	C&I
Agribusiness - Other	C&I
Agribusiness - Other,Mixed-Use - Office/Retail	C&I
Agribusiness - Other,Office,Retail,Warehouse	C&I
Agribusiness - Other,Office,Warehouse	C&I
Agribusiness - Poultry	C&I
Agribusiness - Poultry,Hospitality - Motel	C&I
Agribusiness - Swine	C&I
Convenience Store	C&I
Education - College / Trade School	C&I
Education - College / Trade School,Multi-Residential - Condominium	C&I
Education - College / Trade School,Multi-Residential - Rental Apartment	C&I
Education - College / Trade School,Retail	C&I
Education - Primary School	C&I
Education - Primary School,Education - Secondary School	C&I
Education - Primary School,Multi-Residential - Rental Apartment	C&I
Education - Primary School,Not-for-Profit	C&I
Education - Secondary School	C&I
Education - University	C&I
Education - University,Office	C&I
Hospital/Healthcare - Clinic	C&I
Hospital/Healthcare - Clinic,Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Clinic,Industrial	C&I
Hospital/Healthcare - Clinic,Retail	C&I
Hospital/Healthcare - Long-term Care	C&I
Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail,Office	C&I
Hospitality - Hotel	C&I
Hospitality - Hotel,Restaurant - Dining	C&I
Hospitality - Motel	C&I
Industrial	Industrial
Mixed-Use - Office/Retail	C&I
Mixed-Use - Office/Retail,Industrial	Industrial
Mixed-Use - Office/Retail,Mixed-Use - Other	C&I
Mixed-Use - Office/Retail,Mixed-Use - Other,Not-for-Profit,Warehouse	C&I
Mixed-Use - Office/Retail,Mixed-Use - Residential/Retail	C&I
Mixed-Use - Office/Retail,Office,Restaurant - Dining,Restaurant - Quick Serve,Retail,Warehouse	C&I

Mixed-Use - Office/Retail,Office,Warehouse	C&I
Mixed-Use - Office/Retail,Retail	C&I
Mixed-Use - Office/Retail,Warehouse	C&I
Mixed-Use - Office/Retail,Warehouse,Industrial	Industrial
Mixed-Use - Other	C&I
Mixed-Use - Other,Industrial	Industrial
Mixed-Use - Other,Not-for-Profit,Office	C&I
Mixed-Use - Other,Office	C&I
Mixed-Use - Other,Other: Please specify	C&I
Mixed-Use - Other,Retail,Warehouse	C&I
Mixed-Use - Other,Warehouse	C&I
Mixed-Use - Residential/Retail	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Condominium	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Rental Apartment	C&I
Mixed-Use - Residential/Retail,Retail	C&I
Multi-Residential - Condominium	C&I
Multi-Residential - Condominium,Multi-Residential - Rental Apartment	C&I
Multi-Residential - Condominium,Other: Please specify	C&I
Multi-Residential - Rental Apartment	C&I
Multi-Residential - Rental Apartment,Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Warehouse	C&I
Multi-Residential - Social Housing Provider	C&I
Multi-Residential - Social Housing Provider,Industrial	C&I
Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Not-for-Profit	C&I
Not-for-Profit,Office	C&I
Not-for-Profit,Other: Please specify	C&I
Not-for-Profit,Warehouse	C&I
Office	C&I
Office,Industrial	Industrial
Office,Other: Please specify	C&I
Office,Other: Please specify,Warehouse	C&I
Office,Restaurant - Dining	C&I
Office,Restaurant - Dining,Industrial	Industrial
Office,Retail	C&I
Office,Retail,Industrial	C&I
Office,Retail,Warehouse	C&I
Office,Warehouse	C&I
Office,Warehouse,Industrial	Industrial
Other: Please specify	C&I
Other: Please specify,Industrial	Industrial
Other: Please specify,Retail	C&I
Other: Please specify,Warehouse	C&I
Restaurant - Dining	C&I
Restaurant - Dining,Retail	C&I

Restaurant - Quick Serve	C&I
Restaurant - Quick Serve,Retail	C&I
Retail	C&I
Retail,Industrial	Industrial
Retail,Warehouse	C&I
Warehouse	C&I
Warehouse,Industrial	Industrial

Consumer Program Allocation Methodology

Results can be allocated based on average of 2008 & 2009 residential throughput for each LDC (below) when additional information is not available. Source: OEB Yearbook Data 2008 & 2009

Local Distribution Company	Allocation
Algoma Power Inc.	0.2%
Atikokan Hydro Inc.	0.0%
Attawapiskat Power Corporation	0.0%
Bluewater Power Distribution Corporation	0.6%
Brant County Power Inc.	0.2%
Brantford Power Inc.	0.7%
Burlington Hydro Inc.	1.4%
Cambridge and North Dumfries Hydro Inc.	1.0%
Canadian Niagara Power Inc.	0.5%
Centre Wellington Hydro Ltd.	0.1%
Chapleau Public Utilities Corporation	0.0%
COLLUS Power Corporation	0.3%
Cooperative Hydro Embrun Inc.	0.0%
E.L.K. Energy Inc.	0.2%
Enersource Hydro Mississauga Inc.	3.9%
ENTEGRUS	0.6%
ENWIN Utilities Ltd.	1.6%
Erie Thames Powerlines Corporation	0.4%
Espanola Regional Hydro Distribution Corporation	0.1%
Essex Powerlines Corporation	0.7%
Festival Hydro Inc.	0.3%
Fort Albany Power Corporation	0.0%
Fort Frances Power Corporation	0.1%
Greater Sudbury Hydro Inc.	1.0%
Grimsby Power Inc.	0.2%
Guelph Hydro Electric Systems Inc.	0.9%
Haldimand County Hydro Inc.	0.4%
Halton Hills Hydro Inc.	0.5%
Hearst Power Distribution Company Limited	0.1%
Horizon Utilities Corporation	4.0%
Hydro 2000 Inc.	0.0%
Hydro Hawkesbury Inc.	0.1%
Hydro One Brampton Networks Inc.	2.8%
Hydro One Networks Inc.	30.0%

Hydro Ottawa Limited	5.6%
Innisfil Hydro Distribution Systems Limited	0.4%
Kashechewan Power Corporation	0.0%
Kenora Hydro Electric Corporation Ltd.	0.1%
Kingston Hydro Corporation	0.5%
Kitchener-Wilmot Hydro Inc.	1.6%
Lakefront Utilities Inc.	0.2%
Lakeland Power Distribution Ltd.	0.2%
London Hydro Inc.	2.7%
Middlesex Power Distribution Corporation	0.1%
Midland Power Utility Corporation	0.1%
Milton Hydro Distribution Inc.	0.6%
Newmarket - Tay Power Distribution Ltd.	0.7%
Niagara Peninsula Energy Inc.	1.0%
Niagara-on-the-Lake Hydro Inc.	0.2%
Norfolk Power Distribution Inc.	0.3%
North Bay Hydro Distribution Limited	0.5%
Northern Ontario Wires Inc.	0.1%
Oakville Hydro Electricity Distribution Inc.	1.5%
Orangeville Hydro Limited	0.2%
Orillia Power Distribution Corporation	0.3%
Oshawa PUC Networks Inc.	1.2%
Ottawa River Power Corporation	0.2%
Parry Sound Power Corporation	0.1%
Peterborough Distribution Incorporated	0.7%
PowerStream Inc.	6.6%
PUC Distribution Inc.	0.9%
Renfrew Hydro Inc.	0.1%
Rideau St. Lawrence Distribution Inc.	0.1%
Sioux Lookout Hydro Inc.	0.1%
St. Thomas Energy Inc.	0.3%
Thunder Bay Hydro Electricity Distribution Inc.	0.9%
Tillsonburg Hydro Inc.	0.1%
Toronto Hydro-Electric System Limited	12.8%
Veridian Connections Inc.	2.4%
Wasaga Distribution Inc.	0.2%
Waterloo North Hydro Inc.	1.0%
Welland Hydro-Electric System Corp.	0.4%
Wellington North Power Inc.	0.1%
West Coast Huron Energy Inc.	0.1%
Westario Power Inc.	0.5%
Whitby Hydro Electric Corporation	0.9%
Woodstock Hydro Services Inc.	0.3%

Reporting Glossary

Annual: the peak demand or energy savings that occur in a given year (includes resource savings from new program activity in a given year and resource savings persisting from previous years).

Cumulative Energy Savings: represents the sum of the annual energy savings that accrue over a defined period (in the context of this report the defined period is 2011 - 2014). This concept does not apply to peak demand savings.

End-User Level: resource savings in this report are measured at the customer level as opposed to the generator level (the difference being line losses).

Free-ridership: the percentage of participants who would have implemented the program measure or practice in the absence of the program.

Incremental: the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'.

Initiative: a Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup).

Net-to-Gross Ratio: The ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover

Net Energy Savings (MWh): energy savings attributable to conservation and demand management activities net of free-riders, etc.

Net Peak Demand Savings (MW): peak demand savings attributable to conservation and demand management activities net of free-riders, etc.

Program: a group of initiatives that target a particular market sector (e.g. Consumer, Industrial).

Realization Rate: A comparison of observed or measured (evaluated) information to original reported savings which is used to adjust the gross savings estimates.

Settlement Account: the grouping of demand response facilities (contributors) into one contractual agreement

Spillover: Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.

Unit: for a specific initiative the relevant type of activity acquired in the market place (i.e. appliances picked up, projects completed, coupons redeemed).

Table 11: Oshawa PUC Networks Inc. Initiative and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement**	Appliances	51	9	11		353,647	65,351	72,527	
Appliance Exchange**	Appliances	9	4	14		11,435	7,624	25,269	
HVAC Incentives	Equipment	690	574	578		1,302,023	1,006,099	1,021,715	
Conservation Instant Coupon Booklet	Items	12	3	6		207,864	16,286	84,043	
Bi-Annual Retailer Event	Items	18	20	14		330,404	358,935	201,949	
Retailer Co-op	Items	0	0	0		0	0	0	
Residential Demand Response	Devices	192	213	486		0	1,642	422	
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	0	0	0		0	0	0	
Consumer Program Total		**972**	**823**	**1,109**		**2,205,373**	**1,455,937**	**1,405,925**	
Business Program									
Retrofit	Projects	237	607	1,014		1,217,872	2,553,763	5,147,434	
Direct Install Lighting	Projects	0	141	131		0	491,211	460,195	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	0	0	0		0	0	0	
Energy Audit	Audits	0	10	27		0	50,353	146,621	
Small Commercial Demand Response	Devices	0	0	0		0	0	0	
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0	
Demand Response 3	Facilities	441	443	717		17,235	6,435	11,654	
Business Program Total		**678**	**1,201**	**1,889**		**1,235,107**	**3,101,762**	**5,765,904**	
Industrial Program									
Process & System Upgrades	Projects	0	0	0		0	0	0	
Monitoring & Targeting	Projects	0	0	0		0	0	0	
Energy Manager	Projects	0	0	0		0	0	1,845	
Retrofit	Projects	0	0	0		0	0	0	
Demand Response 3	Facilities	82	0	190		4,799	0	4,336	
Industrial Program Total		**82**	**0**	**191**		**4,799**	**0**	**6,181**	
Home Assistance Program									
Home Assistance Program	Homes	0	0	10		0	0	130,871	
Home Assistance Program Total		**0**	**0**	**10**		**0**	**0**	**130,871**	
Aboriginal Program									
Home Assistance Program	Homes	0	0	0		0	0	0	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		**0**	**0**	**0**		**0**	**0**	**0**	
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	6	0	0		36,214	0	0	
High Performance New Construction	Projects	34	3	0		176,832	2,689	0	
Toronto Comprehensive	Projects	0	0	0		0	0	0	
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0	
LDC Custom Programs	Projects	0	0	0		0	0	0	
Pre-2011 Programs completed in 2011 Total		**41**	**3**	**0**		**213,046**	**2,689**	**0**	
Other									
Program Enabled Savings	Projects	0	0	0		0	0	0	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
Other Total		**0**	**0**	**0**		**0**	**0**	**0**	
Adjustments to 2011 Verified Results		**0**	**100**	**0**		**0**	**-76,760**	**0**	
Adjustments to 2012 Verified Results		**0**	**0**	**29**		**0**	**0**	**103,240**	
Energy Efficiency Total		**1,058**	**1,371**	**1,805**		**3,636,291**	**4,552,311**	**7,292,470**	
Demand Response Total		**715**	**656**	**1,394**		**22,033**	**8,077**	**16,411**	
Adjustments to Previous Years' Verified Results Total		**0**	**100**	**29**		**0**	**-76,760**	**103,240**	
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		**1,773**	**2,127**	**3,228**		**3,658,324**	**4,483,628**	**7,412,121**	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings

Gross results are presented for informational purposes only and are not considered official 2013 Final Verified Results

**Net results substituted for gross results due to unavailability of data

Table 12: Adjustments to Oshawa PUC Networks Inc. Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0		
HVAC Incentives	Equipment	-108	8			-203,397	14,798		
Conservation Instant Coupon Booklet	Items	0	0			3,144	0		
Bi-Annual Retailer Event	Items	1	0			29,155	0		
Retailer Co-op	Items	0	0			0	0		
Residential Demand Response	Devices	0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0		
Residential New Construction	Homes	0	0			0	0		
Consumer Program Total		**-107**	**8**			**-171,097**	**14,798**		
Business Program									
Retrofit	Projects	0	0			43,984	0		
Direct Install Lighting	Projects	0	10			0	38,089		
Building Commissioning	Buildings	0	0			0	0		
New Construction	Buildings	0	0			0	0		
Energy Audit	Audits	10	10			50,353	50,353		
Small Commercial Demand Response	Devices	0	0			0	0		
Small Commercial Demand Response (IHD)	Devices	0	0			0	0		
Demand Response 3	Facilities	0	0			0	0		
Business Program Total		**10**	**21**			**94,337**	**88,442**		
Industrial Program									
Process & System Upgrades	Projects	0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0		
Energy Manager	Projects	0	0			0	0		
Retrofit	Projects	0	0			0	0		
Demand Response 3	Facilities	0	0			0	0		
Industrial Program Total		**0**	**0**			**0**	**0**		
Home Assistance Program									
Home Assistance Program	Homes	0	0			0	0		
Home Assistance Program Total		**0**	**0**			**0**	**0**		
Aboriginal Program									
Home Assistance Program	Homes	0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0		
Aboriginal Program Total									
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	0	0			0	0		
High Performance New Construction	Projects	196	0			0	0		
Toronto Comprehensive	Projects	0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0		
Pre-2011 Programs completed in 2011 Total		**196**	**0**			**0**	**0**		
Other									
Program Enabled Savings	Projects	0	0			0	0		
Time-of-Use Savings	Homes	0	0			0	0		
Other Total		**0**	**0**			**0**	**0**		
Adjustments to 2011 Verified Results		**100**				**-76,760**			
Adjustments to 2012 Verified Results			**29**				**103,240**		
Total Adjustments to Previous Years' Verified Results		**100**	**29**			**-76,760**	**103,240**		

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Gross results are presented for informational purposes only and are not considered official 2013 Final Verified Results

Table 13: Province-Wide Initiatives and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement**	Appliances	6,750	2,011	3,151		45,971,627	13,424,518	18,616,239	
Appliance Exchange**	Appliances	719	556	2,101		873,531	974,621	3,746,106	
HVAC Incentives	Equipment	53,209	38,346	40,418		99,413,430	66,929,213	71,225,037	
Conservation Instant Coupon Booklet	Items	1,184	231	464		19,192,453	1,325,898	6,842,244	
Bi-Annual Retailer Event	Items	1,504	1,622	1,142		26,899,265	29,222,072	16,441,329	
Retailer Co-op	Items	0	0	0		3,917	0	0	
Residential Demand Response	Devices	10,390	49,038	93,076		23,597	359,408	390,303	
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	0	1	29		1,813	4,884	259,826	
Consumer Program Total		**73,757**	**91,805**	**140,380**		**192,379,633**	**112,240,615**	**117,521,084**	
Business Program									
Retrofit	Projects	34,201	78,965	82,896		184,070,265	387,817,248	478,410,896	
Direct Install Lighting	Projects	22,155	20,469	19,807		65,777,197	68,896,046	68,140,249	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	247	1,596	2,934		823,434	3,755,869	9,183,826	
Energy Audit	Audits	0	1,450	4,283		0	7,049,351	23,386,108	
Small Commercial Demand Response	Devices	55	187	773		131	1,068	373	
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0	
Demand Response 3	Facilities	21,390	19,389	23,706		633,421	281,823	346,659	
Business Program Total		**78,048**	**122,056**	**134,399**		**251,304,448**	**467,801,406**	**579,468,111**	
Industrial Program									
Process & System Upgrades	Projects	0	0	313		0	0	2,799,746	
Monitoring & Targeting	Projects	0	0	0		0	0	0	
Energy Manager	Projects	0	1,034	3,953		0	7,067,535	24,438,070	
Retrofit	Projects	6,372	0	0		38,412,408	0	0	
Demand Response 3	Facilities	176,180	74,056	162,543		4,243,958	1,784,712	4,309,160	
Industrial Program Total		**182,552**	**75,090**	**166,809**		**42,656,366**	**8,852,247**	**31,546,976**	
Home Assistance Program									
Home Assistance Program	Homes	4	1,777	2,361		56,119	5,524,230	20,987,275	
Home Assistance Program Total		**4**	**1,777**	**2,361**		**56,119**	**5,524,230**	**20,987,275**	
Aboriginal Program									
Home Assistance Program	Homes	0	0	267		0	0	1,609,393	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		**0**	**0**	**267**		**0**	**0**	**1,609,393**	
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	40,418	0	0		223,956,390	0	0	
High Performance New Construction	Projects	10,197	6,501	772		52,371,183	23,803,888	3,522,240	
Toronto Comprehensive	Projects	33,467	0	0		174,070,574	0	0	
Multifamily Energy Efficiency Rebates	Projects	2,553	0	0		9,774,792	0	0	
LDC Custom Programs	Projects	534	0	0		649,140	0	0	
Pre-2011 Programs completed in 2011 Total		**87,169**	**6,501**	**772**		**460,822,079**	**23,803,888**	**3,522,240**	
Other									
Program Enabled Savings	Projects	0	2,177	3,692		0	525,011	4,075,382	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
Other Total		**0**	**2,177**	**3,692**		**0**	**525,011**	**4,075,382**	
Adjustments to 2011 Verified Results			**13,266**	**645**			**48,705,294**	**1,744,645**	
Adjustments to 2012 Verified Results				**8,707**				**55,101,043**	
Energy Efficiency Total		**213,515**	**156,735**	**168,583**		**942,317,539**	**616,320,385**	**753,683,966**	
Demand Response Total		**208,015**	**142,670**	**280,099**		**4,901,107**	**2,427,011**	**5,046,495**	
Adjustments to Previous Years' Verified Results Total		**0**	**13,266**	**9,352**		**0**	**48,705,294**	**56,845,688**	
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		**421,530**	**312,671**	**458,033**		**947,218,646**	**667,452,690**	**815,576,149**	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings

Gross results are presented for informational purposes only and are not considered official 2013 Final Verified Results

**Net results substituted for gross results due to unavailability of data

Table 14: Adjustments to Province-Wide Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0		
HVAC Incentives	Equipment	-8,762	1,036			-16,245,279	1,854,833		
Conservation Instant Coupon Booklet	Items	15	0			255,975	0		
Bi-Annual Retailer Event	Items	117	0			2,373,616	0		
Retailer Co-op	Items	0	0			0	0		
Residential Demand Response	Devices	0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0		
Residential New Construction	Homes	0	0			328,256	0		
Consumer Program Total		**-8,630**	**1,036**			**-13,287,430**	**1,854,833**		
Business Program									
Retrofit	Projects	4,504	6,218			22,046,931	40,101,273		
Direct Install Lighting	Projects	541	217			1,346,618	781,858		
Building Commissioning	Buildings	0	0			0	0		
New Construction	Buildings	3,243	0			11,323,593	0		
Energy Audit	Audits	492	337			2,391,744	1,636,457		
Small Commercial Demand Response	Devices	0	0			0	0		
Small Commercial Demand Response (IHD)	Devices	0	0			0	0		
Demand Response 3	Facilities	0	0			0	0		
Business Program Total		**8,780**	**6,771**			**37,108,886**	**42,519,588**		
Industrial Program									
Process & System Upgrades	Projects	0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0		
Energy Manager	Projects	0	75			0	799,151		
Retrofit	Projects	0	0			0	0		
Demand Response 3	Facilities	0	0			0	0		
Industrial Program Total		**0**	**75**			**0**	**799,151**		
Home Assistance Program									
Home Assistance Program	Homes	0	0			0	0		
Home Assistance Program Total		**0**	**0**			**0**	**0**		
Aboriginal Program									
Home Assistance Program	Homes	0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0		
Aboriginal Program Total		**0**	**0**			**0**	**0**		
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	266	0			1,049,108	0		
High Performance New Construction	Projects	12,872	0			23,905,663	0		
Toronto Comprehensive	Projects	0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0		
Pre-2011 Programs completed in 2011 Total		**13,137**	**0**			**24,954,771**	**0**		
Other									
Program Enabled Savings	Projects	624	824			1,673,712	9,927,473		
Time-of-Use Savings	Homes	0	0			0	0		
Other Total		**624**	**824**			**1,673,712**	**9,927,473**		
Adjustments to 2011 Verified Results		**13,911**				**50,449,939**			
Adjustments to 2012 Verified Results			**8,707**				**55,101,043**		
Adjustments to Previous Years' Verified Results Total		**13,911**	**8,707**			**50,449,939**	**55,101,043**		

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Gross results are presented for informational purposes only and are not considered official 2013 Final Verified Results

LDC Historical Performance Report and Final Target & Budget

Enclosed is the updated 2011-2014 Historical Performance Report and final LDC target and budget for the new 2015-2020 Conservation First Framework. The intention of this report is to provide LDCs a summary of their historical performance in comparison to their final target and budget for the new 2015-2020 Conservation First Framework and to assist LDCs in planning for the new framework. The final budget is a single number and includes all customer incentives and administative costs. Allocation of administrative costs within the budget is at the LDC's sole discretion. This report replaces the previous draft LDC Historical Performance Report issued to LDCs as part of the LDC Tool Kit on July 31, 2014. Key updates to this report include updated CDM targets and budgets (Appendix A), updated 2013 results based on final verified savings (Table 1 and Table 2), and updated initiative and program level financial data based on revised data (Table 3).

As part of this report, each LDC is being provided with the following:

1) Overall progress-to-date based on final verified savings for 2011, 2012, and 2013;
2) Estimated savings required in 2014 to meet the current 2011-2014 Ontario Energy Board (OEB) targets;
3) A summary of historical spending for both adminstration costs (based on actual PAB spending) and incentive costs (based on provincially allocated spending or actual settlement by LDC, depending on the initiative);
4) Final 2015-2020 CDM target and budget projected by year and sector, based on the approved Conservation First budget and target allocation methodology; and
5) A summary of the 2012 OEB yearbook data by rate class used to develop the CDM targets and budgets, including estimates on overall cost-effectiveness.

The format of this report was developed in collaboration with members of the Conservation First Advisory Working Group (CFAWG) and is designed to provide LDCs with an overview of their current performance in relation to their new Conservation First CDM targets and budgets. To increase transparency, all consumption data used to determine an LDC's share of load by sector and Independent Electricity Service Operator (IESO) zone for target allocation purposes has been provided.

Throughout the current framework LDCs ongoing collaboration and cooperation continues to be appreciated. The OPA remains committed to supporting LDCs in the successful delivery of conservation savings and we look forward to working with LDCs within the new Conservation First Framework.

LDC: Oshawa PUC Networks Inc.

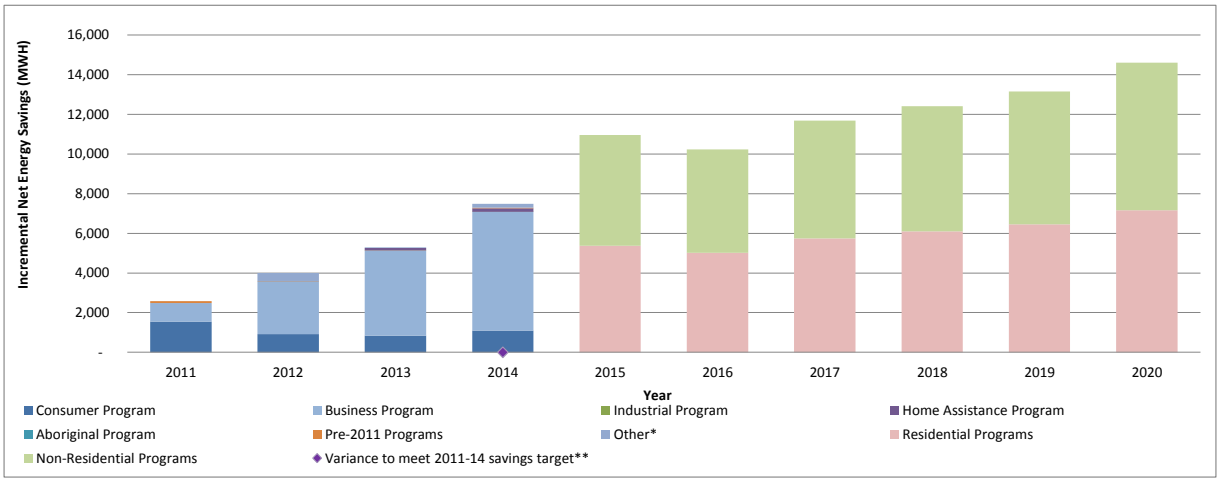
Incremental Net Energy Savings & Targets Assigned Summary (MWh)

	2011	2012	2013	2014ǂ	2015	2016	2017	2018	2019	2020
Consumer Program	1,547	913	839	1,100						
Business Program	929	2,676	4,281	5,981						
Industrial Program	-	-	2	2						
Home Assistance Program	-	-	131	174						
Aboriginal Program	-	-	-	-						
Pre-2011 Programs	107	1	-	36						
Other*	-	404	43	192						
Residential Programs					5,377	5,018	5,735	6,094	6,452	7,169
Non-Residential Programs					5,575	5,204	5,947	6,319	6,690	7,434
Total	2,584	3,995	5,296	7,486	10,952	10,222	11,682	12,412	13,143	14,603
Variance to meet 2011-14 savings target**				-	**Allocated CDM Target (GWh)**					**73.0**

**Other includes Program Enabled Savings and Adjustments*

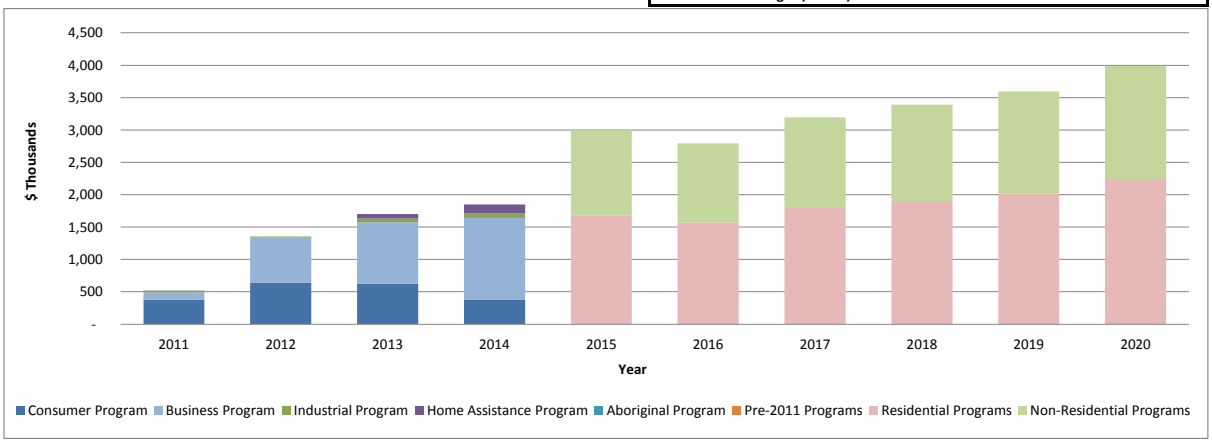
*** Includes Demand Response*

ǂ *2014 savings are forecasted based on past performance*



Financial Summary ($ Thousands)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Consumer Program	377	641	623	382						
Business Program	114	699	948	1,259						
Industrial Program	24	14	60	72						
Home Assistance Program	1	-	72	138						
Aboriginal Program	-	-	-	-						
Pre-2011 Programs	-	-	-	-						
Residential Programs					1,681	1,569	1,793	1,905	2,017	2,241
Non-Residential Programs					1,314	1,226	1,401	1,489	1,576	1,752
Total	516	1,355	1,703	1,851	2,995	2,795	3,194	3,394	3,594	3,993
					Allocated CDM Budget (Actual)					**$19,963,922**



Savings for Demand Response resources have been excluded for the purposes of this report.

Table 2: **Oshawa PUC Networks Inc.** Initiative and Program Level Net Demand Savings by Year

Initiative	Net Peak Demand Savings (KW)		
	2011	2012	2013
Consumer Program			
Appliance Retirement	24	9	5
Appliance Exchange	4	4	7
HVAC Incentives	415	286	279
Conservation Instant Coupon Booklet	14	3	6
Bi-Annual Retailer Event	21	18	15
Retailer Co-op	0	0	0
Residential New Construction	0	0	0
Consumer Program Total	**479**	**320**	**313**
Business Program			
Retrofit	175	456	762
Direct Install Lighting	0	106	123
Building Commissioning	0	0	0
New Construction	0	0	0
Energy Audit	0	10	18
Business Program Total	**175**	**573**	**903**
Industrial Program			
Process & System Upgrades	0	0	0
Monitoring & Targeting	0	0	0
Energy Manager	0	0	0
Industrial Program Total	**0**	**0**	**0**
Home Assistance Program			
Home Assistance Program	0	0	10
Home Assistance Program Total	**0**	**0**	**10**
Aboriginal Program			
Home Assistance Program Aboriginal	0	0	0
Aboriginal Program Total	**0**	**0**	**0**
Pre-2011 Programs completed in 2011			
Pre-2011 Programs completed in 2011 Total	20	1	0
Pre-2011 Programs completed in 2011 Total	**20**	**1**	**0**
Other			
Program Enabled Savings	0	0	0
Total	**0**	**0**	**0**
Adjustments to 2011 Verified Results	**0**	**28**	**0**
Adjustments to 2012 Verified Results	**0**	**0**	**13**
OPA-Contracted LDC Portfolio Total (inc. Adj.)	**675**	**922**	**1,240**

Savings for Demand Response resources have been excluded for the purposes of this report.

Includes Retrofit portion that is part of the Industrial Schedule

Table 1: **Oshawa PUC Networks Inc.** Initiative and Program Level Net Energy Savings by Year

Initiative	Net Incremental Energy Savings (MWh)		
	2011	2012	2013
Consumer Program			
Appliance Retirement	172	65	34
Appliance Exchange	6	8	13
HVAC Incentives	779	494	486
Conservation Instant Coupon Booklet	229	17	95
Bi-Annual Retailer Event	361	329	211
Retailer Co-op	0	0	0
Residential New Construction	0	0	0
Consumer Program Total	**1,547**	**913**	**839**
Business Program			
Retrofit	929	2,217	3,750
Direct Install Lighting	0	409	434
Building Commissioning	0	0	0
New Construction	0	0	0
Energy Audit	0	50	97
Business Program Total	**929**	**2,676**	**4,281**
Industrial Program			
Process & System Upgrades	0	0	0
Monitoring & Targeting	0	0	0
Energy Manager	0	0	2
Industrial Program Total	**0**	**0**	**2**
Home Assistance Program			
Home Assistance Program	0	0	131
Home Assistance Program Total	**0**	**0**	**131**
Aboriginal Program			
Home Assistance Program Aboriginal	0	0	0
Aboriginal Program Total	**0**	**0**	**0**
Pre-2011 Programs completed in 2011			
Pre-2011 Programs completed in 2011 Total	107	1	0
Pre-2011 Programs completed in 2011 Total	**107**	**1**	**0**
Other			
Program Enabled Savings	0	0	0
Total	**0**	**0**	**0**
Adjustments to 2011 Verified Results		**404**	**0**
Adjustments to 2012 Verified Results			**43**
OPA-Contracted LDC Portfolio Total (inc. Adj.)	**2,584**	**3,995**	**5,296**

Savings for Demand Response resources have been excluded for the purposes of this report.

Includes Retrofit portion that is part of the Industrial Schedule

Table 3: **Oshawa PUC Networks Inc.** Initiative and Program Level Financial Data by Year

Initiative	Program Administration Costs			*Customer Incentives		
	2011	2012	2013	2011	2012	2013
Consumer Program						
Appliance Retirement	22,555	52,836	3,427	29,812	20,490	7,042
Appliance Exchange	20,943	48,907	72,971	0	2,797	0
HVAC Incentives	21,036	52,871	65,011	209,625	404,301	416,790
Conservation Instant Coupon Booklet	49,149	24,418	19,638	1,032	5,814	1,768
Bi-Annual Retailer Event	13,186	10,034	13,267	3,869	9,164	16,158
Retailer Co-op	0	0	0	Included in Bi-annual Retailer Event		
Residential New Construction	5,318	9,730	6,634	0	0	0
Consumer Program Total	**132,187**	**198,797**	**180,948**	**244,338**	**442,566**	**441,759**
Business Program						
Retrofit	85,871	160,744	158,250	0	272,510	491,734
**Direct Install Lighting	9,655	31,705	83,172	0	139,879	149,081
Building Commissioning	845	592	0	0	0	0
New Construction	9,655	24,392	25,869	0	0	0
Energy Audit	8,452	58,958	27,466	0	10,250	12,211
Business Program Total	**114,478**	**276,390**	**294,757**	**0**	**422,638**	**653,026**
Industrial Program						
Process & System Upgrades	23,758	14,260	3,762	0	0	50,000
Energy Manager	0	0	6,072	0	0	0
Industrial Program Total	**23,758**	**14,260**	**9,834**	**0**	**0**	**50,000**
Home Assistance Program						
Home Assistance Program	760	0	19,699	0	0	52,478
Home Assistance Program Total	**760**	**0**	**19,699**	**0**	**0**	**52,478**
Aboriginal Program						
Home Assistance Program Aboriginal	0	0	0	0	0	0
Aboriginal Program Total	**0**	**0**	**0**	**0**	**0**	**0**
Pre-2011 Programs completed in 2011						
Pre-2011 Programs completed in 2011 Total	0	0	0	136,941	52,158	320,993
Pre-2011 Programs completed in 2011 Total	**0**	**0**	**0**	**136,941**	**52,158**	**320,993**
Other						
Program Enabled Savings	0	0	0	N/A	N/A	N/A
Other Total	**0**	**0**	**0**			
OPA-Contracted LDC Portfolio Total						

Financials for Demand Response resources have been excluded for the purposes of this report.

*2011-2013 numbers are actuals and represent amounts paid to LDCs/vendors for each initiative (i.e. excludes accruals), therefore savings can be in a different year than the incentive payments.

**Customer Incentive values align with install dates as reported in the small business lighting portal

Allocation by LDC for Customer Incentives is based on the savings allocation in Appendix B

Allocation by LDC for Customer Incentives is based on LDC Settlements

Allocation by LDC for Customer Incentives is based on LDC's

Includes Retrofit portion that is part of the

Appendix A: 2015 - 2020 Savings and Budget Allocation

IESO Zone	7 TWh Provincial Distribution for 2015-2020		LDC's Share of 7TWh for 2015-2020					
			2012 Residential GWh			2012 Non-Residential GWh		
	Res	Non-Res	LDC	IESO Zone	Share %	LDC	IESO Zone	Share %
BRUCE	4	8	0	116	0%	0	127	0%
EAST	148	234	0	3,859	0%	0	4,434	0%
ESSA	174	231	0	3,400	0%	0	4,074	0%
NIAGARA	67	180	0	1,422	0%	0	2,449	0%
NORTHEAST	119	76	0	2,387	0%	0	2,581	0%
NORTHWEST	52	52	0	879	0%	0	1,127	0%
OTTAWA	235	278	0	3,399	0%	0	6,219	0%
SOUTHWEST	452	863	0	7,996	0%	0	14,701	0%
TORONTO	929	2,200	493	12,786	4%	600	35,539	2%
WEST	234	463	0	4,102	0%	0	7,448	0%
Total	**2,415**	**4,585**	**493**	**40,344**		**600**	**78,700**	
Provincial CDM Target		**7,000**	**LDC CDM Target:**		**35.8**	**LDC CDM Target:**		**37.2**

*Summary	Res	Non Res	Total
Allocated CDM Target (GWh)	35.8	37.2	**73.0**
Allocated CDM Budget (Actual)	$11,206,410	$8,757,512	**$19,963,922**
Funding Rates ($/kWh)	$0.31	$0.24	$0.27
LUEC ($/kWh)	$0.06	$0.02	$0.04
PAC Test	1.13	2.87	1.90

*Estimated 2015-2020 Cost Effectiveness	Res	Non Res	Total
Benefits ($M)	$11.44	$22.68	$34.13
Costs ($M)	$10.11	$7.90	$18.01
LUEC ($/kWh)	$0.06	$0.02	$0.04
PAC Ratio	1.13	2.87	1.90

Cumulative Estimated Energy Savings (GWh)	2015	2016	2017	2018	2019	2020
Residential	5.4	10.4	16.1	22.2	28.7	35.8
Non-Residential	5.6	10.8	16.7	23.0	29.7	37.2
Total Estimated Energy Savings (GWh)	**11.0**	**21.2**	**32.9**	**45.3**	**58.4**	**73.0**

Incremental Est. Annual Budgets ($M)	2015	2016	2017	2018	2019	2020
Residential	$1.68	$1.57	$1.79	$1.91	$2.02	$2.24
Non-Residential	$1.31	$1.23	$1.40	$1.49	$1.58	$1.75
Total Est. Annual Budgets ($M)	**$2.99**	**$2.79**	**$3.19**	**$3.39**	**$3.59**	**$3.99**

Total Cummulative Est. Annual Budget (Actual) **$19,963,922**

OEB Yearbook Data	
**Rate Class	Metered Load (kWh)
Res	493,324,280
GS<50	131,590,801
GS>50, Large Users	455,983,381
Street Lighting	10,139,708
Sentinel Lighting	0
Billed Unmeterred Scattered Load	2,745,701

*See OPA Cost Effectiveness Guide on how to calculate

**Derived from the 2012 OEB Yearbook data

Appendix B - 2011 -2014 Savings Allocation

LDC	Allocation %
Algoma Power Inc.	0.12%
Atikokan Hydro Inc.	0.02%
Attawapiskat Power Corporation	0.00%
Bluewater Power Distribution Corporation	0.90%
Brant County Power Inc.	0.16%
Brantford Power Inc.	0.82%
Burlington Hydro Inc.	1.37%
COLLUS Power Corporation	0.25%
Cambridge and North Dumfries Hydro Inc.	1.23%
Canadian Niagara Power Inc.	0.42%
Centre Wellington Hydro Ltd.	0.13%
Chapleau Public Utilities Corporation	0.02%
ENTEGRUS	0.78%
Cooperative Hydro Embrun Inc.	0.02%
E.L.K. Energy Inc.	0.14%
ENWIN Utilities Ltd.	1.96%
Enersource Hydro Mississauga Inc.	6.95%
Erie Thames Powerlines Corporation	0.38%
Espanola Regional Hydro Distribution Corporation	0.05%
Essex Powerlines Corporation	0.36%
Festival Hydro Inc.	0.49%
Fort Albany Power Corporation	0.00%
Fort Frances Power Corporation	0.06%
Greater Sudbury Hydro Inc.	0.73%
Grimsby Power Inc.	0.13%
Guelph Hydro Electric Systems Inc.	1.33%
Haldimand County Hydro Inc.	0.22%
Halton Hills Hydro Inc.	0.37%
Hearst Power Distribution Company Limited	0.07%
Horizon Utilities Corporation	4.69%
Hydro 2000 Inc.	0.02%
Hydro Hawkesbury Inc.	0.15%
Hydro One Brampton Networks Inc.	3.16%
Hydro One Networks Inc.	18.84%
Hydro Ottawa Limited	6.25%
Innisfil Hydro Distribution Systems Limited	0.15%
Kashechewan Power Corporation	0.01%
Kenora Hydro Electric Corporation Ltd.	0.09%
Kingston Hydro Corporation	0.62%
Kitchener-Wilmot Hydro Inc.	1.50%
Lakefront Utilities Inc.	0.23%
Lakeland Power Distribution Ltd.	0.17%
London Hydro Inc.	2.61%
Midland Power Utility Corporation	0.18%

Appendix B - 2011 -2014 Savings Allocation

LDC	Allocation %
Milton Hydro Distribution Inc.	0.56%
Newmarket - Tay Power Distribution Ltd.	0.55%
Niagara Peninsula Energy Inc.	0.97%
Niagara-on-the-Lake Hydro Inc.	0.14%
Norfolk Power Distribution Inc.	0.26%
North Bay Hydro Distribution Limited	0.44%
Northern Ontario Wires Inc.	0.10%
Oakville Hydro Electricity Distribution Inc.	1.23%
Orangeville Hydro Limited	0.20%
Orillia Power Distribution Corporation	0.25%
Oshawa PUC Networks Inc.	0.87%
Ottawa River Power Corporation	0.15%
PUC Distribution Inc.	0.51%
Parry Sound Power Corporation	0.07%
Peterborough Distribution Incorporated	0.64%
PowerStream Inc.	6.79%
Renfrew Hydro Inc.	0.08%
Rideau St. Lawrence Distribution Inc.	0.09%
Sioux Lookout Hydro Inc.	0.06%
St. Thomas Energy Inc.	0.25%
Thunder Bay Hydro Electricity Distribution Inc.	0.79%
Tillsonburg Hydro Inc.	0.17%
Toronto Hydro-Electric System Limited	21.73%
Veridian Connections Inc.	1.93%
Wasaga Distribution Inc.	0.07%
Waterloo North Hydro Inc.	1.11%
Welland Hydro-Electric System Corp.	0.34%
Wellington North Power Inc.	0.08%
West Coast Huron Energy Inc.	0.14%
Westario Power Inc.	0.35%
Whitby Hydro Electric Corporation	0.65%
Woodstock Hydro Services Inc.	0.31%
All LDCs	100.00%

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-28

Reference: E3/pg. 29

a) What is the current status of the City of Oshawa's plan to replace 100% of its street lights in 2015? Is it still anticipated that all the replacements will be finished by year end?

b) In the first table on page 29, the last three columns are all titled as being related to purchases. However, Table 3-15 and the 2nd Table on page 29 both suggest the values are for billed energy and kW (e.g. for 2,420,722 kWh shown in Table 3-15 for 2015 is used in the calculating the 12,757,278 kWh residual CDM which in the 2nd page 29 table is marked up for losses to obtain a power purchased value). Please reconcile

c) For each of the two tables on page 29, what loss factor was used to convert the billed energy to purchased energy?

Response:

a) The City is still planning to replace street lights in 2015. OPUCN believes there may be delays in 2016.

b) I have corrected the first table on page 29 of Exhibit 3 with the following:

Description	Average Connections	Billed Before LED		Billed With LED		Purchased kWh		
		kWh	kW	kWh	kW	Before LED	With LED	Adjustment
2014 Bridge Year (Regression)	12,581	9,157,883	24,692	9,157,883	24,692	9,602,956	9,602,956	0
2015 Test Year (Regression)	12,958	9,234,112	25,128	6,813,389	18,602	9,682,889	7,144,520	2,538,369
2016 Test Year (Regression)	13,347	9,310,975	25,572	4,429,231	12,410	9,763,488	4,644,491	5,118,997
2017 Test Year (Regression)	13,747	9,388,477	26,024	4,466,099	12,752	9,844,757	4,683,151	5,161,606
2018 Test Year (Regression)	14,160	9,466,625	26,484	4,503,274	13,101	9,926,703	4,722,133	5,204,570
2019 Test Year (Regression)	14,585	9,545,423	26,952	4,540,758	13,458	10,009,331	4,761,439	5,247,892

c) The summary table above has been corrected and changed however, the corrections did not have any impact on the load forecast.

The loss factor used was 1.0486%.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-29

Reference: E3/pg. 30-33

With respect to Table 3-18, please provide a schedule that for each forecast year (2014-2019) shows the contribution to the total billed energy from: i) the purchased power regression model, ii) the city expansion assumptions, iii) CDM, and iv) the loss factor assumptions.

Response:

TAB - "Rate Class Energy Model"/Row 73

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
kWh Billed									
2014 Bridge Year (Regression)	483,864,092	135,450,260	351,769,938	43,895,826	72,645,592	9,157,883	34,962	2,736,196	1,099,554,749
2015 Test Year (Regression)	481,434,710	135,448,038	359,231,572	45,523,640	65,343,893	9,234,112	34,131	2,720,071	1,098,970,168
2016 Test Year (Regression)	479,840,944	135,678,643	367,445,058	47,211,819	58,863,942	9,310,975	33,321	2,704,042	1,101,088,744
2017 Test Year (Regression)	475,273,703	135,063,140	373,650,750	48,962,602	52,741,695	9,388,477	32,530	2,688,107	1,097,801,004
2018 Test Year (Regression)	471,616,586	134,697,953	380,620,799	50,778,310	47,332,126	9,466,625	31,757	2,672,266	1,097,216,422
2019 Test Year (Regression)	467,620,618	134,228,410	387,439,092	52,661,351	42,449,425	9,545,423	31,003	2,656,518	1,096,631,841

TAB - "Chart II"/Cell M69

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
kWh Billed									
2014 Bridge Year (Regression)	0	0	0	0	0	0	0	0	0
2015 Test Year (Regression)	7,862,700	3,281,464	10,776,947	0	1,782,106	85,586	0	0	23,788,803
2016 Test Year (Regression)	15,801,472	6,656,970	22,414,149	0	3,745,887	173,315	0	0	48,791,793
2017 Test Year (Regression)	23,667,830	10,058,818	34,674,790	0	4,794,700	263,354	0	0	73,459,490
2018 Test Year (Regression)	31,571,733	13,540,052	47,805,972	0	6,024,089	355,720	0	0	99,297,566
2019 Test Year (Regression)	39,452,666	17,072,663	61,680,303	0	6,946,269	450,428	0	0	125,602,330

TAB - "Rate Class Energy Model"/Row 97

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
kWh Billed									
2014 Bridge Year (Regression)	2,809,206	786,394	2,044,047	258,470	422,565	0	206	16,111	6,337,000
2015 Test Year (Regression)	5,633,878	1,585,049	4,205,179	535,553	765,218	2,420,722	402	32,000	15,178,000
2016 Test Year (Regression)	8,883,681	2,511,928	6,802,050	872,483	1,089,527	4,881,744	616	49,971	25,092,000
2017 Test Year (Regression)	13,300,962	3,779,863	10,447,194	1,349,634	1,472,975	4,922,379	897	74,097	35,348,000
2018 Test Year (Regression)	18,101,983	5,170,090	14,585,206	1,897,701	1,810,114	4,963,352	1,187	99,869	46,629,500
2019 Test Year (Regression)	23,121,985	6,637,063	19,110,907	2,504,353	2,087,720	5,004,666	1,474	126,333	58,594,500

TAB - "Chart II"/Cell B69

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
kWh Billed									
2014 Bridge Year (Regression)	481,054,885	134,663,866	349,725,891	43,637,356	72,223,027	9,157,883	34,756	2,720,085	1,093,217,749
2015 Test Year (Regression)	483,663,532	137,144,452	365,803,341	44,988,087	66,360,781	6,898,975	33,730	2,688,072	1,107,580,970
2016 Test Year (Regression)	486,758,735	139,823,685	383,057,156	46,339,336	61,520,302	4,602,545	32,705	2,654,071	1,124,788,537
2017 Test Year (Regression)	485,640,571	141,342,094	397,878,346	47,612,969	56,063,419	4,729,452	31,633	2,614,011	1,135,912,494
2018 Test Year (Regression)	485,086,336	143,067,915	413,841,565	48,880,609	51,546,101	4,858,993	30,570	2,572,397	1,149,884,488
2019 Test Year (Regression)	483,951,299	144,664,011	430,008,488	50,156,999	47,307,974	4,991,186	29,529	2,530,185	1,163,639,671

Loss factor used was 1.0486%.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-30

Reference: E3/pg. 35-38

a) In developing its multifactor regression model did OPUCN test any other economic variables besides unemployment? If yes, what were they and what were the results (in terms of coefficients, t-stats and Adjusted R Square values)?

b) Did OPUCN test "population" as a potential independent variable?

   i. If yes, what were the results (in terms of coefficients, t-stats and Adjusted R Square values)?

   ii. If no, please do so by rerunning the existing model but also including population and provide the results

   iii. If the results from either (i) or (ii) show population to be statistically significant please use the "model" to forecast purchases for 2014-2019.

c) With respect to the unemployment rate variable (per page 36), when was the Conference Board of Canada forecast for 2014-2019 developed and what was the associated economic forecast (GDP and unemployment) for the Province of Ontario overall?

Response:

a) OPUCN did not believe any additional multifactor regression models were necessary. The model was used in OPUCN's last cost of service which was only three years ago and the resulting predictions used in this application appear reasonable from a practical perspective.

b) Expected predictions that would be considered useful should fall within a fairly narrow range, otherwise OPUCN believes the results would not be considered practical regardless of their statistical relevance as determined by the model. Multifactor regression models are complicated and utilities could exhaust a

significant amount of time, effort and cost in running endless scenarios. In this case, as noted above, OPUCN does not believe there is any value in cycling through numerous variations and then sifting through the results to determine which are more statistically relevant and produce practical results when the margin between acceptable methods is reasonably narrow.

c) As per 3.0-VECC-24, OPUCN does not have population data related to its service territory and therefore cannot comply with the request.

d) As per 3.0-VECC-24, we are planning to use the most recent Unemployment Rates available under our subscription to the Conference Board of Canada's online system. OPUCN does not subscribe to provincial data so cannot information for the Province of Ontario.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC)
Interrogatory 3.0-VECC-31

Reference: E3/pg. 39-40

a) Please provide a schedule that sets out the actual and weather normal HDD ad CDD values for 2011-2013.

b) With respect to Table 3-21 please provide the predicted purchases for 2011 - 2013 using the weather normal values for HDD and CDD as opposed to the actual values for each year.

c) Were the linear trend lines for either the 10 year or 20 year period statistically significant? Note: If the trend analysis undertaken by OPUCN does not provide this data please provide, for both the 10 and 20 year periods, the results of regression analyses that relate the annual HDD and CDD values to time in each case.

Response:

a)

	Weather Normal		Actual	
Jan-11	738.35	-	760.90	-
Feb-11	615.87	-	634.20	-
Mar-11	433.58	-	559.80	-
Apr-11	257.40	-	350.80	-
May-11	128.39	22.22	157.70	2.80
Jun-11	20.47	44.63	26.70	36.90
Jul-11	3.69	118.74	0.20	141.20
Aug-11	3.38	92.70	3.70	80.50
Sep-11	90.20	17.72	48.90	34.60
Oct-11	261.41	-	225.30	-
Nov-11	410.58	-	349.70	-
Dec-11	663.24	-	531.20	-
Jan-12	666.31	-	611.00	-
Feb-12	555.78	-	536.20	-
Mar-12	391.27	-	399.40	-
Apr-12	232.29	-	336.90	-
May-12	115.86	27.67	109.30	21.80
Jun-12	18.47	55.57	28.20	64.30
Jul-12	3.33	147.87	-	155.30
Aug-12	3.05	115.43	4.40	102.80
Sep-12	81.40	22.06	84.00	24.40
Oct-12	235.91	-	229.00	-
Nov-12	370.52	-	427.90	-
Dec-12	598.53	-	451.10	-
Jan-13	757.65	-	615.40	-
Feb-13	631.97	-	611.50	-
Mar-13	444.91	-	545.00	-
Apr-13	264.13	-	366.50	-
May-13	131.74	16.65	133.40	3.00
Jun-13	21.00	33.44	42.90	32.20
Jul-13	3.79	88.98	4.40	110.00
Aug-13	3.46	69.46	11.00	57.90
Sep-13	92.55	13.27	96.60	15.70
Oct-13	268.25	-	221.00	3.00
Nov-13	421.31	-	458.60	-
Dec-13	680.57	-	472.80	-

b) Predicted purchases are as follows:

- 2011 – 1,164,081,875
- 2012 – 1,152,849,332
- 2013 – 1,164,340,386

c) No.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-32

Reference: Filing Requirements, Appendix 2-I LF_CDM_WF
http://www.ontarioenergyboard.ca/oeb/Industry/Regulatory%20Proceedings/Applications%20Before%20the%20Board/Electricity%20Distribution%20Rates/2015%20Electricity%20Distribution%20Rate%20Applications

a) Please provide an updated version of Appendix 2-I, based on the August 2014 update posted on the Board's web-site.

b) Please provide the total kWh LRAMVA CDM threshold values for each of 2015-2019 and explain how they were established.

c) For each of the years, 2015-2019 please provide a breakdown of the total kWh LRAMVA CDM threshold value by customer class and, for those classes that are demand billed, also provide the kW values for each year. Again, please explain how the values were determined.

Response:

a) Appendix 2-I LF_CDM_WF has been provided as an attached excel spreadsheet.

Refer to the table below for the threshold values:

	2015	2016	2017	2018	2019
Amount used for CDM threshold for LRAMVA (2014) 2011 CDM adjustment (per Board Decision in 2011 Cost of Service Application) (enter as negative)					
Amount used for CDM threshold for LRAMVA (2015 - 2019)	12,166,666.67	12,166,666.67	12,166,666.67	12,166,666.67	12,166,666.67
Manual Adjustment for 2015 Load Forecast (billed basis)	6,083,333.33	6,083,333.33	6,083,333.33	6,083,333.33	6,083,333.33
Proposed Loss Factor (TLF) Manual Adjustment for 2015 Load Forecast (system purchased basis)	6,378,983.33	6,378,983.33	6,378,983.33	6,378,983.33	6,378,983.33

b) The results were established based upon the same methodology used for 2015.

c) The following table provides an allocation of CDM savings derived from the table above to customer classes based upon their proportionate share of consumption which is in line with OPUCN's load forecast methodology with the exception of LEDs for street light replacements which was identified separately in OPUCN's forecast.

Description	Residential	GS<50 kW	GS 50 to 999 kW	Large User	GS>1,000 kW	Streetlight	Sentinel Light	USL	Total
kWh Billed									
2015 Test Year (Regression)	5,327,685	1,498,904	3,976,633	506,447	723,629	102,729	380	30,261	12,166,667
2016 Test Year (Regression)	5,302,869	1,499,426	4,060,296	520,805	650,363	102,712	368	29,829	12,166,667
2017 Test Year (Regression)	5,273,961	1,498,753	4,142,414	535,143	584,049	102,613	356	29,380	12,166,667
2018 Test Year (Regression)	5,241,340	1,496,974	4,223,075	549,470	524,110	102,438	344	28,916	12,166,667
2019 Test Year (Regression)	5,205,363	1,494,176	4,302,365	563,795	470,000	102,194	332	28,441	12,166,667

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Appendix 2-I
Load Forecast CDM Adjustment Work Form (2015)

The 2014 bridge year is the last year of the current four year (2011-2014) CDM program, and 2015 is the first year of a new six year (2015-2020) CDM program, per the Ministirial directives of March 31, 2014. Thus, with 2015, there is a need to recognize the final year of the current 2011-2014 CDM program, as well as to estimate reasonable impacts each year for the new 2015-2020 CDM program. These are combined to estimate the adjustment for CDM program impacts on the 2015 load forecast.

Appendix 2-I was developed to help determine what would be the amount of CDM savings needed in each year to cumulatively achieve the four year 2011-2014 CDM target. This then determined the amount of kWh (and with translation, kW of demand) savings that were converted in dollars balances for the LRAMVA, and also to determine the related adjustment to the load forecast to account for OPA-reported savings. Beginning for the 2015 year, it has been adjusted because of the persistence of 2011-2014 CDM programs will be an adjustment to the load forecast in addition to the estimated savings for the first year (2015) for the new 2015-2020 CDM plan.

It is assumed that the new six year (2015-2020) CDM program will work similar to the existing 2011-2014 CDM program, meaning that distributors will offer programs each year that, cumulatively over the six years (from January 1, 2015 to December 31, 2020) will cumulatively achieve the new six year CDM target. This is the approach contemplated in the Ministerial directive letters of March 31, 2014 to the Board and to the OPA. Thus, distributors will be able to offer programs on a basis so that cumulatively over the period, the impacts, including persistence, of the CDM programs will accumulate towards achieving each distributor's 2015-2020 CDM target.

With this approach, it is necessary to account for estimated savings for the last year of the current program, particularly the estimated savings for new CDM programs offered in 2014, as well as the estimated savings for new CDM programs that the distributor will offer in 2015 towards achievement of the new six year (2015-2020) CDM program. This necessitates expansion of this Appendix 2-I to deal with both the 2011-2014 and 2015-2020 CDM plans. It is expected that this approach will be updated each year.

2011-2014 CDM Program - 2014, last year of the current CDM plan

Input the 2011-2014 CDM target in Cell B21.

Input the measured results for 2011 CDM programs for each of the years 2011 and persistence into 2012, 2013 and 2014 into cells B31 to E31. These results are taken from the final 2011 CDM Report issued by the OPA for that distributor in the fall of 2012.

Measured results for 2012 CDM programs for each of the years 2012 and persistence into 2013 and 2014 are input into cells C32 to E32. These results are taken from the final 2012 CDM Report issued by the OPA for that distributor in the fall of 2013.

##

##

4 Year (2011-2014) kWh Target:					
		52,240,000			
	2011	**2012**	**2013**	**2014**	**Total**
2011 CDM Programs	4.98%	4.98%	4.98%	4.98%	19.91%
2012 CDM Programs		7.66%	7.47%	7.47%	22.59%
2013 CDM Programs			10.34%	10.15%	20.48%
2014 CDM Programs				37.02%	37.02%
Total in Year	**4.98%**	**12.63%**	**22.78%**	**59.61%**	**100.00%**
		kWh			
2011 CDM Programs	2,600,000	2,600,000	2,600,000	2,600,000	10,400,000
2012 CDM Programs		4,000,000	3,900,000	3,900,000	11,800,000
2013 CDM Programs			5,400,000	5,300,000	10,700,000
2014 CDM Programs				19,340,000	19,340,000
Total in Year	**2,600,000**	**6,600,000**	**11,900,000**	**31,140,000**	**52,240,000**

	2011	2012	2013	2014
2011 CDM Programs	50%	100%	100%	100%
2012 CDM Programs		50%	100%	100%
2013 CDM Programs			50%	100%
2014 CDM Programs				50%

2015-2020 CDM Program - 2015, first year of the current CDM plan

For the first year of the new 2015-2020 CDM plan, it is assumed that each year's program will achieve an equal amount of new CDM savings. The new targets for 2015-2020 do not take into account persistence beyond the first year, but the OPA will encourage distributors to promote and implement CDM plans that will have longer term persistence of savings. This results in each year's program being about 1/6 (18.67%) of the cumulative 2015-2020 CDM target for kWh savings. A distributor may propose an alternative approach but would be expected to document in its application why it believes that its proposal is more reasonable. In its proposal, the distributor should ensure that the sum of the results for each year's CDM program from 2015 to 2020 add up to its 2015-2020 CDM target as established by the OPA

6 Year (2015-2020) kWh Target:							
			73,000,000				
	2015	2016	2017	2018	2019	2020	Total
			%				
2015 CDM Programs	16.67%						16.67%
2016 CDM Programs		16.67%					16.67%
2017 CDM Programs			16.67%				16.67%
2018 CDM Programs				16.67%			16.67%
2019 CDM Programs					16.67%		16.67%
2020 CDM Programs						16.67%	16.67%
Total in Year	**16.67%**	**16.67%**	**16.67%**	**16.67%**	**16.67%**	**16.67%**	**100.00%**
			kWh				
2015 CDM Programs	12,166,666.67						12,166,666.67
2016 CDM Programs		12,166,666.67					12,166,666.67
2017 CDM Programs			12,166,666.67				12,166,666.67
2018 CDM Programs				12,166,666.67			12,166,666.67
2019 CDM Programs					12,166,666.67		12,166,666.67
2020 CDM Programs						12,166,666.67	12,166,666.67
Total in Year	**12,166,666.67**	**12,166,666.67**	**12,166,666.67**	**12,166,666.67**	**12,166,666.67**	**12,166,666.67**	**73,000,000.00**

Determination of 2015 Load Forecast Adjustment

The Board has determined that the "net" number should be used in its Decision and Order with respect to Centre Wellington Hydro Ltd.'s 2013 Cost of Service rates (EB-2012-0113). This approach has also been used in Settlement Agreements accepted by the Board in other 2013 and 2-14 applications. The distributor should select whether the adjustment is done on a "net" or "gross" basis, but must support a proposal for the adjustment being done on a "gross" basis. Sheet 2-I defaults to the adjustment being done on a "net" basis consistent with Board policy and practice.

From each of the 2006-2010 CDM Final Report, and the 2011, 2012 and 2013 CDM Final Reports, issued by the OPA for the distributor, the distributor should input the "gross" and "net" results of the cumulative CDM savings for 2014 into cells D31 to E33. The model will calculate the cumulative savings for all programs from 2006 to 2012 and determine the "net" to "gross" factor "g".

Net-to-Gross Conversion				
Is CDM adjustment being done on a "net" or "gross" basis?				**net**
Persistence of Historical CDM programs to 2014	**"Gross" kWh**	**"Net" kWh**	**Difference kWh**	**Conversion Factor ('g')**
2006-2010 CDM programs				
2011 CDM program				
2012 CDM program				
2013 CDM program				
2006 to 2013 OPA CDM programs: Persistence to 2015	0	0	0	0.00%

The default values represent the factor that each year's CDM program is factored into the manual CDM adjustment. Distributors can choose alternative weights of "0", "0.5" or "1" from the drop-down menu for each cell, but must support its alternatives.

These factors do not mean that CDM programs are excluded, but also reflect the assumption that impacts of 2011 and 2012 programs are already implicitly reflected in the actual data for those years that are the basis for the load forecast prior to any manual CDM adjustment.

Weight Factor for Inclusion in CDM Adjustment to 2014 Load Forecast

	2011	2012	2013	2014	2015	
Weight Factor for each year's CDM program impact on 2014 load forecast	**0**	**0**	**0**	**1**	**0.5**	Distributor can select "0", "0.5", or "1" from drop-down list
Default Value selection rationale.	*Full year persistence of 2011 CDM programs on 2015 load forecast. Full impact assumed because of 50% impact in 2011 (first year) but full year persistence impact on 2012 and 2013, and thus reflected in base forecast before the CDM adjustment.*	*Full year persistence of 2012 CDM programs on 2015 load forecast. Full impact assumed because of 50% impact in 2012 (first year) but full year persistence impact on 2013, and thus reflected in base forecast before the CDM adjustment.*	*Default is 0, but one option is for full year impact of persistence of 2013 CDM programs on 2015 load forecast, but 50% impact in base forecast (first year impact of 2013 CDM programs on 2013 load forecast, which is part of the data for the load forecast.*	*Full year impact of persistence of 2014 programs on 2015 load forecast. 2014 CDM programs not in base forecast.*	*Only 50% of 2015 CDM programs are assumed to impact the 2015 load forecast based on the "half-year" rule.*	

2011-2014 and 2015-2020 LRAMVA and 2015 CDM adjustment to Load Forecast

One manual adjustment for CDM impacts to the 2015 load forecast is made. However, the distributor will have two associated annualized CDM impacts, one for the 2011-2014 CDM program and the second for the 2015-2020 CDM plan. In addition, the distributor needs to reflect the CDM adjustment that was explicitly factored into its 2011 load forecast in its 2011 cost of service application (assuming that it rebased in that year). this amount, and equal persistence for 2012, 2013 and 2014 is used as an offset to determine what the net balance of the 2011-2014 LRAMVA balance should be for disposition.

The Amount used for the CDM threshold of the LRAMVA is the kWh that will be used to determine the base amount for the LRAMVA balance for 2014, for assessing performance against the four-year target. The base amount for 2011-2013 is 0 (zero) for 2014 Cost of Service applications, as the utility rebased prior to the 2011-2014 CDM programs, and there was no adjustment to reflect the impacts of the 2011-2014 programs on the load forecast used to determine their last cost of service-based rates.

The proposed loss factor should correspond with the loss factor calculated in Appendix 2-R

The Manual Adjustment for the 2015 Load Forecast is the amount manually subtracted from the load forecast derived from the base forecast from historical data, and is intended to reflect the further CDM savings that the distributor needs to achieve assuming that they meet 100% of the 2011-2014 CDM target that is a condition of their target.

If the distributor has developed their load forecast on a system purchased basis, then the manual adjustment should be on system purchased basis, including the adjustment for losses. If the load forecast has been developed on a billed basis, either on a system basis or on a class-specific basis, the manual adjustment should be on a billed basis, excluding losses.

The distributor should determine the allocation of the savings to all customer classes in a reasonable manner (e.g. taking into account what programs and what OPA-measured impacts were directed at specific customer classes), for both the LRAMVA and for the load forecast adjustment.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total for 2014	Total for 2015
	kWh										
Amount used for CDM threshold for LRAMVA (2014)	2,600,000.00	3,900,000.00	5,300,000.00	19,340,000.00						31,140,000.00	
2011 CDM adjustment (per Board Decision in 2011 Cost of Service Application) (enter as negative)		-	-	-						-	
Amount used for CDM threshold for LRAMVA (2015 - 2019)					12,166,666.67	12,166,666.67	12,166,666.67	12,166,666.67	12,166,666.67		12,166,666.67
Manual Adjustment for 2015 Load Forecast (billed basis)	-	-	-	19,340,000.00	6,083,333.33	6,083,333.33	6,083,333.33	6,083,333.33	6,083,333.33		25,423,333.33
Proposed Loss Factor (TLF)	4.86%	Format: X.XX%									
Manual Adjustment for 2015 Load Forecast (system purchased basis)	-	-	-	20,279,924.00	6,378,983.33	6,378,983.33	6,378,983.33	6,378,983.33	6,378,983.33		26,658,907.33

Manual adjustment uses "gross" versus "net" (i.e. numbers multiplied by (1 + g). The Weight factor is also used calculate the impact of each year's program on the CDM adjustment to the 2014 load forecast.

OSHAWA PUC NETWORKS INC.

Response to Vulnerable Energy Consumers Coalition (VECC) Interrogatory 3.0-VECC-33

Reference: E3/pg. 64

a) With respect to Table 3-36, please provide the actual results for 2014.

b) It is noted that for the actual years 2012 and 2013 the difference between revenues and expenses for Non-Utility Operations is in excess of $200,000 but that for the forecast years the differences are less than $10,000. Please explain this significant reduction in margin of revenue over expenses.

Response:

a) OPUCN will file updated models on RESS.

b) In 2012 and 2013 LRAM totalled $375 thousand and $266 thousand respectively. In addition, in 2013 OPUCN received $122 thousand related to CDM incentives. OPUCN has not forecasted LRAM nor CDM incentives for future years.