



## LDC Info

<b>Utility Name</b>	Niagara-on-the-Lake Hydro Inc.
<b>Service Territory</b>	Niagara-on-the-Lake
<b>Assigned EB Number</b>	EB 2018-0056
<b>Name of Contact and Title</b>	Jeff Klassen, VP Finance
<b>Phone Number</b>	905-468-4235 ext 380
<b>Email Address</b>	<a href="mailto:jklassen@notlhydro.com">jklassen@notlhydro.com</a>
<b>Bridge Year</b>	2018
<b>Test Year</b>	2019
<b>Last Rebasing Year</b>	2014
<b>Model Notes</b>	
Input cells	
Drop down cells	



## Customer Classes

Customer Class Name	Energy (kWh) Weather Sensitive / Non-weather sensitive	Demand (kW) Weather Sensitive / Non-weather sensitive
Residential	Weather-Sensitive	n/a
General Service < 50 kW	Weather-Sensitive	n/a
Unmetered Scattered Load	Non-Weather Sensitive	Non-Weather Sensitive
	n/a	n/a
General Service > 50 kW - 4999 kW	Non-Weather Sensitive	Non-Weather Sensitive
Streetlighting	Non-Weather Sensitive	Non-Weather Sensitive
Large User	Non-Weather Sensitive	Non-Weather Sensitive
	n/a	n/a

Enter **Only** Customer Classes in which Distribution Volumetric is billed in **kWh**

kWh  
kWh  
kWh

Enter **Only** Customer Classes in which Distribution Volumetric is billed in **kW**

kW  
kW  
kW  
kW



### Consumption by Rate Class

**Notes:**

- ▲ 1) "Wholesale" purchases are purchases measured at the wholesale meter.
- 2) "Metered" or Class consumption is monthly usage measured at the retail meter, unadjusted for losses (i.e., the retail consumption amount)
- 3) "Consumed" consumption (retail) is the uplifted consumption billed
- 4) Number of customers is defined as number of connections (i.e., meters). Add or delete rate classes as appropriate.

Consumption should reflect usage in the month, not the month in which it was billed (e.g what was used in January not what was billed in January, etc.).

Year	Month	Residential Unadjusted		General Service < 50 kW Unadjusted		Unmetered Scattered Load Unadjusted		General Service > 50 kW - 4999 kW Unadjusted			Streetlighting Unadjusted			Large User Unadjusted		
		kWh	Customer Connections	kWh	Customer Connections	kWh	Customer Connections	kWh	kW	Customer Connections	kWh	kW	Customer Connections	kWh	kW	Customer Connections
2011	January	5,993,233	6,543	3,009,477	1,227	20,229	20	6,629,574	15,376	121	120,418	258	1,946			
2011	February	6,217,237	6,551	3,244,052	1,227	22,701	21	6,497,277	13,865	121	100,413	241	1,946			
2011	March	4,225,360	6,555	2,209,669	1,226	14,472	22	5,655,606	17,941	121	99,433	321	1,946			
2011	April	4,662,714	6,563	2,537,363	1,227	17,309	22	5,766,519	12,501	121	84,358	229	1,946			
2011	May	12,020,065	6,570	4,649,503	1,229	18,026	22	6,258,449	18,026	121	76,808	284	1,946			
2011	June	5,733,962	6,577	2,819,289	1,231	16,871	22	6,700,502	16,512	121	70,039	249	1,946			
2011	July	7,882,978	6,592	3,567,043	1,230	17,719	22	7,934,256	19,209	121	75,241	291	1,946			
2011	August	7,046,796	6,612	3,634,742	1,234	22,533	23	7,783,033	20,737	121	84,504	261	1,946			
2011	September	2,453,051	6,626	2,065,244	1,242	18,621	24	6,922,899	17,260	120	93,231	261	1,946			
2011	October	720,988	6,635	1,382,331	1,246	18,642	24	6,432,133	18,242	118	108,656	288	1,946			
2011	November	4,389,737	6,648	2,455,279	1,248	18,651	23	5,975,170	15,100	118	115,694	252	1,946			
2011	December	5,630,709	6,660	2,747,042	1,251	19,588	23	6,077,039	15,149	118	125,093	288	1,946			
2012	January	5,715,083	6,670	2,855,719	1,251	19,634	22	6,297,951	15,181	118	121,946	261	1,946			
2012	February	5,023,845	6,679	2,631,052	1,252	19,454	22	5,916,005	17,759	118	105,126	253	1,946			
2012	March	4,700,287	6,684	2,655,346	1,260	18,231	22	6,102,584	14,379	118	100,695	306	1,946			
2012	April	4,414,337	6,688	2,534,293	1,267	18,225	22	5,695,533	15,084	118	85,427	243	1,946			
2012	May	4,890,985	6,691	2,800,387	1,274	18,232	22	6,430,107	18,279	118	77,782	288	1,946			
2012	June	6,454,309	6,699	3,270,941	1,278	18,227	22	6,974,378	17,787	117	70,069	252	1,946			
2012	July	8,054,449	6,710	4,037,845	1,278	18,232	22	8,027,663	20,563	118	75,240	288	1,946			
2012	August	7,023,140	6,724	3,709,392	1,280	18,232	22	7,772,104	19,610	118	84,504	261	1,946			
2012	September	5,382,154	6,738	2,859,233	1,277	18,227	22	6,594,815	18,760	118	93,231	261	1,948			
2012	October	4,699,064	6,751	2,564,024	1,275	19,409	22	6,215,486	17,913	118	108,656	288	1,949			
2012	November	4,983,442	6,768	2,619,968	1,275	19,411	22	5,936,528	14,243	118	115,694	252	1,949			
2012	December	5,745,878	6,796	2,836,678	1,264	20,880	22	6,030,493	13,181	117	125,093	288	1,948			
2013	January	5,981,421	6,823	2,985,396	1,251	20,819	22	6,367,883	15,680	117	121,946	261	1,946			
2013	February	5,329,196	6,845	2,780,277	1,234	20,574	22	5,815,641	15,131	117	101,685	244	1,946			
2013	March	5,409,442	6,866	2,889,531	1,219	19,408	22	6,145,069	17,119	117	100,695	325	1,946			
2013	April	4,691,366	6,874	2,592,932	1,220	19,402	22	5,791,301	12,204	117	85,427	232	1,946			
2013	May	4,778,001	6,888	2,713,317	1,218	19,409	22	6,284,585	18,682	117	77,782	288	1,946			
2013	June	5,905,179	6,904	2,947,997	1,219	19,027	21	6,733,967	16,809	117	70,069	252	1,946			
2013	July	7,385,958	6,915	3,544,818	1,219	19,032	21	7,456,365	21,105	118	75,240	288	1,946			
2013	August	6,483,158	6,933	3,494,422	1,217	19,032	21	7,447,661	20,860	118	84,504	261	1,946			
2013	September	5,501,922	6,952	2,925,463	1,212	19,027	21	6,755,713	16,244	118	93,231	261	1,946			
2013	October	4,917,782	6,968	2,589,877	1,208	19,032	21	6,441,762	21,229	119	108,656	288	1,946			
2013	November	5,302,449	6,987	2,717,466	1,209	19,032	21	6,172,802	15,295	120	115,694	270	1,946			
2013	December	6,440,935	6,998	3,109,636	1,230	20,673	21	6,483,345	14,236	121	125,093	288	1,979			
2014	January	6,653,406	7,009	3,327,004	1,286	20,423	21	6,776,353	14,688	125	121,946	243	2,012			
2014	February	5,746,565	7,016	3,050,129	1,319	19,016	21	6,114,701	14,138	127	101,685	244	2,012			
2014	March	5,802,479	7,026	3,242,279	1,318	19,031	21	6,511,020	19,629	128	100,695	325	2,032			
2014	April	4,865,503	7,049	2,858,596	1,317	19,025	21	5,813,579	14,327	130	85,427	232	2,051			
2014	May	4,770,891	7,074	3,110,798	1,316	19,027	22	6,261,781	15,461	130	77,782	279	2,051			
2014	June	5,859,852	7,101	3,437,599	1,314	19,027	22	6,837,349	18,947	129	70,069	270	2,051			
2014	July	6,618,150	7,126	3,807,262	1,313	19,027	22	7,351,313	19,760	129	75,240	279	2,051			
2014	August	6,469,853	7,149	3,890,117	1,314	19,027	22	7,611,046	17,492	130	84,504	244	2,051			
2014	September	5,526,119	7,168	3,334,866	1,313	19,027	22	6,882,554	22,729	131	93,231	279	2,066			
2014	October	4,860,007	7,181	2,937,049	1,312	19,027	22	6,571,092	19,271	131	108,657	315	2,080			
2014	November	5,327,677	7,203	3,004,231	1,312	19,027	22	6,504,299	11,688	132	115,694	208	2,080			
2014	December	6,099,025	7,223	3,288,531	1,311	20,133	22	6,841,811	19,912	133	125,094	323	2,080			
2015	January	6,455,140	7,244	3,561,752	1,311	20,070	22	7,188,554	-4,596	133	121,946	234	2,080			
2015	February	5,878,381	7,268	3,399,226	1,315	19,167	22	6,670,994	33,514	133	101,685	244	2,080			
2015	March	5,691,167	7,294	3,427,001	1,313	18,747	22	6,941,446	19,958	133	100,696	334	2,080			







## Customer Growth Chart

**Notes:**

1) Utilities will have the choice to manually adjust the projected growth in the bridge and test years if it is felt that the Geomean average does not represent forecasted growth.

Date	Residential		General Service < 50 kW		Unmetered Scattered Load		General Service > 50 kW - 4999 kW		Streetlighting		Large User	
	Customers or Connections	Growth Rate	Customers or Connections	Growth Rate	Customers or Connections	Growth Rate	Customers or Connections	Growth Rate	Customers or Connections	Growth Rate	Customers or Connections	Growth Rate
2011	6,594		1,235		22		120		1,946		-	
2012	6,716	1.0185	1,269	1.0278	22	0.9962	118	0.9806	1,947	1.0004	-	0.0000
2013	6,912	1.0292	1,221	0.9622	21	0.9716	118	1.0014	1,949	1.0010	-	0.0000
2014	7,110	1.0286	1,312	1.0744	22	1.0117	129	1.0976	2,051	1.0526	-	0.0000
2015	7,389	1.0392	1,322	1.0074	20	0.9345	128	0.9894	2,081	1.0143	-	0.0000
2016	7,661	1.0368	1,333	1.0084	18	0.8763	122	0.9492	2,120	1.0189	-	0.0000
2017	7,838	1.0232	1,332	0.9992	21	1.2000	129	1.0614	2,124	1.0018	-	0.0000
<i>Geomean</i>		1.0292		1.0127		0.9936		1.0120		1.0147		0.0000
2018	8,067		1,349		21		131		2,155		-	
2019	8,303		1,366		21		132		2,187		-	

Total Customers	
Customers & Connections	Growth Rate
9,917	
10,072	1.0156
10,222	1.0149
10,624	1.0394
10,940	1.0297
11,253	1.0286
11,444	1.0170
	1.0242
11,723	
12,009	

In the section below, LDCs can adjust the computed customer count for the Bridge and Test Year for special circumstance such as new subdivision or loss of customer or other utility specific reasons.

Adjusted												
2018	7,976	1.0176	1,335	1.0023	26	1.2235	131	1.0120	2,155	1.0147	-	0.0000
2019	8,152	1.0221	1,338	1.0022	26	1.0000	131	1.0038	2,187	1.0147	1	0.0000

Adjusted	
Customers & Connections	Growth Rate
11,623	1.0156
11,835	1.0183

Note: The model computes an average customer count. Utility may chose to overwrite the customer/connection count if a year end count is more appropriate.

FINAL ADJUSTED NUMBERS												
2018	7,976	1.0176	1,335	1.0023	26	1.2235	131	1.0120	2,155	1.0147	-	0.0000
2019	8,152	1.0221	1,338	1.0022	26	1.0000	131	1.0038	2,187	1.0147	1	0.0000

Adjusted	
Customers & Connections	Growth Rate
11,623	1.0156
11,835	1.0183



## Variables

### Notes:

1) Enter Variables here that will be used to run the regression analysis in worksheet 6. WS Regression Analysis ( Maximum 6 variables)

\*Wholesale purchases are purchases measured at the wholesale meter.

Note: Your final regression analysis does not need to include all six of the variables

HDD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	678.00	578.50	527.45	342.60	187.10	21.90	-	-	26.90	185.70	284.90	463.70
2012	554.40	482.40	366.70	296.30	99.50	18.90	-	-	37.90	191.90	381.90	462.50
2013	556.40	565.90	508.70	341.30	150.35	44.30	3.20	-	51.60	159.95	416.30	608.50
2014	727.80	648.10	636.20	356.60	174.70	27.00	0.60	0.90	46.40	173.70	416.00	509.75
2015	696.25	776.40	596.90	325.90	131.80	61.20	2.60	2.20	17.10	186.05	284.45	372.95
2016	597.25	537.40	444.60	373.25	157.95	19.10	-	-	14.40	141.90	270.50	540.90
2017	556.50	468.50	528.40	273.05	181.80	27.00	-	0.30	25.10	94.70	383.85	617.20

CDD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	-	-	-	-	4.10	41.80	196.90	146.30	39.90	4.20	-	-
2012	-	-	-	-	22.40	105.60	203.50	148.70	50.30	2.60	-	-
2013	-	-	-	-	12.15	47.50	139.50	106.40	34.40	4.80	-	-
2014	-	-	-	-	3.00	39.10	78.40	88.10	42.30	5.70	-	-
2015	-	-	-	-	9.75	19.50	121.20	104.30	84.00	1.80	-	-
2016	-	-	-	-	31.00	67.10	166.60	198.85	88.80	12.35	-	-
2017	-	-	-	-	2.80	62.80	111.60	102.00	59.50	14.90	-	-

Daylight Hours	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2012	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2013	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2014	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2015	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2016	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50
2017	9.12	10.20	11.50	13.26	14.47	15.30	15.11	14.00	12.27	10.52	9.31	8.50

# Customers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	7,891	7,899	7,902	7,911	7,919	7,928	7,943	7,967	7,987	7,999	8,013	8,029
2012	8,039	8,049	8,062	8,072	8,082	8,094	8,105	8,122	8,133	8,144	8,160	8,176
2013	8,190	8,196	8,202	8,210	8,223	8,239	8,251	8,268	8,282	8,295	8,315	8,349
2014	8,419	8,462	8,471	8,496	8,520	8,544	8,568	8,593	8,611	8,623	8,647	8,666
2015	8,688	8,716	8,740	8,769	8,801	8,824	8,848	8,877	8,907	8,940	8,966	8,992
2016	9,020	9,044	9,067	9,082	9,086	9,095	9,113	9,133	9,151	9,174	9,199	9,221
2017	9,240	9,252	9,264	9,278	9,289	9,296	9,302	9,315	9,326	9,326	9,339	9,364

Day per Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	31	28	31	30	31	30	31	31	30	31	30	31
2012	31	29	31	30	31	30	31	31	30	31	30	31
2013	31	28	31	30	31	30	31	31	30	31	30	31
2014	31	28	31	30	31	30	31	31	30	31	30	31
2015	31	28	31	30	31	30	31	31	30	31	30	31
2016	31	29	31	30	31	30	31	31	30	31	30	31
2017	31	28	31	30	31	30	31	31	30	31	30	31

Spring/Fall Flag	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	1	1	0	0	0	1	1	1	0	0	0	1
2012	1	1	0	0	0	1	1	1	0	0	0	1
2013	1	1	0	0	0	1	1	1	0	0	0	1
2014	1	1	0	0	0	1	1	1	0	0	0	1
2015	1	1	0	0	0	1	1	1	0	0	0	1
2016	1	1	0	0	0	1	1	1	0	0	0	1
2017	1	1	0	0	0	1	1	1	0	0	0	1

Blended Rate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2011	6.50	6.50	6.50	6.50	7.30	7.30	7.30	7.30	7.30	7.30	7.57	7.57
2012	7.57	7.57	7.57	7.57	8.07	8.07	8.07	8.07	8.07	8.07	7.94	7.94
2013	7.94	7.94	7.94	7.94	9.10	9.10	9.10	9.10	9.10	9.10	8.89	8.89
2014	8.89	8.89	8.89	8.89	9.25	9.25	9.25	9.25	9.25	9.25	9.50	9.50
2015	9.50	9.50	9.50	9.50	10.21	10.21	10.21	10.21	10.21	10.21	10.59	10.59
2016	10.59	10.59	10.59	10.59	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
2017	11.00	11.00	11.00	11.00	9.80	9.80	9.80	9.80	9.80	9.80	8.00	8.00



### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)						Revised Wholesale Purchases	
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment		
										FORECAST METHODOLOGY →
1	2011-January	15,867,080.49	4,689.57	-	340,619.94				16,212,390	
2	2011-February	14,293,680.94	4,834.96	-	205,698.10				14,504,214	
3	2011-March	14,071,879.78	10,279.70	-	929,670.52				15,011,830	
4	2011-April	11,999,599.95	10,579.06	-	1,567,509.99				13,577,688	
5	2011-May	12,392,697.66	12,163.73	-	1,574,424.61				13,979,286	
6	2011-June	14,159,950.01	15,161.40	-	1,470,199.59				15,645,311	
7	2011-July	19,649,509.69	42,755.67	-	1,589,080.64				21,281,346	
8	2011-August	17,403,161.89	33,814.69	-	1,575,857.52				19,012,834	
9	2011-September	14,102,512.73	37,995.16	-	1,541,652.11				15,682,160	
10	2011-October	12,832,548.71	25,061.99	-	1,499,763.30				14,357,374	
11	2011-November	12,467,338.53	20,757.39	-	1,221,548.08				13,709,644	
12	2011-December	13,712,938.00	27,730.22	3,911.11	1,579,964.67				15,324,444	
13	2012-January	15,498,934.00	21,094.42	13,065.16	150,948.54				15,684,042	
14	2012-February	14,102,894.00	27,625.25	22,411.87	170,081.21				14,323,012	
15	2012-March	12,935,100.00	72,172.41	54,180.06	972,831.21				14,034,284	
16	2012-April	11,683,162.00	92,376.12	64,422.51	1,437,021.89				13,276,983	
17	2012-May	13,184,475.00	119,561.86	75,701.57	1,428,675.70				14,808,414	
18	2012-June	15,507,309.00	114,984.94	79,761.84	1,312,050.71				17,014,106	
19	2012-July	19,772,339.00	117,029.87	81,423.79	1,419,338.01				21,390,131	
20	2012-August	17,960,624.00	102,971.62	69,336.19	1,429,827.93				19,562,760	
21	2012-September	13,948,856.00	88,852.15	62,535.70	1,266,055.08				15,366,299	
22	2012-October	12,836,472.00	56,871.08	54,161.88	1,156,662.18				14,084,167	
23	2012-November	13,296,539.00	46,729.25	24,568.03	987,787.76				14,235,624	
24	2012-December	14,288,574.00	26,182.61	16,866.46	1,057,628.19				15,389,251	
25	2013-January	15,903,018.00	32,474.70	16,218.99	69,393.93				16,021,105	
26	2013-February	14,500,205.00	35,354.29	27,897.85	134,753.89				14,698,211	
27	2013-March	14,041,857.00	82,699.78	49,100.17	1,036,887.50				15,210,144	
28	2013-April	12,034,641.00	108,214.65	62,810.64	1,464,361.53				13,670,028	
29	2013-May	12,746,996.00	147,010.67	75,811.35	1,474,945.23				14,444,763	
30	2013-June	14,278,379.00	136,277.73	75,442.46	1,339,188.20				15,828,287	
31	2013-July	18,003,814.00	150,365.99	85,506.86	1,431,998.94				19,671,686	
32	2013-August	16,941,461.00	153,959.59	89,730.47	1,416,364.60				18,601,515	
33	2013-September	13,979,166.00	122,659.35	66,891.15	1,366,978.90				15,537,695	
34	2013-October	13,084,554.00	96,930.13	48,701.23	1,351,181.30				14,581,367	
35	2013-November	13,288,408.00	56,018.41	28,004.55	1,368,024.70				14,740,456	
36	2013-December	15,650,880.00	31,907.03	22,328.88	1,112,680.10				16,817,796	
37	2014-January	17,449,392.00	51,212.50	29,499.61	160,321.16				17,690,425	
38	2014-February	15,454,341.00	69,299.26	39,825.63	85,070.66				15,648,537	
39	2014-March	15,715,398.00	110,809.60	69,911.42	595,392.99				16,491,512	
40	2014-April	12,518,352.00	153,077.46	82,402.16	1,343,018.43				14,106,850	
41	2014-May	13,055,162.00	177,712.67	109,836.29	1,281,021.12				14,633,752	
42	2014-June	15,459,248.00	191,177.84	112,245.00	1,205,450.73				16,968,122	
43	2014-July	16,827,472.00	181,740.50	111,335.32	1,314,875.72				18,435,424	
44	2014-August	17,191,166.00	178,772.20	100,699.68	1,446,708.65				18,917,347	



### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)						Revised Wholesale Purchases
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment	
FORECAST METHODOLOGY →									
45	2014-September	14,732,429.00	141,770.25	78,249.33	1,357,122.49				16,309,571
46	2014-October	13,632,688.00	100,933.42	55,146.06	1,182,329.38				14,971,097
47	2014-November	14,402,191.00	53,193.36	30,074.60	1,161,217.69				15,646,677
48	2014-December	15,819,396.00	44,118.31	22,035.00	1,046,805.90				16,932,355
49	2015-January	18,010,471.20	51,293.37	21,998.00	70,763.00				18,154,432
50	2015-February	16,943,673.00	37,079.03	28,418.00	29,646.00				17,038,816
51	2015-March	15,856,379.80	142,560.97	62,952.00	729,965.00				16,791,858
52	2015-April	12,865,469.20	172,100.12	92,885.00	1,293,710.00				14,424,164
53	2015-May	13,913,349.00	203,737.85	107,592.00	1,381,307.00				15,585,986
54	2015-June	14,362,626.70	182,004.55	129,515.80	1,338,087.70				16,012,235
55	2015-July	18,412,685.60	210,076.97	115,595.10	1,312,022.40				20,050,380
56	2015-August	17,872,837.00	184,520.11	107,271.60	1,359,200.70				19,523,829
57	2015-September	16,659,712.00	151,059.07	80,132.60	1,331,502.20				18,222,406
58	2015-October	13,567,240.00	108,639.51	60,710.60	1,347,532.20				15,085,122
59	2015-November	13,560,672.67	83,757.31	39,954.00	1,329,402.90				15,013,787
60	2015-December	14,575,986.00	39,074.43	19,580.00	1,236,160.00				15,870,800
61	2016-January	17,314,785.00	51,366.94	24,980.00	49,494.20				17,440,606
62	2016-February	15,945,461.00	75,677.54	33,620.00	-				16,054,753
63	2016-March	15,143,131.07	120,819.12	70,540.00	539,094.03				15,873,584
64	2016-April	12,812,881.00	164,539.78	83,260.00	1,332,844.53				14,393,525
65	2016-May	14,120,867.00	218,757.84	122,240.00	1,377,929.02				15,839,794
66	2016-June	16,150,289.00	232,763.05	124,480.00	1,258,967.13				17,766,499
67	2016-July	20,645,212.00	217,097.81	111,300.00	1,312,714.66				22,286,324
68	2016-August	21,887,428.00	211,027.20	116,080.00	1,358,607.60				23,573,143
69	2016-September	16,662,759.00	173,070.31	85,480.00	1,263,864.51				18,185,174
70	2016-October	13,874,700.00	121,416.14	57,000.00	1,387,209.67				15,440,326
71	2016-November	13,954,420.00	101,587.72	43,960.00	795,316.11				14,895,284
72	2016-December	16,007,630.00	48,513.82	22,060.00	1,362,065.90				17,440,290
73	2017-January	17,263,822.00	50,576.89	26,400.00	14,321.30				17,355,120
74	2017-February	15,045,537.00	91,610.81	91,004.94	-				15,228,153
75	2017-March	15,907,915.00	134,253.11	70,258.20	494,312.00				16,606,738
76	2017-April	13,255,630.00	159,255.15	74,953.40	1,151,901.80				14,641,740
77	2017-May	13,925,925.00	184,961.90	100,360.80	1,092,416.50				15,303,664
78	2017-June	15,555,222.00	206,251.24	108,653.60	1,251,149.20				17,121,276
79	2017-July	18,542,998.00	198,128.92	97,714.80	1,291,560.90				20,130,403
80	2017-August	18,241,581.00	193,084.71	105,258.40	1,325,601.20				19,965,525
81	2017-September	16,015,086.00	174,286.05	85,655.60	1,321,481.70				17,596,520
82	2017-October	14,205,016.00	118,003.95	59,110.60	1,350,013.70				15,732,144
83	2017-November	14,501,902.00	64,725.96	31,395.80	1,209,082.70				15,807,106
84	2017-December	17,776,748.00	32,921.21	16,956.20	469,751.10				18,296,377

### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)						Revised Wholesale Purchases
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment	

FORECAST METHODOLOGY →

85	2018-January
86	2018-February
87	2018-March
88	2018-April
89	2018-May
90	2018-June
91	2018-July
92	2018-August
93	2018-September
94	2018-October
95	2018-November
96	2018-December
97	2019-January
98	2019-February
99	2019-March
100	2019-April
101	2019-May
102	2019-June
103	2019-July
104	2019-August
105	2019-September
106	2019-October
107	2019-November
108	2019-December

Forecasting Calculation Methodology		
Average		
Utility Adjusted Customer Growth %		
Linear Trending		
Linear Trending Calculation ( y=mx+b)		
Variables	Slope (m)	Intercept (b)
Customer Count	19.76	7,746.87923



### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)						Variables Used						
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment	HDD	CDD	Daylight Hours	# Customers	Day per Month	Spring/Fall Flag	Blended Rate
1	2011-January	15,867,080.49	4,689.57	-	340,619.94				678.00	0.00	9.12	7891.00	31.00	1.00	6.50
2	2011-February	14,293,680.94	4,834.96	-	205,698.10				578.50	0.00	10.20	7898.50	28.00	1.00	6.50
3	2011-March	14,071,879.78	10,279.70	-	929,670.52				527.45	0.00	11.50	7902.00	31.00	0.00	6.50
4	2011-April	11,999,599.95	10,578.06	-	1,967,509.99				342.63	0.00	13.26	7910.50	30.00	0.00	6.50
5	2011-May	12,392,697.66	12,163.73	-	1,574,424.61				187.10	4.10	14.47	7919.00	31.00	0.00	7.30
6	2011-June	14,159,950.01	15,161.40	-	1,470,199.59				21.90	41.80	15.30	7928.00	30.00	1.00	7.30
7	2011-July	19,649,509.69	42,755.67	-	1,589,080.64				0.00	196.90	15.11	7942.50	31.00	1.00	7.30
8	2011-August	17,403,161.69	33,814.69	-	1,575,857.62				0.00	146.30	14.00	7966.50	31.00	1.00	7.30
9	2011-September	14,102,512.73	37,985.16	-	1,541,652.11				26.90	39.90	12.27	7987.00	30.00	0.00	7.30
10	2011-October	12,832,548.71	25,061.99	-	1,499,763.30				185.70	4.20	10.52	7999.00	31.00	0.00	7.30
11	2011-November	12,467,338.53	20,757.39	-	1,221,548.08				294.90	0.00	9.31	8013.00	30.00	0.00	7.57
12	2011-December	13,712,938.00	27,730.22	3,911.11	1,579,864.67				463.70	0.00	8.50	8029.00	31.00	1.00	7.57
13	2012-January	15,498,934.00	21,094.42	13,065.16	150,948.54				554.40	0.00	9.12	8038.50	31.00	1.00	7.57
14	2012-February	14,102,894.00	27,625.25	22,411.87	170,081.21				482.40	0.00	10.20	8048.50	29.00	1.00	7.57
15	2012-March	12,935,100.00	72,172.41	54,180.06	972,831.21				366.70	0.00	11.50	8061.50	31.00	0.00	7.57
16	2012-April	11,683,162.00	92,376.12	64,422.51	1,437,021.89				296.30	0.00	13.26	8072.00	30.00	0.00	7.57
17	2012-May	13,184,475.00	119,561.86	75,701.57	1,428,675.70				99.50	22.40	14.47	8082.00	31.00	0.00	8.07
18	2012-June	15,507,309.00	114,884.84	79,761.84	1,312,050.71				18.90	105.60	15.30	8093.50	30.00	1.00	8.07
19	2012-July	19,772,339.00	117,029.67	81,423.79	1,419,338.01				0.00	203.50	15.11	8105.00	31.00	1.00	8.07
20	2012-August	17,960,624.00	102,971.62	69,336.19	1,429,827.93				0.00	148.70	14.00	8121.50	31.00	1.00	8.07
21	2012-September	13,948,856.00	88,852.15	62,535.70	1,266,056.08				37.90	50.30	12.27	8133.00	30.00	0.00	8.07
22	2012-October	12,836,472.00	56,871.08	34,161.86	1,156,662.18				191.90	2.60	10.52	8143.50	31.00	0.00	8.07
23	2012-November	13,296,539.00	46,729.25	24,568.03	867,787.76				381.90	0.00	9.31	8160.00	30.00	0.00	7.94
24	2012-December	14,288,574.00	26,182.61	16,866.46	1,057,628.19				462.50	0.00	8.50	8176.00	31.00	1.00	7.94
25	2013-January	15,903,018.00	32,474.70	16,218.59	69,393.93				556.40	0.00	9.12	8190.00	31.00	1.00	7.94
26	2013-February	14,500,205.00	35,354.29	27,897.85	134,753.89				565.90	0.00	10.20	8195.50	28.00	1.00	7.94
27	2013-March	14,041,657.00	62,698.78	49,100.17	1,036,687.50				508.70	0.00	11.50	8202.00	31.00	0.00	7.94
28	2013-April	12,034,641.00	108,214.65	62,810.64	1,464,361.53				341.30	0.00	13.26	8210.00	30.00	0.00	7.94
29	2013-May	12,746,996.00	147,010.67	75,811.35	1,474,945.23				150.35	12.15	14.47	8222.50	31.00	0.00	9.10
30	2013-June	14,278,379.00	135,277.73	75,442.46	1,339,188.20				44.30	47.50	15.30	8239.00	30.00	1.00	9.10
31	2013-July	18,003,814.00	150,365.99	85,506.66	1,431,998.94				3.20	139.50	15.11	8250.50	31.00	1.00	9.10
32	2013-August	16,341,461.00	153,858.69	89,736.47	1,416,364.60				0.00	108.40	14.00	8267.50	31.00	1.00	9.10
33	2013-September	13,979,166.00	122,659.35	68,891.15	1,366,979.90				51.60	34.40	12.27	8281.50	30.00	0.00	9.10
34	2013-October	13,084,554.00	96,930.13	48,701.23	1,351,181.30				159.95	4.80	10.52	8294.50	31.00	0.00	9.10
35	2013-November	13,288,408.00	56,018.41	28,004.55	1,368,024.70				416.30	0.00	9.31	8314.50	30.00	0.00	8.89
36	2013-December	15,650,880.00	31,907.03	22,328.88	1,112,680.10				608.50	0.00	8.50	8340.00	31.00	1.00	8.89
37	2014-January	17,449,392.00	51,212.50	29,499.61	160,321.16				727.80	0.00	9.12	8419.00	31.00	1.00	8.89
38	2014-February	15,454,341.00	69,299.26	39,825.63	85,070.66				648.10	0.00	10.20	8462.00	28.00	1.00	8.89
39	2014-March	15,715,398.00	110,809.60	69,911.42	995,392.99				636.20	0.00	11.50	8471.00	31.00	0.00	8.89
40	2014-April	12,518,352.00	153,077.46	92,402.16	1,343,018.43				356.60	0.00	13.26	8495.50	30.00	0.00	8.89
41	2014-May	13,065,162.00	177,712.67	109,836.29	1,281,021.12				174.70	3.00	14.47	8519.50	31.00	0.00	9.25
42	2014-June	15,459,248.00	191,177.84	112,245.00	1,205,450.73				27.00	39.10	15.30	8543.50	30.00	1.00	9.25
43	2014-July	16,827,472.00	181,740.50	111,335.32	1,314,876.72				0.60	78.40	15.11	8567.50	31.00	1.00	9.25
44	2014-August	17,191,166.00	178,772.20	100,699.68	1,446,708.65				0.90	88.10	14.00	8593.00	31.00	1.00	9.25

Weather Normalized	Yearly Total	Customer Adjustment
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16,758,804		6.50
15,090,503		6.50
14,643,350		6.50
13,590,989		6.50
13,700,823		7.30
15,800,982		7.30
22,246,194		7.30
20,351,882		7.30
14,350,491		7.30
13,961,597		7.30
13,710,076		7.57
16,324,529	190,530,219.37	7.57
16,577,713		7.57
15,440,266		7.57
14,367,811		7.57
13,654,654		7.57
14,357,136		8.07
13,490,320		8.07
22,704,213		8.07
20,637,139		8.07
14,968,361		8.07
14,096,405		8.07
14,177,403		7.94
16,502,937	195,964,358.13	7.94
16,771,106		7.94
15,421,024		7.94
14,559,489		7.94
13,957,850		7.94
14,281,670		9.10
16,473,669		9.10
20,402,597		9.10
19,171,371		9.10
14,573,578		9.10
14,274,925		9.10
14,469,834		8.89
17,146,609	191,903,721.59	8.89
17,558,818		8.89
15,992,709		8.89
15,667,548		8.89
14,356,222		8.89
14,354,751		9.25
16,472,685		9.25
18,409,058		9.25
18,864,581		9.25

## Regression Analysis

### Notes:

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases KWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)						Variables Used						
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment	HDD	CDD	Daylight Hours	# Customers	Day per Month	Spring/Fall Flag	Blended Rate
			FORECAST METHODOLOGY						Average	Average	Average	Linear Trending Adjusted	Average	Average	Most Recent
45	2014-September	14,732,429.00	141,770.25	78,249.33	1,357,122.49				46.40	42.30	12.27	8611.00	30.00	0.00	9.25
46	2014-October	13,632,688.00	100,933.42	55,146.06	1,182,329.38				173.70	5.70	10.52	8623.00	31.00	0.00	9.25
47	2014-November	14,402,191.00	53,193.36	30,074.60	1,161,217.69				416.00	0.00	9.31	8646.50	30.00	0.00	9.50
48	2014-December	15,818,396.00	44,118.31	22,035.00	1,046,805.90				508.75	0.00	8.50	8665.50	31.00	1.00	9.50
49	2015-January	18,010,471.20	51,209.37	21,998.00	70,753.00				696.25	0.00	9.12	8688.00	31.00	1.00	9.50
50	2015-February	16,943,673.00	37,079.03	28,418.00	29,646.00				776.40	0.00	10.20	8715.50	28.00	1.00	9.50
51	2015-March	15,856,379.80	142,560.97	62,952.00	729,965.00				596.90	0.00	11.50	8739.50	31.00	0.00	9.50
52	2015-April	12,865,469.20	172,100.12	92,885.00	1,293,710.00				325.90	0.00	13.26	8769.00	30.00	0.00	9.50
53	2015-May	13,913,348.00	203,737.85	107,592.00	1,361,307.00				131.80	9.75	14.47	8801.00	31.00	0.00	10.21
54	2015-June	14,362,626.70	182,004.55	129,515.80	1,338,087.70				61.20	19.50	15.30	8823.50	30.00	1.00	10.21
55	2015-July	18,412,685.60	210,076.97	115,595.10	1,312,022.40				2.60	121.20	15.11	8848.00	31.00	1.00	10.21
56	2015-August	17,872,837.00	184,520.11	107,271.60	1,359,200.70				2.20	104.30	14.00	8876.50	31.00	1.00	10.21
57	2015-September	16,659,712.00	151,059.07	80,132.80	1,331,502.20				17.10	84.00	12.27	8906.50	30.00	0.00	10.21
58	2015-October	13,567,240.00	109,639.51	60,710.60	1,347,532.20				186.05	1.80	10.52	8940.00	31.00	0.00	10.21
59	2015-November	13,560,672.67	83,757.31	39,954.00	1,329,402.90				284.45	0.00	9.31	8965.50	30.00	0.00	10.59
60	2015-December	14,575,986.00	39,074.43	19,580.00	1,236,160.00				372.95	0.00	8.50	8992.00	31.00	1.00	10.59
61	2016-January	17,314,765.00	51,366.94	24,980.00	49,494.20				597.25	0.00	9.12	9020.00	31.00	1.00	10.59
62	2016-February	15,945,461.00	75,871.54	33,620.00	-				537.40	0.00	10.20	9043.50	29.00	1.00	10.59
63	2016-March	15,143,131.07	120,819.12	70,540.00	539,094.03				444.60	0.00	11.50	9068.50	31.00	0.00	10.59
64	2016-April	12,812,881.00	164,539.78	83,260.00	1,332,844.53				373.25	0.00	13.26	9081.50	30.00	0.00	10.59
65	2016-May	14,120,867.00	218,757.84	122,240.00	1,377,929.02				157.95	31.00	14.47	9085.50	31.00	0.00	11.00
66	2016-June	16,150,289.00	232,763.05	124,480.00	1,258,967.13				19.10	67.10	15.30	9094.50	30.00	1.00	11.00
67	2016-July	20,845,212.00	217,097.81	111,300.00	1,312,714.66				0.00	168.60	15.11	9112.50	31.00	1.00	11.00
68	2016-August	21,887,428.00	211,027.20	116,080.00	1,358,607.60				0.00	198.85	14.00	9132.50	31.00	1.00	11.00
69	2016-September	16,662,759.00	173,070.31	85,480.00	1,263,864.51				14.40	88.80	12.27	9150.50	30.00	0.00	11.00
70	2016-October	13,874,700.00	121,416.14	57,000.00	1,387,209.67				141.90	12.35	10.52	9174.00	31.00	0.00	11.00
71	2016-November	13,954,420.00	101,587.72	43,960.00	795,316.11				270.50	0.00	9.31	9198.50	30.00	0.00	11.00
72	2016-December	16,007,630.00	48,513.82	22,060.00	1,362,085.98				540.90	0.00	8.50	9220.50	31.00	1.00	11.00
73	2017-January	17,263,822.00	50,576.89	26,400.00	1,432,130.00				556.50	0.00	9.12	9240.00	31.00	1.00	11.00
74	2017-February	15,045,537.00	91,610.81	91,004.94	-				468.50	0.00	10.20	9252.00	28.00	1.00	11.00
75	2017-March	15,907,915.00	134,253.11	70,258.20	494,312.00				528.40	0.00	11.50	9264.00	31.00	0.00	11.00
76	2017-April	13,255,630.00	159,255.15	74,953.40	1,151,901.80				273.05	0.00	13.26	9278.00	30.00	0.00	11.00
77	2017-May	13,925,925.00	184,961.90	100,360.80	1,092,416.50				181.80	2.80	14.47	9289.00	31.00	0.00	9.80
78	2017-June	15,555,222.00	206,251.24	108,653.60	1,251,144.00				27.00	62.80	15.30	9295.50	30.00	1.00	9.80
79	2017-July	18,542,998.00	198,128.92	97,714.80	1,291,560.90				0.00	111.60	15.11	9301.50	31.00	1.00	9.80
80	2017-August	18,341,581.00	193,084.71	105,258.40	1,325,601.20				0.30	102.00	14.00	9314.50	31.00	1.00	9.80
81	2017-September	16,015,086.00	174,298.05	85,655.80	1,321,481.70				25.10	59.50	12.27	9325.50	30.00	0.00	9.80
82	2017-October	14,205,016.00	118,003.95	59,110.60	1,350,013.70				94.70	14.90	10.52	9326.00	31.00	0.00	9.80
83	2017-November	14,501,902.00	64,725.96	31,395.80	1,209,082.70				383.85	0.00	9.31	9338.50	30.00	0.00	8.00
84	2017-December	17,776,748.00	32,921.21	16,956.20	469,751.10				617.20	0.00	8.50	9363.50	31.00	1.00	8.00

Weather Normalized	Yearly Total	Customer Adjustment
15,273,592		
14,756,989		
14,879,861		
17,247,798	193,844,611.69	
17,798,929		
16,683,938		
15,884,239		
14,604,404		
14,849,875		
16,156,953		
20,428,043		
19,849,851		
17,176,237		
15,033,867		
14,887,643		
17,249,416	200,603,195.60	
17,918,567		
16,833,376		
15,840,872		
15,130,490		
16,105,859		
18,221,266		
22,514,894		
23,840,455		
17,657,121		
15,604,233		
15,134,980		
18,026,358	212,828,670.71	
16,070,965		
16,442,068		
16,331,886		
15,078,891		
15,330,251		
18,325,911		
20,608,015		
20,296,940		
16,764,733		
15,752,747		
15,641,746		
18,427,832	207,071,865.40	

**Regression Analysis**

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)					Variables Used						Weather Normalized	Yearly Total	Customer Adjustment		
			MicroFit	FIT	SOP	Adjustment	Adjustment	Adjustment	HDD	CDD	Daylight Hours	# Customers	Day per Month				Spring/Fall Flag	Blended Rate
			FORECAST METHODOLOGY						Average	Average	Average	Linear Trending Adjusted	Average				Average	Most Recent
85	2018-January							623.80	0.00	9.12	9375.63	31.00	1.00	8.00	18,436,841	-51.00		
86	2018-February							579.60	0.00	10.20	9387.59	28.29	1.00	8.00	17,064,434	-58.80		
87	2018-March							515.56	0.00	11.50	9399.56	31.00	0.00	8.00	16,461,876	-66.60		
88	2018-April							329.86	0.00	13.26	9411.52	30.00	0.00	8.00	15,411,279	-74.40		
89	2018-May							154.74	12.17	14.47	9423.48	31.00	0.00	8.00	15,791,858	-82.20		
90	2018-June							31.34	54.77	15.30	9435.44	30.00	1.00	8.00	18,199,390	-90.00		
91	2018-July							0.91	145.39	15.11	9447.40	31.00	1.00	8.00	22,106,350	-97.80		
92	2018-August							0.49	127.81	14.00	9459.37	31.00	1.00	8.00	21,481,192	-105.60		
93	2018-September							31.34	57.03	12.27	9471.33	30.00	0.00	8.00	16,867,391	-113.40		
94	2018-October							161.99	6.62	10.52	9483.29	31.00	0.00	8.00	15,823,152	-121.20		
95	2018-November							348.27	0.00	9.31	9495.25	30.00	0.00	8.00	15,731,077	-129.00		
96	2018-December							510.79	0.00	8.50	9507.21	31.00	1.00	8.00	18,292,616	-136.80		
97	2019-January							623.80	0.00	9.12	9524.72	31.00	1.00	8.00	18,621,369	-139.05		
98	2019-February							579.60	0.00	10.20	9542.24	28.29	1.00	8.00	17,255,531	-141.30		
99	2019-March							515.56	0.00	11.50	9559.75	31.00	0.00	8.00	16,660,142	-143.55		
100	2019-April							329.86	0.00	13.26	9577.26	30.00	0.00	8.00	15,616,414	-145.80		
101	2019-May							154.74	12.17	14.47	9594.77	31.00	0.00	8.00	15,993,862	-148.05		
102	2019-June							31.34	54.77	15.30	9612.28	30.00	1.00	8.00	18,418,263	-150.30		
103	2019-July							0.91	145.39	15.11	9629.80	31.00	1.00	8.00	22,332,092	-152.55		
104	2019-August							0.49	127.81	14.00	9647.31	31.00	1.00	8.00	21,713,804	-154.80		
105	2019-September							31.34	57.03	12.27	9664.82	30.00	0.00	8.00	17,106,872	-157.05		
106	2019-October							161.99	6.62	10.52	9682.33	31.00	0.00	8.00	16,069,502	-159.30		
107	2019-November							348.27	0.00	9.31	9699.84	30.00	0.00	8.00	15,984,296	-161.55		
108	2019-December							510.79	0.00	8.50	9717.35	31.00	1.00	8.00	18,552,705	-163.80		

2018 Growth Adjust -7.8  
2019 Growth Adjust -2.25

Forecasting Calculation Methodology		
Average		
Utility Adjusted Customer Growth %		
Linear Trending		
Linear Trending Calculation ( y=mx+b)		
Variables	Slope (m)	Intercept (b)
Customer Count	19.76	7,746.87923



### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)				
			MicroFit	FIT	SOP	Adjustment	Adjustment

SUMMARY OUTPUT

**FORECAST METHODOLOGY**

				Regression Statistics																
1	2011-January	15,867,080.49	4,689.57	-	340,619.94															
2	2011-February	14,293,680.94	4,834.96	-	205,698.10															
3	2011-March	14,071,879.78	10,279.70	-	929,670.52															
4	2011-April	11,999,599.95	10,578.06	-	1,567,509.99															
5	2011-May	12,392,697.66	12,163.73	-	1,574,424.61															
6	2011-June	14,159,950.01	15,161.40	-	1,470,199.59															
7	2011-July	19,649,599.69	42,755.67	-	1,599,080.64															
8	2011-August	17,403,161.69	33,914.69	-	1,575,857.62															
9	2011-September	14,102,512.73	37,995.16	-	1,541,652.11															
10	2011-October	12,832,548.71	25,061.99	-	1,499,763.30															
11	2011-November	12,467,338.53	20,757.39	-	1,221,548.08															
12	2011-December	13,712,938.00	27,730.22	-3,911.11	1,579,864.67															
13	2012-January	15,498,934.00	21,394.42	13,065.16	159,948.54															
14	2012-February	14,102,894.00	27,625.25	22,411.87	170,081.21															
15	2012-March	12,935,100.00	72,172.41	54,180.06	972,831.21															
16	2012-April	11,683,162.00	92,376.12	64,422.51	1,437,021.89															
17	2012-May	13,184,475.00	119,561.86	75,701.57	1,428,675.70															
18	2012-June	15,527,399.00	114,394.84	79,761.94	1,312,050.71															
19	2012-July	19,772,339.00	117,029.87	81,423.79	1,419,338.01															
20	2012-August	17,960,624.00	102,971.62	69,336.19	1,429,827.93															
21	2012-September	13,948,856.00	88,852.15	62,536.70	1,266,055.08															
22	2012-October	12,836,472.00	56,871.08	34,161.86	1,156,662.18															
23	2012-November	13,296,539.00	46,729.25	24,568.03	867,787.76															
24	2012-December	14,288,574.00	26,182.61	16,866.46	1,057,628.19															
25	2013-January	15,903,018.00	32,474.70	16,218.59	89,393.93															
26	2013-February	14,500,205.00	35,354.29	27,897.85	134,753.89															
27	2013-March	14,041,657.00	92,899.78	49,100.17	1,038,687.50															
28	2013-April	12,034,641.00	108,214.65	62,810.64	1,464,361.53															
29	2013-May	12,746,996.00	147,010.67	75,811.35	1,474,945.23															
30	2013-June	14,278,379.00	135,277.73	75,442.46	1,339,188.20															
31	2013-July	18,003,814.00	150,365.99	85,506.66	1,431,968.94															
32	2013-August	16,941,461.00	153,958.59	89,730.47	1,416,364.60															
33	2013-September	13,979,166.00	122,659.35	68,891.15	1,366,978.99															
34	2013-October	13,084,554.00	96,930.13	48,701.23	1,351,181.30															
35	2013-November	13,288,408.00	56,018.41	28,004.55	1,368,024.70															
36	2013-December	15,650,880.00	31,907.03	22,328.98	1,112,680.10															
37	2014-January	17,449,392.00	51,212.50	29,499.61	160,321.16															
38	2014-February	15,454,341.00	69,299.26	39,825.63	85,070.66															
39	2014-March	15,715,398.00	110,809.60	69,911.42	595,392.99															
40	2014-April	12,516,352.00	153,077.46	92,402.16	1,343,018.43															
41	2014-May	13,065,162.00	177,712.67	109,836.29	1,291,021.12															
42	2014-June	15,459,248.00	191,177.84	112,245.00	1,205,450.73															
43	2014-July	16,827,472.00	181,740.50	111,335.32	1,314,875.72															
44	2014-August	17,191,166.00	178,772.20	100,699.68	1,446,708.65															

  

				ANOVA						
				df	SS	MS	F	Significance F		
Regression				7	3.57486E+14	5.10694E+13	206.9609294	8.55432E-47		
Residual				76	1.87537E+13	2.46759E+11				
Total				83	3.7624E+14					

  

				Coefficients							
				Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	
Intercept				-10069379.72	236179.515	-3.819686659	0.000271105	-15319786.26	-4818973.19	-15319786.26	-4818973.19
HDD				2942.139967	438.8822824	6.703710962	3.15793E-09	2068.030147	3816.249788	2068.030147	3816.249788
CDD				38923.64305	181.701881	21.41365614	6.30973E-34	35303.376	42543.91009	35303.376	42543.91009
Daylight Hours				-41099.18644	36754.5207	-1.115758978	0.268040017	-114212.1586	32193.78571	-114212.1586	32193.78571
# Customers				1237.68037	222.5686342	5.560893046	3.82703E-07	794.3965176	1680.964222	794.3965176	1680.964222
Day per Month				446850.1022	70391.69102	6.348051819	1.44381E-08	306652.8993	587047.3052	306652.8993	587047.3052
Spring/Fall Flag				794263.8073	139065.0508	5.711455196	2.06731E-07	517291.7545	1071235.86	517291.7545	1071235.86
Blended Rate				25419.38343	82044.09536	0.309825872	0.757541318	-137985.5941	188824.3609	-137985.5941	188824.3609

  

				kWh Predicted Vs. Actual					
				Year	kWh Purchased	year over year	Adjusted	year over year	Purch. VS Adj.
2011				188,298,521.00	188,298,521.00	0.00%	190,530,219.37	0.00%	1.19%
2012				189,169,072.93	189,169,072.93	0.46%	195,964,358.13	2.85%	3.59%
2013				189,823,053.14	189,823,053.14	0.35%	191,903,721.59	-2.07%	1.10%
2014				196,751,647.59	196,751,647.59	3.65%	193,844,611.69	1.01%	-1.48%
2015				201,773,815.26	201,773,815.26	2.65%	200,603,195.60	3.49%	-0.58%
2016				209,189,301.69	209,189,301.69	3.68%	212,828,670.71	6.09%	1.74%
2017				203,784,766.55	203,784,766.55	-2.58%	207,071,865.40	-2.70%	1.61%

  

				Year			
				kWh Purchased (Actual)	Forecast		
2011				188,298,521.00	190,530,219.37		1.19%
2012				189,169,072.93	195,964,358.13		3.59%
2013				189,823,053.14	191,903,721.59		1.10%
2014				196,751,647.59	193,844,611.69		1.48%
2015				201,773,815.26	200,603,195.60		0.58%
2016				209,189,301.69	212,828,670.71		1.74%
2017				203,784,766.55	207,071,865.40		1.61%

### Regression Analysis

**Notes:**

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)							
Period	Month	Unadjusted Wholesale Purchases kWh	MicroFit	FIT	SOP	Adjustment	Adjustment
45	2014-September	14,732,428.00	141,770.25	78,249.33	1,357,122.48		
46	2014-October	13,632,688.00	100,933.42	55,146.08	1,182,329.38		
47	2014-November	14,402,191.00	53,193.36	30,074.60	1,161,217.69		
48	2014-December	15,819,396.00	44,118.31	22,035.00	1,046,805.90		
49	2015-January	18,010,471.20	51,209.37	21,998.00	70,753.00		
50	2015-February	16,943,673.00	37,079.03	28,418.00	29,646.00		
51	2015-March	15,856,379.80	142,560.97	62,952.00	729,965.00		
52	2015-April	12,865,469.20	172,100.12	92,885.00	1,293,710.00		
53	2015-May	13,913,349.00	203,737.85	107,592.00	1,361,307.00		
54	2015-June	14,362,626.70	182,004.55	129,515.80	1,338,087.70		
55	2015-July	18,412,685.60	210,076.97	115,595.10	1,312,022.40		
56	2015-August	17,872,837.00	184,520.11	107,271.60	1,359,200.70		
57	2015-September	16,659,712.00	151,059.07	80,132.60	1,331,502.20		
58	2015-October	13,567,240.00	109,639.51	60,710.60	1,347,532.20		
59	2015-November	13,560,672.67	83,757.31	39,954.00	1,329,402.90		
60	2015-December	14,575,986.00	39,074.43	19,580.00	1,236,160.00		
61	2016-January	17,314,765.00	51,366.94	24,980.00	49,494.20		
62	2016-February	15,945,461.00	75,871.54	33,620.00	-		
63	2016-March	15,143,131.07	120,819.12	70,540.00	539,094.03		
64	2016-April	12,812,881.00	164,539.78	83,260.00	1,332,844.53		
65	2016-May	14,120,867.00	218,757.84	122,240.00	1,377,929.02		
66	2016-June	16,150,289.00	232,763.05	124,480.00	1,258,967.13		
67	2016-July	20,645,212.00	217,097.81	111,300.00	1,312,714.86		
68	2016-August	21,887,428.00	211,027.20	116,080.00	1,358,607.60		
69	2016-September	16,662,759.00	173,070.31	85,480.00	1,263,864.51		
70	2016-October	13,874,700.00	121,416.14	57,000.00	1,367,209.67		
71	2016-November	13,364,420.00	101,587.72	43,960.00	736,316.11		
72	2016-December	16,007,630.00	48,513.82	22,060.00	1,362,085.90		
73	2017-January	17,263,822.00	50,576.89	26,400.00	14,321.30		
74	2017-February	15,045,537.00	91,610.81	91,004.94	-		
75	2017-March	15,907,915.00	134,253.11	70,258.20	494,312.00		
76	2017-April	13,255,630.00	159,255.15	74,953.40	1,151,801.80		
77	2017-May	13,925,925.00	184,961.90	100,360.80	1,092,416.50		
78	2017-June	15,555,222.00	206,251.24	108,653.60	1,251,149.20		
79	2017-July	18,542,988.00	198,128.92	97,714.80	1,291,560.90		
80	2017-August	18,341,581.00	193,084.71	106,258.40	1,325,601.20		
81	2017-September	16,015,098.00	174,288.05	89,655.80	1,321,481.70		
82	2017-October	14,205,016.00	118,003.95	59,110.60	1,350,013.70		
83	2017-November	14,501,902.00	64,725.96	31,395.80	1,209,082.70		
84	2017-December	17,776,748.00	32,921.21	16,956.20	469,751.10		

SUMMARY OUTPUT

FORECAST METHODOLOGY

Mean Average Percentage Error (Mape) :		
Median		
Note: Statistically, MAPE is defined as the average of percentage errors		
Note: the median is the numerical value separating the higher half of a data sample, from the lower half		
Year	kWh Forecasted Purchases	year over year
2018	211,657,455.70	3.86%
2019	214,325,151.90	1.26%

1.61%  
1.48%

Customer Growth

## Regression Analysis

### Notes:

- 1) Update Wholesale Purchases.
- 2) Use drop down lists to select the variables inputted from 5.Variable Worksheet and Select Forecast Methodology
- 3) Run Regression -> Data -> Data Analysis -> Regression

Period	Month	Unadjusted Wholesale Purchases kWh	Adjustments to Wholesale Purchases (i.e. CDM, Loss of customer etc)					SUMMARY OUTPUT			
			MicroFit	FIT	SOP	Adjustment	Adjustment		Adjustment		
FORECAST METHODOLOGY											
85	2018-January							9441.42	9441.55	-0.13	12.13
86	2018-February										11.96
87	2018-March										11.96
88	2018-April										11.96
89	2018-May										11.96
90	2018-June										11.96
91	2018-July										11.96
92	2018-August										11.96
93	2018-September										11.96
94	2018-October										11.96
95	2018-November										11.96
96	2018-December										11.96
97	2019-January							9621.04	9621.04	0.00	17.51
98	2019-February										17.51
99	2019-March										17.51
100	2019-April										17.51
101	2019-May										17.51
102	2019-June										17.51
103	2019-July										17.51
104	2019-August										17.51
105	2019-September										17.51
106	2019-October										17.51
107	2019-November										17.51
108	2019-December							179.62	179.49		17.51

Forecasting Calculation Methodology		
Average		
Utility Adjusted Customer Growth %		
Linear Trending		
Linear Trending Calculation ( $y=mx+b$ )		
Variables	Slope (m)	Intercept (b)
Customer Count	19.76	7,746.87923





## Weather Sensitive Load

### Notes:

- 1) Please Select Only the Weather Sensitive Customer Classes from the Drop Down List ( Include GS>50 kW customers)
- 2) Select if you need to manually adjust for Load Growth or not - i.e. if this was not captured through the regression analysis (this can be verified by a quick calculation, comparing weather normal kwh purchases/forecasted customer totals for the forecast year)-

Does Your Utility need to Adjust for Load Correct Growth?

No

Residential							
Year	Residential Metered kWh	Wholesale Purchases	Weather Normalized	Ratio% *	Weather Normal	Average # Customers	Per customer
2011	66,976,830	188,298,521	190,530,219	35.57%	67,770,634	6,594	10,277
2012	67,086,975	189,169,073	195,964,358	35.46%	69,496,857	6,716	10,348
2013	68,126,809	189,823,053	191,903,722	35.89%	68,873,553	6,912	9,964
2014	68,599,528	196,751,647	193,844,612	34.87%	67,585,959	7,110	9,505
2015	69,624,978	201,773,815	200,603,196	34.51%	69,221,039	7,389	9,368
2016	74,189,661	209,189,302	212,828,671	35.47%	75,480,375	7,661	9,853
2017	71,017,299	203,784,767	207,071,865	34.85%	72,162,825	7,838	9,206
2018			211,657,456	34.85%	73,760,865	7,976	9,247
2019			214,325,152	34.85%	74,690,535	8,152	9,162

\* the model uses metered per class to determine the wholesale per class

↓  
Load corrected for Utility Growth based on utility input

Residential				
Year	New Customer	Per Customer Weather Normalized (based on 2014 cust count)	Added Load	Total
2018	0	9,247	0	<b>73,760,865</b>
2019	0	9,162	0	<b>74,690,535</b>

General Service < 50 kW							
Year	GS<50 Metered kWh	Wholesale Purchases	Weather Normalized	Ratio% *	Weather Normal	Average # Customers	Per customer
2011	34,321,035	188,298,521	190,530,219	18.23%	34,727,805	1,235	28,127
2012	35,374,878	189,169,073	195,964,358	18.70%	36,645,606	1,269	28,878
2013	35,291,131	189,823,053	191,903,722	18.59%	35,677,960	1,221	29,219
2014	39,288,460	196,751,647	193,844,612	19.97%	38,707,967	1,312	29,507
2015	41,172,288	201,773,815	200,603,196	20.41%	40,933,421	1,322	30,974
2016	43,510,841	209,189,302	212,828,671	20.80%	44,267,820	1,333	33,216
2017	40,733,064	203,784,767	207,071,865	19.99%	41,390,099	1,332	31,081
2018			211,657,456	19.99%	42,306,679	1,335	31,698
2019			214,325,152	19.99%	42,839,906	1,338	32,026

\* the model uses metered per class to determine the wholesale per class

↓  
Load corrected for Utility Growth based on utility input

General Service < 50 kW				
Year	New Customer	Per Customer Weather Normalized (based on 2014 cust count)	Added Load	Total
2018	0	31,698	0	<b>42,306,679</b>
2019	0	32,026	0	<b>42,839,906</b>



### kW and Non-Weather Sensitive Load

**Notes:**

- 1) Please Select All Customers billed Distribution Volumetric Rates by kW.
- 2) Please update the Average Years that is used to calculate an average kW/kWh ratio and forecast kW's
- 3) If required, A Distributor may manually adjust kWh's - i.e. Wholesale Market Participant might not have been reflected through Regression for Large Customers (Distributor must support decision)
- 4) Select if you need to manually adjust for Load Growth or not - i.e. if this was not captured through the regression analysis (Distributor must support decision)

General Service > 50 kW - 4999 kW								
Year	kWh	Adjusted kWh	kWh	kW	Customer/ Connection	kWh per connection	KW per connection	KW/kWh Ratio
2011	78,632,457		78,632,457	199,918	120	655,043.03	1,665,401	0.00254
2012	77,993,648		77,993,648	202,738	118	662,600.90	1,722,374	0.00260
2013	77,896,093		77,896,093	204,593	118	660,836.42	1,735,676	0.00263
2014	80,076,899		80,076,899	208,043	129	618,951.87	1,608,058	0.00260
2015	81,848,511		81,848,511	213,949	128	639,441.49	1,671,473	0.00261
2016	83,681,624		83,681,624	211,155	122	688,737.64	1,737,904	0.00252
2017	84,099,297		84,099,297	211,534	129	652,143.18	1,640,328	0.00252
2018	85,961,669		85,961,669	221,277	131	658,671.99	1,695,509	
2019	87,045,116	- 2,700,000	84,345,116	217,115	131	643,855.85	1,657,370	
Avg - Years =			7.00			653,964.93	1,683.03	0.00257

\* the model uses metered per class to determine the wholesale per class

Load corrected for Utility Growth based on utility input



General Service > 50 kW - 4999 kW								
Year			New Customer	Average kWh	Average kW	Growth Corrected?	Total kWh	Total kW
2018			2	653,964.93	1,683.031	No	85,961,669	221,277
2019			2	653,964.93	1,683.031		84,345,116	217,115

Note: This worksheet uses average actual usage for customer load, and not weather normalized used in worksheet 7. Weather Sensitive Class

Streetlighting								
Year	kWh	Adjusted kWh	kWh	kW	Customer/ Connection	kWh per connection	KW per connection	KW/kWh Ratio
2011	1,153,888		1,153,888	3,222	1,946	592.95	1,656	0.00279
2012	1,183,464		1,183,464	3,239	1,947	597.64	1,664	0.00278
2013	1,160,024		1,160,024	3,257	1,949	595.27	1,671	0.00281
2014	1,160,025		1,160,025	3,239	2,051	565.50	1,579	0.00279
2015	974,371		974,371	2,743	2,081	468.28	1,318	0.00282
2016	861,899		861,899	2,373	2,120	406.52	1,119	0.00275
2017	858,844		858,844	2,400	2,124	404.37	1,130	0.00279
2018	873,782		873,782	2,439	2,155	405.45	1,132	
2019	886,616		886,616	2,475	2,187	405.45	1,132	
Avg - Years =			7.00			405	1,1247	0.00279

\* the model uses metered per class to determine the wholesale per class

Load corrected for Utility Growth based on utility input



Streetlighting								
Year			New Customer	Average kWh	Average kW	Growth Corrected?	Total kWh	Total kW
2018			31	405.45	1,125	No	873,782	2,439
2019			63	405.45	1,125		886,616	2,475

Unmetered Scattered Load								
Year	kWh	Adjusted kWh	kWh	kW	Customer/ Connection	kWh per connection	KW per connection	KW/kWh Ratio
2011	225,362		225,362		22	10,205.08	-	-
2012	226,394		226,394		22	10,290.63	-	-
2013	234,467		234,467		21	10,969.23	-	-
2014	230,817		230,817		22	10,673.61	-	-
2015	224,901		224,901		20	11,129.13	-	-
2016	224,075		224,075		18	12,653.66	-	-
2017	250,759		250,759		21	11,800.44	-	-
2018	251,508		251,508	0	26	9,673.38	-	-
2019	251,508		251,508	0	26	9,673.38	-	-
Avg - Years =			7.00			9,673.38	-	-

\* the model uses metered per class to determine the wholesale per class

Load corrected for Utility Growth based on utility input



Unmetered Scattered Load								
Year			New Customer	Average kWh	Average kW	Growth Corrected?	Total kWh	Total kW
2018			5	9,673.38	-	<b>No</b>	251,508	-
2019			5	9,673.38	-		251,508	-

Large User								
Year	kWh	Adjusted kWh	kWh	kW	Customer/ Connection	kWh per connection	KW per connection	KW/kWh Ratio
2011	0		0	0	0	-	-	-
2012	0		0	0	0	-	-	-
2013	0		0	0	0	-	-	-
2014	0		0	0	0	-	-	-
2015	0		0	0	0	-	-	-
2016	0		0	0	0	-	-	-
2017	0		0	0	0	-	-	-
2018	0		0	0	0	-	-	-
2019	23,308,825		23,308,825	60,000	1	23,308,825	60,000.000	
Avg - Years =							-	0.0000 0.00257

\* the model uses metered per class to determine the wholesale per class

Load corrected for Utility Growth based on utility input



Large User								
Year			New Customer	Average kWh	Average kW	Growth Corrected?	Total kWh	Total kW
2018			0	-	-	<b>No</b>	-	-
2019			1	-	-		23,308,825	60,000



## Weather Adjusted Load Forecast Results

	Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	Cust/Conn	6,594	6,716	6,912	7,110	7,389	7,661	7,838	7,976	8,152
	kWh	66,976,830	67,086,975	68,126,809	68,599,528	69,624,978	74,189,661	71,017,299	73,760,865	74,690,535
	kW									
General Service < 50 kW	Cust/Conn	1,235	1,269	1,221	1,312	1,322	1,333	1,332	1,335	1,338
	kWh	34,321,035	35,374,878	35,291,131	39,288,460	41,172,288	43,510,841	40,733,064	42,306,679	42,839,906
	kW									
General Service > 50 kW - 4999 kW	Cust/Conn	120	118	118	129	128	122	129	131	131
	kWh	78,632,457	77,993,648	77,896,093	80,076,899	81,848,511	83,681,624	84,099,297	85,961,669	84,345,116
	kW	199,918	202,738	204,593	208,043	213,949	211,155	211,534	221,277	217,115
Unmetered Scattered Load	Cust/Conn	22	22	21	22	20	18	21	26	26
	kWh	225,362	226,394	234,467	230,817	224,901	224,075	250,759	251,508	251,508
	kW									
Street Lights	Cust/Conn	1,946	1,947	1,949	2,051	2,081	2,120	2,124	2,155	2,187
	kWh	1,153,888	1,163,464	1,160,024	1,160,025	974,371	861,899	858,844	873,782	886,616
	kW	3,222	3,239	3,257	3,239	2,743	2,373	2,400	2,439	2,475
Large User	Cust/Conn	-	-	-	-	-	-	-	-	1
	kWh	-	-	-	-	-	-	-	-	23,308,825
	kW	-	-	-	-	-	-	-	-	60,000
<b>Total</b>	<b>Cust/Conn</b>	<b>9,917</b>	<b>10,072</b>	<b>10,222</b>	<b>10,624</b>	<b>10,940</b>	<b>11,253</b>	<b>11,444</b>	<b>11,623</b>	<b>11,835</b>
	<b>kWh</b>	<b>181,309,571</b>	<b>181,845,359</b>	<b>182,708,524</b>	<b>189,355,729</b>	<b>193,845,050</b>	<b>202,468,101</b>	<b>196,959,263</b>	<b>203,154,504</b>	<b>226,322,506</b>
	<b>kW</b>	<b>203,139</b>	<b>205,977</b>	<b>207,850</b>	<b>211,281</b>	<b>216,692</b>	<b>213,529</b>	<b>213,934</b>	<b>223,716</b>	<b>279,590</b>



### Appendix 2-1 Load Forecast CDM Adjustment Work Form (2018)

Appendix 2-1 was initially 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 2018 is the fourth year of the six-year (2015-2020) Conservation First program. Final results for the 2011-14 program were issued in the fall of 2015, and the program is completed, although in some instances the new six year (2015-2020) CDM program works in a slightly different manner to the previous 2011-2014 CDM program. Distributors will offer programs each year that, over the six years (from January 1, 2015 to

#### 2015-2020 CDM Program - 2018 fifth 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. This results in each year's program being about 1/6 (16.67%) of the

6 Year (2015-2020) kWh Target:							
11,680,000							
	2015	2016	2017	2018	2019	2020	Total
	%						
2015 CDM Programs	5.20%	5.19%	5.19%	5.11%	5.11%	5.11%	30.92%
2016 CDM Programs		6.72%	6.72%	6.72%	6.71%	6.65%	33.50%
2017 CDM Programs			6.21%	5.75%	5.75%	5.74%	23.44%
2018 CDM Programs				2.56%	2.54%	2.53%	7.62%
2019 CDM Programs					1.74%	1.73%	3.47%
2020 CDM Programs						1.04%	1.04%
<b>Total in Year</b>	<b>5.20%</b>	<b>11.91%</b>	<b>18.12%</b>	<b>20.13%</b>	<b>21.85%</b>	<b>22.80%</b>	<b>100.00%</b>
kWh							
2015 CDM Programs	3,119,882.00	3,115,781.00	3,115,689.00	3,066,757.00	3,065,932.00	3,063,490.00	18,547,531.00
2016 CDM Programs		4,029,459.00	4,029,459.00	4,028,659.00	4,022,774.00	3,988,118.00	20,098,469.00
2017 CDM Programs			3,722,902.00	3,448,140.00	3,447,680.00	3,445,057.00	14,063,779.00
2018 CDM Programs				1,533,536.37	1,524,390.03	1,515,298.24	4,573,224.64
2019 CDM Programs					1,045,247.50	1,039,013.42	2,084,260.91
2020 CDM Programs						625,490.86	625,490.86
<b>Total in Year</b>	<b>3,119,882.00</b>	<b>7,145,240.00</b>	<b>10,868,050.00</b>	<b>12,077,092.37</b>	<b>13,106,023.53</b>	<b>13,676,467.52</b>	<b>59,992,755.42</b>

Inputs do not match 2015-20 CDM target

**Note:** The default formulae in the above table assume that the 2015-2020 kWh CDM target is achieved through persistence of CDM savings to the end of 2020. The distributor should enter measured CDM savings

#### Weight Factor for Inclusion in CDM Adjustment to 2018 Load Forecast

	2014	2015	2016	2017	2018	2019	
Weight Factor for each year's CDM program impact on 2018 load forecast	0	0	0	0.5	1	0.5	Distributor can select "0", "0.5", or "1" from drop-down list

#### 2015-2020 LRAMVA and 2018 CDM adjustment to Load Forecast

One manual adjustment for CDM impacts to the 2018 load forecast is made. There is a different but related threshold amount that is used for the 2018 LRAMVA amount for Account 1568.

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 2018, for assessing performance against the six-year target.

If used to determine the manual CDM adjustment for the system purchased kWh, the proposed loss factor should correspond with the proposed total loss factor calculated in Appendix 2-R.

The Manual Adjustment for the 2018 Load Forecast is the amount manually subtracted from the system-wide load forecast (either based on a purchased or billed basis) derived from the base forecast from

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 IESO-measured impacts were directed at specific

	2014	2015	2016	2017	2018	2019	Total for 2019
Amount used for CDM threshold for LRAMVA	1,320,428.00	1,320,428.00	1,320,428.00				3,961,284.00
Amount used for CDM threshold for LRAMVA (2019)				3,447,680.00	1,524,390.03	1,045,247.50	6,017,317.53
<b>Total Manual Forecast to Load Forecast</b>				1,723,840.00	1,524,390.03	522,623.75	3,770,853.78



## CDM Allocation Worksheet

### Notes:

- 1) Use this sheet to allocate Projected CDM Savings for the Test Year.
  - 2) Reallocate CDM savings to specific classes if required ( Distributers must support reallocation)
- Note: This sheet is linked from Worksheet 10.CDM Adjustments

### CDM Allocation

kWh	Year	2019
Residential	kWh	74,690,535
General Service < 50 kW	kWh	42,839,906
General Service > 50 kW - 4999 kW	kWh kW	84,345,116 217,115
Unmetered Scattered Load	kWh	251,508
Street Lights	kWh kW	886,616 2,475
Large User	kWh kW	23,308,825 60,000
Total kWh		226,322,506
Total KW		279,590

2017-2018 Plan	Share	Target	Manual Reallocation	Final Adjusted (kWh)
691,555	21%	691,555		73,998,981 0
962,392	29%	962,392		41,877,513 -
1,639,345 4,220	50%	1,639,345 4,220		82,705,771 212,896
-	0%	0		251,508 -
-	0%	0		886,616 2,475
-	0%	0		23,308,825 60,000
3,293,292	100%	3,293,292	-	223,029,214
4,220				



### Final Load Forecast Results - CDM Adjusted

	Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	Cust/Conn	6,594	6,716	6,912	7,110	7,389	7,661	7,838	7,976	8,152
	kWh	66,976,830	67,086,975	68,126,809	68,599,528	69,624,978	74,189,661	71,017,299	73,760,865	73,998,981
	kW									
General Service < 50 kW	Cust/Conn	1,235	1,269	1,221	1,312	1,322	1,333	1,332	1,335	1,338
	kWh	34,321,035	35,374,878	35,291,131	39,288,460	41,172,288	43,510,841	40,733,064	42,306,679	41,877,513
	kW									
General Service > 50 kW - 4999 kW	Cust/Conn	120	118	118	129	128	122	129	131	131
	kWh	78,632,457	77,993,648	77,896,093	80,076,899	81,848,511	83,681,624	84,099,297	85,961,669	82,705,771
	kW	199,918	202,738	204,593	208,043	213,949	211,155	211,534	221,277	212,896
Unmetered Scattered Load	Cust/Conn	22	22	21	22	20	18	21	26	26
	kWh	225,362	226,394	234,467	230,817	224,901	224,075	250,759	251,508	251,508
	kW									
Street Lights	Cust/Conn	1,946	1,947	1,949	2,051	2,081	2,120	2,124	2,155	2,187
	kWh	1,153,888	1,163,464	1,160,024	1,160,025	974,371	861,899	858,844	873,782	886,616
	kW	3,222	3,239	3,257	3,239	2,743	2,373	2,400	2,439	2,475
Large User	Cust/Conn	-	-	-	-	-	-	-	-	1
	kWh	-	-	-	-	-	-	-	-	23,308,825
	kW	-	-	-	-	-	-	-	-	60,000
<b>Total</b>	<b>Cust/Conn</b>	<b>9,917</b>	<b>10,072</b>	<b>10,222</b>	<b>10,624</b>	<b>10,940</b>	<b>11,253</b>	<b>11,444</b>	<b>11,623</b>	<b>11,835</b>
	<b>kWh</b>	<b>181,309,571</b>	<b>181,845,359</b>	<b>182,708,524</b>	<b>189,355,729</b>	<b>193,845,050</b>	<b>202,468,101</b>	<b>196,959,263</b>	<b>203,154,504</b>	<b>223,029,214</b>
	<b>kW</b>	<b>203,139</b>	<b>205,977</b>	<b>207,850</b>	<b>211,281</b>	<b>216,692</b>	<b>213,529</b>	<b>213,934</b>	<b>223,716</b>	<b>275,370</b>