

Nicole McKenna

From: Brown, Angie
Sent: December 11, 2019 8:17 AM
To: 'CrockettGL@maritimeelectric.com'
Cc: Roberts, Jason
Subject: WNR - Questions

Hi Gloria,

Here's a list of our questions on the weather normalization information provided to date. I've added a tracking number just to help keep the file organized.

Matter	Request #	Question/request
WNR	GT-RFI-2019-2	What is the source for daylight hours used in the calculation of MWh per HDD Coefficient?
WNR	GT-RFI-2019-3	During our review of the 10 year average of HDD, we noted that the Environment Canada dataset for December 2013 HDD value has a HDD value as 744, however the MECL filing introduction of the reserve is 750 HDD. Is there a reason for this discrepancy? If not, quantify the dollar impact on the WNR since inception if calculated at 750 HDD and provide workings.
WNR	GT-RFI-2019-4	In MECL's filings of the Weather Normalization Mechanism and Reserve, we identified a potential discrepancy on HDD values for February 2016 as being 626, when filings since October 2017 noted February 2016 as being 608. Please confirm the correct HDD for February 2016. If 626 HDD for February 2016 is correct, please quantify the impact on the WNR since February 2016 and provide workings.
WNR	GT-RFI-2019-5	In the General Rate Application filed November 30th, 2018, Appendix 5 – Schedule 4 “Mechanism Change in Weather Normalization Reserve – January 1, 2016 to October 31, 2018” states “Actual HDD” recorded for October 2018 is 341 but according to the revised General Rate Application filed September 25th, 2019, October 2018 Actual HDD is 338.2. We noted that Environment Canada’s website states the HDD for October 2018 as 338.7. Additional in MECL’s Excel document provided to Grant Thornton with the Appendix 5 calculations for all schedules in the revised General Rate Application filed September 25th, 2019, October 2018 HDD in Schedule 1 states 341 and in Schedule 4 it states 338.2. Please confirm that correct HDD for October 2018. If different than filings, please quantify impact on WNR since October 2018 and provide workings.
WNR	GT-RFI-2019-6	Please quantify the cumulative impact on the WNR for all errors you agree relating to the three questions above and provide workings.
WNR	GT-RFI-2019-7	Supporting kWh sales and revenue data provided by MECL for 2019 marginal net revenue noted the \$/kWh for small industrial customer for forecast November and December was approximately \$0.126/kWh and \$0.129/kWh, respectively which is lower in comparison to actual average of approximately \$0.141/kWh for previous 10 months. Please explain why forecast \$/kWh is lower than previous 10 month actual \$/kWh rates.

We can discuss on our call later today if you need any clarification.

Thank you,
Angie

Angie Brown | Senior Manager
Grant Thornton LLP

Suite 300 | 15 International Place | St. John's | NL | A1A 0L4

T +1 709 778 8841 | F +1 709 722 7892

E Angie.Brown@ca.gt.com | W <http://www.grantthornton.ca/>



Grant Thornton LLP is proud to be recognized as one of Canada's best workplaces for our twelfth consecutive year!

Nicole McKenna

From: Brown, Angie
Sent: December 12, 2019 4:43 PM
To: 'CrockettGL@maritimeelectric.com'
Cc: 'Roberts, Jason'
Subject: RE: WNR - Questions
Attachments: Copy of Sales and Revenue actualscalculations GT-RFI.XLSX

Hi Gloria,

Here are some additional questions for our consideration:

Matter	Request #	Question/request
WNR	GT-RFI-2019-8	The attached spreadsheet notes form differences (highlighted in yellow). Please provide reconciliation and explanation of the differences between the IRAC monthly reporting as of date to October 31, 2019 and WNR actual to date October 31, 2019 provided for revenue and kWh sales as illustrated in attached excel document.
WNR	GT-RFI-2019-9	If errors in data are agreed by MECL as a result of Grant Thornton's questions, please file updated Appendix 5 for which you seek approval from IRAC.

Also, as a follow up to yesterday's call regarding the Dorian model I just wanted to note the take away items from that discussion.

Matter	Request #	Question/request
Hurricane Dorian	GT-RFI-2019-10	The following is a summary of our take away items from the call on December 11, 2019. -You can pass on our discussion on the TOIL matter. We reviewed this further and have further information. -Please provide supporting documents for mutual aid expenses including support for the allocation between capital and operating. -Please provide supporting documents for contractor expenses including support for the allocation between capital and operating. -You have indicated that the 80/20 split used in the model was based on discussions with operations management who were actively involved in managing the storm response. If please provide any additional support you would have for the basis of this split.

Let me know if you have any questions or require clarifications.

Angie

Angie Brown | Senior Manager
Grant Thornton LLP
Suite 300 | 15 International Place | St. John's | NL | A1A 0L4
T +1 709 778 8841 | F +1 709 722 7892
E Angie.Brown@ca.gt.com | W <http://www.grantthornton.ca/>

From: Brown, Angie
Sent: Wednesday, December 11, 2019 8:47 AM
To: 'CrockettGL@maritimeelectric.com' <CrockettGL@maritimeelectric.com>

Cc: Roberts, Jason <RobertsJS@maritimeelectric.com>

Subject: WNR - Questions

Hi Gloria,

Here's a list of our questions on the weather normalization information provided to date. I've added a tracking number just to help keep the file organized.

Matter	Request #	Question/request
WNR	GT-RFI-2019-2	What is the source for daylight hours used in the calculation of MWh per HDD Coefficient?
WNR	GT-RFI-2019-3	During our review of the 10 year average of HDD, we noted that the Environment Canada dataset for December 2013 HDD value has a HDD value as 744, however the MECL filing introduction of the reserve is 750 HDD. Is there a reason for this discrepancy? If not, quantify the dollar impact on the WNR since inception if calculated at 750 HDD and provide workings.
WNR	GT-RFI-2019-4	In MECL's filings of the Weather Normalization Mechanism and Reserve, we identified a potential discrepancy on HDD values for February 2016 as being 626, when filings since October 2017 noted February 2016 as being 608. Please confirm the correct HDD for February 2016. If 626 HDD for February 2016 is correct, please quantify the impact on the WNR since February 2016 and provide workings.
WNR	GT-RFI-2019-5	In the General Rate Application filed November 30th, 2018, Appendix 5 – Schedule 4 “Mechanism Change in Weather Normalization Reserve – January 1, 2016 to October 31, 2018” states “Actual HDD” recorded for October 2018 is 341 but according to the revised General Rate Application filed September 25th, 2019, October 2018 Actual HDD is 338.2. We noted that Environment Canada’s website states the HDD for October 2018 as 338.7. Additional in MECL’s Excel document provided to Grant Thornton with the Appendix 5 calculations for all schedules in the revised General Rate Application filed September 25th, 2019, October 2018 HDD in Schedule 1 states 341 and in Schedule 4 it states 338.2. Please confirm that correct HDD for October 2018. If different than filings, please quantify impact on WNR since October 2018 and provide workings.
WNR	GT-RFI-2019-6	Please quantify the cumulative impact on the WNR for all errors you agree relating to the three questions above and provide workings.
WNR	GT-RFI-2019-7	Supporting kWh sales and revenue data provided by MECL for 2019 marginal net revenue noted the \$/kWh for small industrial customer for forecast November and December was approximately \$0.126/kWh and \$0.129/kWh, respectively which is lower in comparison to actual average of approximately \$0.141/kWh for previous 10 months. Please explain why forecast \$/kWh is lower than previous 10 month actual \$/kWh rates.

We can discuss on our call later today if you need any clarification.

Thank you,

Angie

Angie Brown | Senior Manager

Grant Thornton LLP

Suite 300 | 15 International Place | St. John's | NL | A1A 0L4

T +1 709 778 8841 | F +1 709 722 7892

E Angie.Brown@ca.gt.com | W <http://www.grantthornton.ca/>



An instinct for growth™



Grant Thornton LLP is proud to be recognized as one of Canada's best workplaces for our twelfth consecutive year!

Nicole McKenna

From: Crockett, Gloria <CrockettGL@maritimeelectric.com>
Sent: December 14, 2019 9:52 AM
To: Brown, Angie
Cc: Roberts, Jason
Subject: RE: WNR - Questions
Attachments: 2015 Sunrise & Sunset Table.pdf; GT WNRA Queries.docx; 2016 Daily Data Download from Environment Canada.xlsx; 2018 Daily Data Download from Environment Canada.xlsx; Appendix 5 - Weather Normalization Reserve with Updates from GT Matters GT-RFI-2019-7,8,9.xlsx; Appendix 5 - Weather Normalization Reserve with Updates from GT Matters GT-RFI-2019-3,4,5.xlsx; Sales and Revenue actualscalculations GT-RFI.XLSX; 2016 GRA - Section 7 - filed October 28, 2015.pdf

Hi Angie,

I have provided my responses to the WNRA queries in the attached word document.

I prepared my responses in two steps, first dealing with the HDD queries and then the marginal net revenue (sales and revenue queries).

The supporting calculations for the updates related to the HDD queries are provided in the attached excel file Appendix 5 – Weather Normalization Reserve with updates from GT Matters-GT-RFI-2019-3,4,5.xlsx.

The supporting calculations for the updates related to the kWh sales and revenue queries are provided in the attached excel file Appendix 5 – Weather Normalization Reserve with updates from GT Matters-GT-RFI-2019-7,8,9.xlsx. This spreadsheet is cumulative and is the updated Appendix 5 for which the Company seeks approval from IRAC.

I have also provided a number of supporting documents referenced in my responses including a reconciliation of the sales and revenue actuals GT-RFI.xlsx to the monthly FS for October 31, 2019.

Give me a call if you have any questions and have a good weekend,

Gloria

From: Brown, Angie <Angie.Brown@ca.gt.com>
Sent: Thursday, December 12, 2019 4:44 PM
To: Crockett, Gloria <CrockettGL@maritimeelectric.com>
Cc: Roberts, Jason <RobertsJS@maritimeelectric.com>
Subject: RE: WNR - Questions

**** THIS IS AN EXTERNAL EMAIL ** Use caution before opening links / attachments. Never supply user ID/password information.**

Hi Gloria,

Here are some additional questions for our consideration:

Matter	Request #	Question/request
--------	-----------	------------------

WNR	GT-RFI-2019-8	The attached spreadsheet notes form differences (highlighted in yellow). Please provide reconciliation and explanation of the differences between the IRAC monthly reporting as of date to October 31, 2019 and WNR actual to date October 31, 2019 provided for revenue and kWh sales as illustrated in attached excel document.
WNR	GT-RFI-2019-9	If errors in data are agreed by MECL as a result of Grant Thornton's questions, please file updated Appendix 5 for which you seek approval from IRAC.

Also, as a follow up to yesterday's call regarding the Dorian model I just wanted to note the take away items from that discussion.

Matter	Request #	Question/request
Hurricane Dorian	GT-RFI-2019-10	<p>The following is a summary of our take away items from the call on December 11, 2019.</p> <ul style="list-style-type: none"> -You can pass on our discussion on the TOIL matter. We reviewed this further and have further information. -Please provide supporting documents for mutual aid expenses including support for the allocation between capital and operating. -Please provide supporting documents for contractor expenses including support for the allocation between capital and operating. -You have indicated that the 80/20 split used in the model was based on discussions with operations management who were actively involved in managing the storm response. Please provide any additional support you would have for the basis of this split.

Let me know if you have any questions or require clarifications.

Angie

Angie Brown | Senior Manager

Grant Thornton LLP

Suite 300 | 15 International Place | St. John's | NL | A1A 0L4

T +1 709 778 8841 | F +1 709 722 7892

E Angie.Brown@ca.gt.com | W <http://www.grantthornton.ca/>

From: Brown, Angie

Sent: Wednesday, December 11, 2019 8:47 AM

To: 'CrockettGL@maritimeelectric.com' <CrockettGL@maritimeelectric.com>

Cc: Roberts, Jason <RobertsJS@maritimeelectric.com>

Subject: WNR - Questions

Hi Gloria,

Here's a list of our questions on the weather normalization information provided to date. I've added a tracking number just to help keep the file organized.

Matter	Request #	Question/request
WNR	GT-RFI-2019-2	What is the source for daylight hours used in the calculation of MWh per HDD Coefficient?
WNR	GT-RFI-2019-3	During our review of the 10 year average of HDD, we noted that the Environment Canada dataset for December 2013 HDD value has a HDD value as 744, however the MECL filing introduction of the reserve is 750 HDD. Is there a reason for this discrepancy? If not, quantify the dollar impact on the WNR since inception if calculated at 750 HDD and provide working.

WNR	GT-RFI-2019-4	In MECL's filings of the Weather Normalization Mechanism and Reserve, we identified a potential discrepancy on HDD values for February 2016 as being 626, when filings since October 2017 noted February 2016 as being 608. Please confirm the correct HDD for February 2016. If 626 HDD for February 2016 is correct, please quantify the impact on the WNR since February 2016 and provide workings.
WNR	GT-RFI-2019-5	In the General Rate Application filed November 30th, 2018, Appendix 5 – Schedule 4 “Market Change in Weather Normalization Reserve – January 1, 2016 to October 31, 2018” states “Actual HDD” recorded for October 2018 is 341 but according to the revised General Rate Application filed September 25th, 2019, October 2018 Actual HDD is 338.2. We noted that Environment Canada’s website states the HDD for October 2018 as 338.7. Additional in MECL’s Excel document provided to Grant Thornton with the Appendix 5 calculations for all schedules in the revised General Rate Application filed September 25th, 2019, October 2018 HDD in Schedule 1 states 341 and in Schedule 4 it states 338.2. Please confirm that correct HDD for October 2018. If different than filings, please quantify impact on WNR since October 2018 and provide workings.
WNR	GT-RFI-2019-6	Please quantify the cumulative impact on the WNR for all errors you agree relating to the three questions above and provide workings.
WNR	GT-RFI-2019-7	Supporting kWh sales and revenue data provided by MECL for 2019 marginal net revenues noted the \$/kWh for small industrial customer for forecast November and December was approximately \$0.126/kWh and \$0.129/kWh, respectively which is lower in comparison to actual average of approximately \$0.141/kWh for previous 10 months. Please explain why forecast \$/kWh is lower than previous 10 month actual \$/kWh rates.

We can discuss on our call later today if you need any clarification.

Thank you,
Angie

Angie Brown | Senior Manager

Grant Thornton LLP
Suite 300 | 15 International Place | St. John's | NL | A1A 0L4
T +1 709 778 8841 | F +1 709 722 7892
[E Angie.Brown@ca.gt.com](mailto:Angie.Brown@ca.gt.com) | [W http://www.grantthornton.ca/](http://www.grantthornton.ca/)



Grant Thornton LLP is proud to be recognized as one of Canada's best workplaces for our twelfth consecutive year!

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in

Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

Content type: text/plain

STANDARD TIMES OF SOLAR RISE/SET
FOR User defined location, 2015

Longitude = 63♦ 0' West, Latitude = 46♦ 0' North

Time zone is STD, -4 UTC

Correction from standard meridian : 12.00 minutes

*** Add one hour to listed times when ***
*** Daylight Saving Time is in effect. ***

Date	Twilight Start			Twilight End			Hours of Illumination			Local Sidereal Time at 00:00 STD	
	Nautical	Civil	Sun Rise	Local Noon	Sun Set	Civil	Nautical	Day	Sky	Total	hh:mm:ss
Jan 1	6:42	7:20	7:54	12:16	16:37	17:12	17:49	8.72	1.15	9.87	6:29:58
Jan 2	6:42	7:20	7:54	12:16	16:38	17:12	17:50	8.73	1.14	9.88	6:33:55
Jan 3	6:42	7:20	7:54	12:16	16:39	17:13	17:51	8.75	1.14	9.89	6:37:52
Jan 4	6:42	7:20	7:54	12:17	16:40	17:14	17:52	8.77	1.14	9.91	6:41:48
Jan 5	6:42	7:20	7:54	12:17	16:41	17:15	17:53	8.79	1.14	9.93	6:45:45
Jan 6	6:42	7:20	7:54	12:18	16:42	17:16	17:54	8.81	1.14	9.95	6:49:41
Jan 7	6:42	7:19	7:53	12:18	16:43	17:17	17:55	8.83	1.13	9.97	6:53:38
Jan 8	6:42	7:19	7:53	12:19	16:44	17:18	17:56	8.85	1.13	9.99	6:57:34
Jan 9	6:42	7:19	7:53	12:19	16:46	17:19	17:57	8.88	1.13	10.01	7:01:31
Jan 10	6:41	7:19	7:53	12:19	16:47	17:21	17:58	8.90	1.13	10.03	7:05:27
Jan 11	6:41	7:18	7:52	12:20	16:48	17:22	17:59	8.93	1.13	10.06	7:09:24
Jan 12	6:41	7:18	7:52	12:20	16:49	17:23	18:00	8.96	1.12	10.08	7:13:21
Jan 13	6:40	7:18	7:51	12:21	16:50	17:24	18:01	8.99	1.12	10.11	7:17:17
Jan 14	6:40	7:17	7:51	12:21	16:52	17:25	18:02	9.02	1.12	10.13	7:21:14
Jan 15	6:40	7:17	7:50	12:21	16:53	17:26	18:04	9.05	1.11	10.16	7:25:10
Jan 16	6:39	7:16	7:49	12:22	16:54	17:28	18:05	9.08	1.11	10.19	7:29:07
Jan 17	6:39	7:16	7:49	12:22	16:56	17:29	18:06	9.11	1.11	10.22	7:33:03
Jan 18	6:38	7:15	7:48	12:22	16:57	17:30	18:07	9.15	1.11	10.25	7:37:00
Jan 19	6:38	7:14	7:47	12:23	16:58	17:31	18:08	9.18	1.10	10.28	7:40:56
Jan 20	6:37	7:14	7:47	12:23	17:00	17:33	18:09	9.22	1.10	10.32	7:44:53
Jan 21	6:36	7:13	7:46	12:23	17:01	17:34	18:11	9.25	1.10	10.35	7:48:50
Jan 22	6:36	7:12	7:45	12:24	17:03	17:35	18:12	9.29	1.09	10.39	7:52:46
Jan 23	6:35	7:11	7:44	12:24	17:04	17:37	18:13	9.33	1.09	10.42	7:56:43
Jan 24	6:34	7:11	7:43	12:24	17:05	17:38	18:14	9.37	1.09	10.46	8:00:39
Jan 25	6:33	7:10	7:42	12:24	17:07	17:39	18:16	9.41	1.08	10.49	8:04:36
Jan 26	6:33	7:09	7:41	12:25	17:08	17:41	18:17	9.45	1.08	10.53	8:08:32
Jan 27	6:32	7:08	7:40	12:25	17:10	17:42	18:18	9.49	1.08	10.57	8:12:29
Jan 28	6:31	7:07	7:39	12:25	17:11	17:43	18:20	9.53	1.08	10.61	8:16:25
Jan 29	6:30	7:06	7:38	12:25	17:13	17:45	18:21	9.58	1.07	10.65	8:20:22
Jan 30	6:29	7:05	7:37	12:25	17:14	17:46	18:22	9.62	1.07	10.69	8:24:19
Jan 31	6:28	7:04	7:36	12:25	17:16	17:48	18:23	9.66	1.07	10.73	8:28:15
Feb 1	6:27	7:03	7:35	12:26	17:17	17:49	18:25	9.71	1.06	10.77	8:32:12
Feb 2	6:26	7:02	7:33	12:26	17:19	17:50	18:26	9.75	1.06	10.81	8:36:08
Feb 3	6:25	7:00	7:32	12:26	17:20	17:52	18:27	9.80	1.06	10.85	8:40:05
Feb 4	6:24	6:59	7:31	12:26	17:21	17:53	18:29	9.84	1.05	10.90	8:44:01
Feb 5	6:22	6:58	7:30	12:26	17:23	17:55	18:30	9.89	1.05	10.94	8:47:58
Feb 6	6:21	6:57	7:28	12:26	17:24	17:56	18:31	9.94	1.05	10.99	8:51:54
Feb 7	6:20	6:55	7:27	12:26	17:26	17:57	18:33	9.99	1.05	11.03	8:55:51
Feb 8	6:19	6:54	7:25	12:26	17:27	17:59	18:34	10.03	1.04	11.08	8:59:48
Feb 9	6:18	6:53	7:24	12:26	17:29	18:00	18:35	10.08	1.04	11.12	9:03:44
Feb 10	6:16	6:51	7:23	12:26	17:30	18:02	18:37	10.13	1.04	11.17	9:07:41
Feb 11	6:15	6:50	7:21	12:26	17:32	18:03	18:38	10.18	1.03	11.22	9:11:37
Feb 12	6:14	6:49	7:20	12:26	17:33	18:04	18:40	10.23	1.03	11.26	9:15:34
Feb 13	6:12	6:47	7:18	12:26	17:35	18:06	18:41	10.28	1.03	11.31	9:19:30
Feb 14	6:11	6:46	7:17	12:26	17:36	18:07	18:42	10.33	1.03	11.36	9:23:27

Feb 15	6:09	6:44	7:15	12:26	17:38	18:09	18:44	10.38	1.02	11.41	9:27:23
Feb 16	6:08	6:43	7:13	12:26	17:39	18:10	18:45	10.43	1.02	11.45	9:31:20
Feb 17	6:06	6:41	7:12	12:26	17:41	18:11	18:46	10.48	1.02	11.50	9:35:17
Feb 18	6:05	6:40	7:10	12:26	17:42	18:13	18:48	10.53	1.02	11.55	9:39:13
Feb 19	6:03	6:38	7:09	12:26	17:44	18:14	18:49	10.59	1.02	11.60	9:43:10
Feb 20	6:02	6:37	7:07	12:26	17:45	18:16	18:50	10.64	1.01	11.65	9:47:06
Feb 21	6:00	6:35	7:05	12:26	17:47	18:17	18:52	10.69	1.01	11.70	9:51:03
Feb 22	5:59	6:33	7:04	12:25	17:48	18:18	18:53	10.74	1.01	11.75	9:54:59
Feb 23	5:57	6:32	7:02	12:25	17:50	18:20	18:55	10.80	1.01	11.80	9:58:56
Feb 24	5:55	6:30	7:00	12:25	17:51	18:21	18:56	10.85	1.01	11.85	10:02:52
Feb 25	5:54	6:28	6:58	12:25	17:52	18:23	18:57	10.90	1.00	11.91	10:06:49
Feb 26	5:52	6:27	6:57	12:25	17:54	18:24	18:59	10.95	1.00	11.96	10:10:46
Feb 27	5:50	6:25	6:55	12:25	17:55	18:25	19:00	11.01	1.00	12.01	10:14:42
Feb 28	5:49	6:23	6:53	12:25	17:57	18:27	19:01	11.06	1.00	12.06	10:18:39
Mar 1	5:47	6:21	6:51	12:24	17:58	18:28	19:03	11.11	1.00	12.11	10:22:35
Mar 2	5:45	6:20	6:49	12:24	18:00	18:30	19:04	11.17	1.00	12.17	10:26:32
Mar 3	5:43	6:18	6:48	12:24	18:01	18:31	19:06	11.22	1.00	12.22	10:30:28
Mar 4	5:41	6:16	6:46	12:24	18:02	18:32	19:07	11.28	1.00	12.27	10:34:25
Mar 5	5:40	6:14	6:44	12:24	18:04	18:34	19:08	11.33	0.99	12.33	10:38:21
Mar 6	5:38	6:12	6:42	12:23	18:05	18:35	19:10	11.38	0.99	12.38	10:42:18
Mar 7	5:36	6:10	6:40	12:23	18:07	18:36	19:11	11.44	0.99	12.43	10:46:15
Mar 8	5:34	6:09	6:38	12:23	18:08	18:38	19:12	11.49	0.99	12.49	10:50:11
Mar 9	5:32	6:07	6:37	12:23	18:09	18:39	19:14	11.55	0.99	12.54	10:54:08
Mar 10	5:30	6:05	6:35	12:22	18:11	18:41	19:15	11.60	0.99	12.59	10:58:04
Mar 11	5:28	6:03	6:33	12:22	18:12	18:42	19:17	11.66	0.99	12.65	11:02:01
Mar 12	5:27	6:01	6:31	12:22	18:13	18:43	19:18	11.71	0.99	12.70	11:05:57
Mar 13	5:25	5:59	6:29	12:22	18:15	18:45	19:19	11.76	0.99	12.76	11:09:54
Mar 14	5:23	5:57	6:27	12:21	18:16	18:46	19:21	11.82	0.99	12.81	11:13:50
Mar 15	5:21	5:55	6:25	12:21	18:18	18:47	19:22	11.87	0.99	12.87	11:17:47
Mar 16	5:19	5:54	6:23	12:21	18:19	18:49	19:24	11.93	0.99	12.92	11:21:44
Mar 17	5:17	5:52	6:21	12:20	18:20	18:50	19:25	11.98	0.99	12.97	11:25:40
Mar 18	5:15	5:50	6:19	12:20	18:22	18:51	19:26	12.04	0.99	13.03	11:29:37
Mar 19	5:13	5:48	6:17	12:20	18:23	18:53	19:28	12.09	0.99	13.08	11:33:33
Mar 20	5:11	5:46	6:16	12:20	18:24	18:54	19:29	12.15	0.99	13.14	11:37:30
Mar 21	5:09	5:44	6:14	12:19	18:26	18:56	19:31	12.20	0.99	13.19	11:41:26
Mar 22	5:07	5:42	6:12	12:19	18:27	18:57	19:32	12.26	0.99	13.25	11:45:23
Mar 23	5:05	5:40	6:10	12:19	18:28	18:58	19:34	12.31	0.99	13.31	11:49:19
Mar 24	5:03	5:38	6:08	12:18	18:30	19:00	19:35	12.36	1.00	13.36	11:53:16
Mar 25	5:01	5:36	6:06	12:18	18:31	19:01	19:36	12.42	1.00	13.42	11:57:13
Mar 26	4:59	5:34	6:04	12:18	18:32	19:02	19:38	12.47	1.00	13.47	12:01:09
Mar 27	4:57	5:32	6:02	12:17	18:34	19:04	19:39	12.53	1.00	13.53	12:05:06
Mar 28	4:55	5:30	6:00	12:17	18:35	19:05	19:41	12.58	1.00	13.58	12:09:02
Mar 29	4:52	5:28	5:58	12:17	18:36	19:06	19:42	12.64	1.00	13.64	12:12:59
Mar 30	4:50	5:26	5:56	12:17	18:38	19:08	19:44	12.69	1.00	13.69	12:16:55
Mar 31	4:48	5:24	5:54	12:16	18:39	19:09	19:45	12.75	1.01	13.75	12:20:52
Apr 1	4:46	5:22	5:52	12:16	18:40	19:11	19:47	12.80	1.01	13.81	12:24:48
Apr 2	4:44	5:20	5:50	12:16	18:42	19:12	19:48	12.85	1.01	13.86	12:28:45
Apr 3	4:42	5:18	5:49	12:15	18:43	19:13	19:50	12.91	1.01	13.92	12:32:42
Apr 4	4:40	5:16	5:47	12:15	18:44	19:15	19:51	12.96	1.01	13.97	12:36:38
Apr 5	4:38	5:14	5:45	12:15	18:46	19:16	19:53	13.01	1.01	14.03	12:40:35
Apr 6	4:36	5:12	5:43	12:14	18:47	19:18	19:54	13.07	1.02	14.08	12:44:31
Apr 7	4:34	5:10	5:41	12:14	18:48	19:19	19:56	13.12	1.02	14.14	12:48:28
Apr 8	4:32	5:09	5:39	12:14	18:50	19:20	19:57	13.17	1.02	14.20	12:52:24
Apr 9	4:30	5:07	5:37	12:14	18:51	19:22	19:59	13.23	1.02	14.25	12:56:21
Apr 10	4:28	5:05	5:35	12:13	18:52	19:23	20:00	13.28	1.03	14.31	13:00:17
Apr 11	4:25	5:03	5:34	12:13	18:54	19:24	20:02	13.33	1.03	14.36	13:04:14
Apr 12	4:23	5:01	5:32	12:13	18:55	19:26	20:03	13.39	1.03	14.42	13:08:11
Apr 13	4:21	4:59	5:30	12:13	18:56	19:27	20:05	13.44	1.04	14.47	13:12:07
Apr 14	4:19	4:57	5:28	12:12	18:57	19:29	20:07	13.49	1.04	14.53	13:16:04
Apr 15	4:17	4:55	5:26	12:12	18:59	19:30	20:08	13.54	1.04	14.58	13:20:00
Apr 16	4:15	4:53	5:24	12:12	19:00	19:32	20:10	13.59	1.04	14.64	13:23:57
Apr 17	4:13	4:51	5:23	12:12	19:01	19:33	20:11	13.65	1.05	14.69	13:27:53
Apr 18	4:11	4:49	5:21	12:11	19:03	19:34	20:13	13.70	1.05	14.75	13:31:50
Apr 19	4:09	4:48	5:19	12:11	19:04	19:36	20:15	13.75	1.06	14.80	13:35:46
Apr 20	4:07	4:46	5:17	12:11	19:05	19:37	20:16	13.80	1.06	14.86	13:39:43

Apr 21	4:05	4:44	5:16	12:11	19:07	19:39	20:18	13.85	1.06	14.91	13:43:40
Apr 22	4:03	4:42	5:14	12:11	19:08	19:40	20:19	13.90	1.07	14.97	13:47:36
Apr 23	4:01	4:40	5:12	12:10	19:09	19:42	20:21	13.95	1.07	15.02	13:51:33
Apr 24	3:59	4:38	5:11	12:10	19:11	19:43	20:23	14.00	1.07	15.07	13:55:29
Apr 25	3:57	4:37	5:09	12:10	19:12	19:44	20:24	14.05	1.08	15.13	13:59:26
Apr 26	3:55	4:35	5:07	12:10	19:13	19:46	20:26	14.10	1.08	15.18	14:03:22
Apr 27	3:53	4:33	5:06	12:10	19:15	19:47	20:28	14.15	1.09	15.23	14:07:19
Apr 28	3:51	4:31	5:04	12:10	19:16	19:49	20:29	14.20	1.09	15.29	14:11:15
Apr 29	3:49	4:30	5:02	12:09	19:17	19:50	20:31	14.25	1.09	15.34	14:15:12
Apr 30	3:47	4:28	5:01	12:09	19:18	19:52	20:33	14.29	1.10	15.39	14:19:09
May 1	3:45	4:26	4:59	12:09	19:20	19:53	20:34	14.34	1.10	15.44	14:23:05
May 2	3:43	4:25	4:58	12:09	19:21	19:54	20:36	14.39	1.11	15.49	14:27:02
May 3	3:41	4:23	4:56	12:09	19:22	19:56	20:38	14.43	1.11	15.55	14:30:58
May 4	3:40	4:21	4:55	12:09	19:24	19:57	20:39	14.48	1.12	15.60	14:34:55
May 5	3:38	4:20	4:53	12:09	19:25	19:59	20:41	14.53	1.12	15.65	14:38:51
May 6	3:36	4:18	4:52	12:09	19:26	20:00	20:43	14.57	1.13	15.70	14:42:48
May 7	3:34	4:17	4:51	12:09	19:27	20:01	20:44	14.62	1.13	15.75	14:46:44
May 8	3:32	4:15	4:49	12:09	19:29	20:03	20:46	14.66	1.14	15.79	14:50:41
May 9	3:31	4:14	4:48	12:08	19:30	20:04	20:48	14.70	1.14	15.84	14:54:38
May 10	3:29	4:12	4:46	12:08	19:31	20:06	20:49	14.75	1.14	15.89	14:58:34
May 11	3:27	4:11	4:45	12:08	19:32	20:07	20:51	14.79	1.15	15.94	15:02:31
May 12	3:25	4:09	4:44	12:08	19:34	20:08	20:53	14.83	1.15	15.98	15:06:27
May 13	3:24	4:08	4:43	12:08	19:35	20:10	20:54	14.87	1.16	16.03	15:10:24
May 14	3:22	4:07	4:41	12:08	19:36	20:11	20:56	14.91	1.16	16.08	15:14:20
May 15	3:20	4:05	4:40	12:08	19:37	20:12	20:58	14.95	1.17	16.12	15:18:17
May 16	3:19	4:04	4:39	12:08	19:38	20:14	20:59	14.99	1.17	16.16	15:22:13
May 17	3:17	4:03	4:38	12:08	19:40	20:15	21:01	15.03	1.18	16.21	15:26:10
May 18	3:16	4:01	4:37	12:08	19:41	20:16	21:02	15.07	1.18	16.25	15:30:07
May 19	3:14	4:00	4:36	12:08	19:42	20:18	21:04	15.10	1.19	16.29	15:34:03
May 20	3:13	3:59	4:35	12:09	19:43	20:19	21:05	15.14	1.19	16.33	15:38:00
May 21	3:11	3:58	4:34	12:09	19:44	20:20	21:07	15.17	1.20	16.37	15:41:56
May 22	3:10	3:57	4:33	12:09	19:45	20:21	21:08	15.21	1.20	16.41	15:45:53
May 23	3:09	3:56	4:32	12:09	19:46	20:23	21:10	15.24	1.21	16.45	15:49:49
May 24	3:07	3:55	4:31	12:09	19:47	20:24	21:11	15.28	1.21	16.49	15:53:46
May 25	3:06	3:54	4:30	12:09	19:48	20:25	21:13	15.31	1.22	16.52	15:57:42
May 26	3:05	3:53	4:29	12:09	19:50	20:26	21:14	15.34	1.22	16.56	16:01:39
May 27	3:04	3:52	4:28	12:09	19:51	20:27	21:16	15.37	1.22	16.59	16:05:36
May 28	3:03	3:51	4:28	12:09	19:51	20:28	21:17	15.40	1.23	16.63	16:09:32
May 29	3:01	3:50	4:27	12:09	19:52	20:30	21:18	15.43	1.23	16.66	16:13:29
May 30	3:00	3:49	4:26	12:10	19:53	20:31	21:20	15.45	1.24	16.69	16:17:25
May 31	2:59	3:48	4:26	12:10	19:54	20:32	21:21	15.48	1.24	16.72	16:21:22
Jun 1	2:58	3:48	4:25	12:10	19:55	20:33	21:22	15.50	1.25	16.75	16:25:18
Jun 2	2:57	3:47	4:24	12:10	19:56	20:34	21:23	15.53	1.25	16.78	16:29:15
Jun 3	2:57	3:46	4:24	12:10	19:57	20:35	21:25	15.55	1.25	16.80	16:33:11
Jun 4	2:56	3:46	4:23	12:10	19:58	20:35	21:26	15.57	1.26	16.83	16:37:08
Jun 5	2:55	3:45	4:23	12:11	19:58	20:36	21:27	15.59	1.26	16.85	16:41:05
Jun 6	2:54	3:45	4:23	12:11	19:59	20:37	21:28	15.61	1.26	16.87	16:45:01
Jun 7	2:54	3:44	4:22	12:11	20:00	20:38	21:29	15.63	1.27	16.89	16:48:58
Jun 8	2:53	3:44	4:22	12:11	20:01	20:39	21:30	15.65	1.27	16.91	16:52:54
Jun 9	2:53	3:43	4:22	12:11	20:01	20:39	21:31	15.66	1.27	16.93	16:56:51
Jun 10	2:52	3:43	4:21	12:11	20:02	20:40	21:31	15.68	1.27	16.95	17:00:47
Jun 11	2:52	3:43	4:21	12:12	20:02	20:41	21:32	15.69	1.28	16.96	17:04:44
Jun 12	2:51	3:43	4:21	12:12	20:03	20:41	21:33	15.70	1.28	16.98	17:08:40
Jun 13	2:51	3:42	4:21	12:12	20:04	20:42	21:34	15.71	1.28	16.99	17:12:37
Jun 14	2:51	3:42	4:21	12:12	20:04	20:42	21:34	15.72	1.28	17.00	17:16:34
Jun 15	2:50	3:42	4:21	12:12	20:05	20:43	21:35	15.73	1.28	17.01	17:20:30
Jun 16	2:50	3:42	4:21	12:13	20:05	20:43	21:35	15.74	1.28	17.02	17:24:27
Jun 17	2:50	3:42	4:21	12:13	20:05	20:44	21:36	15.74	1.28	17.03	17:28:23
Jun 18	2:50	3:42	4:21	12:13	20:06	20:44	21:36	15.75	1.28	17.03	17:32:20
Jun 19	2:50	3:42	4:21	12:13	20:06	20:45	21:37	15.75	1.29	17.04	17:36:16
Jun 20	2:50	3:42	4:21	12:14	20:06	20:45	21:37	15.75	1.29	17.04	17:40:13
Jun 21	2:51	3:43	4:21	12:14	20:06	20:45	21:37	15.75	1.29	17.04	17:44:09
Jun 22	2:51	3:43	4:21	12:14	20:07	20:45	21:37	15.75	1.29	17.04	17:48:06
Jun 23	2:51	3:43	4:22	12:14	20:07	20:45	21:37	15.75	1.29	17.04	17:52:03
Jun 24	2:51	3:43	4:22	12:14	20:07	20:45	21:37	15.75	1.28	17.03	17:55:59

Jun 25	2:52	3:44	4:22	12:15	20:07	20:45	21:37	15.74	1.28	17.03	17:59:56
Jun 26	2:52	3:44	4:23	12:15	20:07	20:45	21:37	15.74	1.28	17.02	18:03:52
Jun 27	2:53	3:45	4:23	12:15	20:07	20:45	21:37	15.73	1.28	17.01	18:07:49
Jun 28	2:53	3:45	4:23	12:15	20:07	20:45	21:37	15.72	1.28	17.00	18:11:45
Jun 29	2:54	3:46	4:24	12:15	20:07	20:45	21:37	15.71	1.28	16.99	18:15:42
Jun 30	2:55	3:46	4:24	12:16	20:07	20:45	21:36	15.70	1.28	16.98	18:19:38
Jul 1	2:55	3:47	4:25	12:16	20:06	20:45	21:36	15.69	1.28	16.97	18:23:35
Jul 2	2:56	3:47	4:26	12:16	20:06	20:44	21:36	15.68	1.27	16.95	18:27:32
Jul 3	2:57	3:48	4:26	12:16	20:06	20:44	21:35	15.66	1.27	16.93	18:31:28
Jul 4	2:58	3:49	4:27	12:16	20:06	20:44	21:34	15.65	1.27	16.91	18:35:25
Jul 5	2:59	3:50	4:28	12:17	20:05	20:43	21:34	15.63	1.27	16.90	18:39:21
Jul 6	3:00	3:50	4:28	12:17	20:05	20:43	21:33	15.61	1.26	16.87	18:43:18
Jul 7	3:01	3:51	4:29	12:17	20:05	20:42	21:32	15.59	1.26	16.85	18:47:14
Jul 8	3:02	3:52	4:30	12:17	20:04	20:42	21:32	15.57	1.26	16.83	18:51:11
Jul 9	3:03	3:53	4:30	12:17	20:04	20:41	21:31	15.55	1.25	16.80	18:55:07
Jul 10	3:04	3:54	4:31	12:17	20:03	20:40	21:30	15.53	1.25	16.78	18:59:04
Jul 11	3:05	3:55	4:32	12:18	20:02	20:40	21:29	15.50	1.25	16.75	19:03:01
Jul 12	3:06	3:56	4:33	12:18	20:02	20:39	21:28	15.48	1.24	16.72	19:06:57
Jul 13	3:08	3:57	4:34	12:18	20:01	20:38	21:27	15.45	1.24	16.69	19:10:54
Jul 14	3:09	3:58	4:35	12:18	20:00	20:37	21:26	15.43	1.23	16.66	19:14:50
Jul 15	3:10	3:59	4:36	12:18	20:00	20:37	21:25	15.40	1.23	16.63	19:18:47
Jul 16	3:11	4:00	4:37	12:18	19:59	20:36	21:24	15.37	1.23	16.60	19:22:43
Jul 17	3:13	4:01	4:38	12:18	19:58	20:35	21:23	15.34	1.22	16.56	19:26:40
Jul 18	3:14	4:02	4:39	12:18	19:57	20:34	21:21	15.31	1.22	16.53	19:30:36
Jul 19	3:16	4:03	4:40	12:18	19:56	20:33	21:20	15.28	1.21	16.49	19:34:33
Jul 20	3:17	4:04	4:41	12:18	19:55	20:32	21:19	15.25	1.21	16.45	19:38:30
Jul 21	3:18	4:06	4:42	12:18	19:55	20:31	21:17	15.21	1.20	16.42	19:42:26
Jul 22	3:20	4:07	4:43	12:18	19:54	20:29	21:16	15.18	1.20	16.38	19:46:23
Jul 23	3:21	4:08	4:44	12:19	19:53	20:28	21:14	15.14	1.19	16.34	19:50:19
Jul 24	3:23	4:09	4:45	12:19	19:51	20:27	21:13	15.11	1.19	16.30	19:54:16
Jul 25	3:24	4:10	4:46	12:19	19:50	20:26	21:12	15.07	1.18	16.26	19:58:12
Jul 26	3:26	4:12	4:47	12:19	19:49	20:25	21:10	15.04	1.18	16.21	20:02:09
Jul 27	3:28	4:13	4:48	12:19	19:48	20:23	21:08	15.00	1.17	16.17	20:06:05
Jul 28	3:29	4:14	4:49	12:19	19:47	20:22	21:07	14.96	1.17	16.13	20:10:02
Jul 29	3:31	4:16	4:51	12:18	19:46	20:21	21:05	14.92	1.16	16.08	20:13:59
Jul 30	3:32	4:17	4:52	12:18	19:44	20:19	21:04	14.88	1.16	16.04	20:17:55
Jul 31	3:34	4:18	4:53	12:18	19:43	20:18	21:02	14.84	1.16	15.99	20:21:52
Aug 1	3:35	4:19	4:54	12:18	19:42	20:16	21:00	14.80	1.15	15.95	20:25:48
Aug 2	3:37	4:21	4:55	12:18	19:41	20:15	20:58	14.76	1.15	15.90	20:29:45
Aug 3	3:39	4:22	4:56	12:18	19:39	20:13	20:57	14.71	1.14	15.85	20:33:41
Aug 4	3:40	4:23	4:58	12:18	19:38	20:12	20:55	14.67	1.14	15.81	20:37:38
Aug 5	3:42	4:25	4:59	12:18	19:36	20:10	20:53	14.63	1.13	15.76	20:41:34
Aug 6	3:43	4:26	5:00	12:18	19:35	20:09	20:51	14.58	1.13	15.71	20:45:31
Aug 7	3:45	4:27	5:01	12:18	19:34	20:07	20:49	14.54	1.12	15.66	20:49:28
Aug 8	3:47	4:29	5:02	12:18	19:32	20:06	20:48	14.49	1.12	15.61	20:53:24
Aug 9	3:48	4:30	5:04	12:18	19:31	20:04	20:46	14.45	1.11	15.56	20:57:21
Aug 10	3:50	4:32	5:05	12:17	19:29	20:02	20:44	14.40	1.11	15.51	21:01:17
Aug 11	3:51	4:33	5:06	12:17	19:28	20:01	20:42	14.36	1.10	15.46	21:05:14
Aug 12	3:53	4:34	5:07	12:17	19:26	19:59	20:40	14.31	1.10	15.41	21:09:10
Aug 13	3:55	4:36	5:09	12:17	19:24	19:57	20:38	14.26	1.10	15.36	21:13:07
Aug 14	3:56	4:37	5:10	12:17	19:23	19:55	20:36	14.22	1.09	15.31	21:17:03
Aug 15	3:58	4:38	5:11	12:17	19:21	19:54	20:34	14.17	1.09	15.25	21:21:00
Aug 16	3:59	4:40	5:12	12:16	19:19	19:52	20:32	14.12	1.08	15.20	21:24:57
Aug 17	4:01	4:41	5:14	12:16	19:18	19:50	20:30	14.07	1.08	15.15	21:28:53
Aug 18	4:03	4:42	5:15	12:16	19:16	19:48	20:28	14.02	1.08	15.10	21:32:50
Aug 19	4:04	4:44	5:16	12:16	19:14	19:47	20:26	13.97	1.07	15.04	21:36:46
Aug 20	4:06	4:45	5:17	12:15	19:13	19:45	20:24	13.92	1.07	14.99	21:40:43
Aug 21	4:07	4:47	5:19	12:15	19:11	19:43	20:22	13.87	1.06	14.94	21:44:39
Aug 22	4:09	4:48	5:20	12:15	19:09	19:41	20:20	13.82	1.06	14.88	21:48:36
Aug 23	4:10	4:49	5:21	12:15	19:07	19:39	20:18	13.77	1.06	14.83	21:52:32
Aug 24	4:12	4:51	5:22	12:14	19:06	19:37	20:16	13.72	1.05	14.78	21:56:29
Aug 25	4:13	4:52	5:24	12:14	19:04	19:35	20:14	13.67	1.05	14.72	22:00:26
Aug 26	4:15	4:53	5:25	12:14	19:02	19:33	20:12	13.62	1.05	14.67	22:04:22
Aug 27	4:16	4:55	5:26	12:14	19:00	19:32	20:09	13.57	1.04	14.61	22:08:19
Aug 28	4:18	4:56	5:27	12:13	18:58	19:30	20:07	13.52	1.04	14.56	22:12:15

Aug 29	4:19	4:57	5:29	12:13	18:57	19:28	20:05	13.47	1.04	14.51	22:16:12
Aug 30	4:21	4:59	5:30	12:13	18:55	19:26	20:03	13.42	1.03	14.45	22:20:08
Aug 31	4:22	5:00	5:31	12:12	18:53	19:24	20:01	13.36	1.03	14.40	22:24:05
Sep 1	4:24	5:01	5:32	12:12	18:51	19:22	19:59	13.31	1.03	14.34	22:28:01
Sep 2	4:25	5:03	5:34	12:12	18:49	19:20	19:57	13.26	1.03	14.29	22:31:58
Sep 3	4:27	5:04	5:35	12:11	18:47	19:18	19:55	13.21	1.02	14.23	22:35:55
Sep 4	4:28	5:05	5:36	12:11	18:45	19:16	19:53	13.16	1.02	14.18	22:39:51
Sep 5	4:30	5:07	5:37	12:11	18:43	19:14	19:51	13.10	1.02	14.12	22:43:48
Sep 6	4:31	5:08	5:38	12:10	18:42	19:12	19:48	13.05	1.02	14.07	22:47:44
Sep 7	4:33	5:09	5:40	12:10	18:40	19:10	19:46	13.00	1.01	14.01	22:51:41
Sep 8	4:34	5:11	5:41	12:10	18:38	19:08	19:44	12.95	1.01	13.96	22:55:37
Sep 9	4:36	5:12	5:42	12:09	18:36	19:06	19:42	12.89	1.01	13.90	22:59:34
Sep 10	4:37	5:13	5:43	12:09	18:34	19:04	19:40	12.84	1.01	13.85	23:03:30
Sep 11	4:38	5:14	5:45	12:09	18:32	19:02	19:38	12.79	1.01	13.79	23:07:27
Sep 12	4:40	5:16	5:46	12:08	18:30	19:00	19:36	12.73	1.00	13.74	23:11:24
Sep 13	4:41	5:17	5:47	12:08	18:28	18:58	19:34	12.68	1.00	13.68	23:15:20
Sep 14	4:43	5:18	5:48	12:08	18:26	18:56	19:32	12.63	1.00	13.63	23:19:17
Sep 15	4:44	5:20	5:50	12:07	18:24	18:54	19:30	12.57	1.00	13.57	23:23:13
Sep 16	4:45	5:21	5:51	12:07	18:22	18:52	19:27	12.52	1.00	13.52	23:27:10
Sep 17	4:47	5:22	5:52	12:07	18:20	18:50	19:25	12.47	1.00	13.46	23:31:06
Sep 18	4:48	5:24	5:53	12:06	18:18	18:48	19:23	12.41	1.00	13.41	23:35:03
Sep 19	4:49	5:25	5:55	12:06	18:16	18:46	19:21	12.36	1.00	13.35	23:38:59
Sep 20	4:51	5:26	5:56	12:06	18:14	18:44	19:19	12.30	0.99	13.30	23:42:56
Sep 21	4:52	5:27	5:57	12:05	18:12	18:42	19:17	12.25	0.99	13.24	23:46:53
Sep 22	4:53	5:29	5:58	12:05	18:10	18:40	19:15	12.20	0.99	13.19	23:50:49
Sep 23	4:55	5:30	6:00	12:04	18:08	18:38	19:13	12.14	0.99	13.14	23:54:46
Sep 24	4:56	5:31	6:01	12:04	18:06	18:36	19:11	12.09	0.99	13.08	23:58:42
Sep 25	4:58	5:32	6:02	12:04	18:04	18:34	19:09	12.04	0.99	13.03	0:02:39
Sep 26	4:59	5:34	6:04	12:03	18:02	18:32	19:07	11.98	0.99	12.97	0:06:35
Sep 27	5:00	5:35	6:05	12:03	18:01	18:30	19:05	11.93	0.99	12.92	0:10:32
Sep 28	5:01	5:36	6:06	12:03	17:59	18:28	19:03	11.87	0.99	12.87	0:14:28
Sep 29	5:03	5:38	6:07	12:02	17:57	18:26	19:01	11.82	0.99	12.81	0:18:25
Sep 30	5:04	5:39	6:09	12:02	17:55	18:24	18:59	11.77	0.99	12.76	0:22:22
Oct 1	5:05	5:40	6:10	12:02	17:53	18:22	18:57	11.71	0.99	12.70	0:26:18
Oct 2	5:07	5:41	6:11	12:01	17:51	18:21	18:55	11.66	0.99	12.65	0:30:15
Oct 3	5:08	5:43	6:13	12:01	17:49	18:19	18:53	11.61	0.99	12.60	0:34:11
Oct 4	5:09	5:44	6:14	12:01	17:47	18:17	18:51	11.55	0.99	12.54	0:38:08
Oct 5	5:11	5:45	6:15	12:01	17:45	18:15	18:49	11.50	0.99	12.49	0:42:04
Oct 6	5:12	5:47	6:16	12:00	17:43	18:13	18:48	11.45	0.99	12.44	0:46:01
Oct 7	5:13	5:48	6:18	12:00	17:41	18:11	18:46	11.39	0.99	12.39	0:49:57
Oct 8	5:15	5:49	6:19	12:00	17:39	18:09	18:44	11.34	0.99	12.33	0:53:54
Oct 9	5:16	5:51	6:20	11:59	17:38	18:07	18:42	11.29	1.00	12.28	0:57:51
Oct 10	5:17	5:52	6:22	11:59	17:36	18:06	18:40	11.23	1.00	12.23	1:01:47
Oct 11	5:19	5:53	6:23	11:59	17:34	18:04	18:38	11.18	1.00	12.18	1:05:44
Oct 12	5:20	5:54	6:24	11:59	17:32	18:02	18:36	11.13	1.00	12.13	1:09:40
Oct 13	5:21	5:56	6:26	11:58	17:30	18:00	18:35	11.07	1.00	12.07	1:13:37
Oct 14	5:22	5:57	6:27	11:58	17:28	17:58	18:33	11.02	1.00	12.02	1:17:33
Oct 15	5:24	5:58	6:28	11:58	17:27	17:57	18:31	10.97	1.00	11.97	1:21:30
Oct 16	5:25	6:00	6:30	11:58	17:25	17:55	18:29	10.92	1.00	11.92	1:25:26
Oct 17	5:26	6:01	6:31	11:57	17:23	17:53	18:28	10.86	1.01	11.87	1:29:23
Oct 18	5:28	6:02	6:33	11:57	17:21	17:51	18:26	10.81	1.01	11.82	1:33:20
Oct 19	5:29	6:04	6:34	11:57	17:20	17:50	18:24	10.76	1.01	11.77	1:37:16
Oct 20	5:30	6:05	6:35	11:57	17:18	17:48	18:23	10.71	1.01	11.72	1:41:13
Oct 21	5:31	6:06	6:37	11:57	17:16	17:46	18:21	10.66	1.01	11.67	1:45:09
Oct 22	5:33	6:08	6:38	11:57	17:14	17:45	18:20	10.61	1.01	11.62	1:49:06
Oct 23	5:34	6:09	6:39	11:56	17:13	17:43	18:18	10.55	1.02	11.57	1:53:02
Oct 24	5:35	6:10	6:41	11:56	17:11	17:42	18:16	10.50	1.02	11.52	1:56:59
Oct 25	5:37	6:12	6:42	11:56	17:09	17:40	18:15	10.45	1.02	11.47	2:00:55
Oct 26	5:38	6:13	6:44	11:56	17:08	17:38	18:13	10.40	1.02	11.43	2:04:52
Oct 27	5:39	6:14	6:45	11:56	17:06	17:37	18:12	10.35	1.03	11.38	2:08:49
Oct 28	5:41	6:16	6:46	11:56	17:05	17:35	18:10	10.30	1.03	11.33	2:12:45
Oct 29	5:42	6:17	6:48	11:56	17:03	17:34	18:09	10.25	1.03	11.28	2:16:42
Oct 30	5:43	6:18	6:49	11:56	17:02	17:33	18:08	10.20	1.03	11.24	2:20:38
Oct 31	5:44	6:20	6:51	11:56	17:00	17:31	18:06	10.15	1.04	11.19	2:24:35
Nov 1	5:46	6:21	6:52	11:56	16:59	17:30	18:05	10.11	1.04	11.14	2:28:31

Nov 2	5:47	6:22	6:54	11:56	16:57	17:28	18:04	10.06	1.04	11.10	2:32:28
Nov 3	5:48	6:24	6:55	11:56	16:56	17:27	18:02	10.01	1.04	11.05	2:36:24
Nov 4	5:50	6:25	6:56	11:56	16:54	17:26	18:01	9.96	1.05	11.01	2:40:21
Nov 5	5:51	6:26	6:58	11:56	16:53	17:24	18:00	9.92	1.05	10.97	2:44:18
Nov 6	5:52	6:28	6:59	11:56	16:51	17:23	17:59	9.87	1.05	10.92	2:48:14
Nov 7	5:53	6:29	7:01	11:56	16:50	17:22	17:57	9.82	1.06	10.88	2:52:11
Nov 8	5:55	6:30	7:02	11:56	16:49	17:21	17:56	9.78	1.06	10.84	2:56:07
Nov 9	5:56	6:32	7:04	11:56	16:48	17:19	17:55	9.73	1.06	10.79	3:00:04
Nov 10	5:57	6:33	7:05	11:56	16:46	17:18	17:54	9.69	1.06	10.75	3:04:00
Nov 11	5:58	6:34	7:06	11:56	16:45	17:17	17:53	9.64	1.07	10.71	3:07:57
Nov 12	6:00	6:36	7:08	11:56	16:44	17:16	17:52	9.60	1.07	10.67	3:11:53
Nov 13	6:01	6:37	7:09	11:56	16:43	17:15	17:51	9.56	1.07	10.63	3:15:50
Nov 14	6:02	6:38	7:11	11:56	16:42	17:14	17:50	9.52	1.08	10.59	3:19:47
Nov 15	6:04	6:40	7:12	11:57	16:41	17:13	17:49	9.48	1.08	10.55	3:23:43
Nov 16	6:05	6:41	7:14	11:57	16:40	17:12	17:48	9.43	1.08	10.52	3:27:40
Nov 17	6:06	6:42	7:15	11:57	16:39	17:11	17:48	9.39	1.09	10.48	3:31:36
Nov 18	6:07	6:44	7:16	11:57	16:38	17:10	17:47	9.36	1.09	10.44	3:35:33
Nov 19	6:08	6:45	7:18	11:57	16:37	17:09	17:46	9.32	1.09	10.41	3:39:29
Nov 20	6:10	6:46	7:19	11:58	16:36	17:09	17:45	9.28	1.09	10.37	3:43:26
Nov 21	6:11	6:47	7:20	11:58	16:35	17:08	17:45	9.24	1.10	10.34	3:47:22
Nov 22	6:12	6:49	7:22	11:58	16:34	17:07	17:44	9.21	1.10	10.31	3:51:19
Nov 23	6:13	6:50	7:23	11:58	16:33	17:06	17:43	9.17	1.10	10.27	3:55:16
Nov 24	6:14	6:51	7:24	11:59	16:33	17:06	17:43	9.14	1.11	10.24	3:59:12
Nov 25	6:15	6:52	7:26	11:59	16:32	17:05	17:42	9.10	1.11	10.21	4:03:09
Nov 26	6:17	6:54	7:27	11:59	16:31	17:05	17:42	9.07	1.11	10.18	4:07:05
Nov 27	6:18	6:55	7:28	12:00	16:31	17:04	17:41	9.04	1.12	10.15	4:11:02
Nov 28	6:19	6:56	7:30	12:00	16:30	17:04	17:41	9.01	1.12	10.13	4:14:58
Nov 29	6:20	6:57	7:31	12:00	16:30	17:03	17:40	8.98	1.12	10.10	4:18:55
Nov 30	6:21	6:58	7:32	12:01	16:29	17:03	17:40	8.95	1.12	10.07	4:22:51
Dec 1	6:22	6:59	7:33	12:01	16:29	17:02	17:40	8.92	1.13	10.05	4:26:48
Dec 2	6:23	7:00	7:34	12:01	16:28	17:02	17:39	8.90	1.13	10.03	4:30:45
Dec 3	6:24	7:02	7:35	12:02	16:28	17:02	17:39	8.87	1.13	10.00	4:34:41
Dec 4	6:25	7:03	7:37	12:02	16:28	17:02	17:39	8.85	1.13	9.98	4:38:38
Dec 5	6:26	7:04	7:38	12:03	16:27	17:01	17:39	8.83	1.14	9.96	4:42:34
Dec 6	6:27	7:05	7:39	12:03	16:27	17:01	17:39	8.80	1.14	9.94	4:46:31
Dec 7	6:28	7:06	7:40	12:03	16:27	17:01	17:39	8.78	1.14	9.92	4:50:27
Dec 8	6:29	7:07	7:41	12:04	16:27	17:01	17:39	8.77	1.14	9.91	4:54:24
Dec 9	6:30	7:08	7:42	12:04	16:27	17:01	17:39	8.75	1.14	9.89	4:58:20
Dec 10	6:31	7:08	7:43	12:05	16:27	17:01	17:39	8.73	1.14	9.88	5:02:17
Dec 11	6:31	7:09	7:44	12:05	16:27	17:01	17:39	8.72	1.15	9.86	5:06:14
Dec 12	6:32	7:10	7:45	12:06	16:27	17:01	17:39	8.70	1.15	9.85	5:10:10
Dec 13	6:33	7:11	7:45	12:06	16:27	17:01	17:39	8.69	1.15	9.84	5:14:07
Dec 14	6:34	7:12	7:46	12:07	16:27	17:01	17:39	8.68	1.15	9.83	5:18:03
Dec 15	6:35	7:12	7:47	12:07	16:27	17:02	17:40	8.67	1.15	9.82	5:22:00
Dec 16	6:35	7:13	7:48	12:08	16:27	17:02	17:40	8.66	1.15	9.81	5:25:56
Dec 17	6:36	7:14	7:48	12:08	16:28	17:02	17:40	8.65	1.15	9.81	5:29:53
Dec 18	6:37	7:15	7:49	12:09	16:28	17:03	17:41	8.65	1.15	9.80	5:33:49
Dec 19	6:37	7:15	7:50	12:09	16:28	17:03	17:41	8.64	1.15	9.80	5:37:46
Dec 20	6:38	7:16	7:50	12:10	16:29	17:03	17:41	8.64	1.15	9.79	5:41:43
Dec 21	6:38	7:16	7:51	12:10	16:29	17:04	17:42	8.64	1.15	9.79	5:45:39
Dec 22	6:39	7:17	7:51	12:11	16:30	17:04	17:42	8.64	1.15	9.79	5:49:36
Dec 23	6:39	7:17	7:52	12:11	16:30	17:05	17:43	8.64	1.15	9.79	5:53:32
Dec 24	6:40	7:18	7:52	12:12	16:31	17:05	17:43	8.64	1.15	9.80	5:57:29
Dec 25	6:40	7:18	7:53	12:12	16:31	17:06	17:44	8.65	1.15	9.80	6:01:25
Dec 26	6:40	7:18	7:53	12:13	16:32	17:07	17:45	8.65	1.15	9.81	6:05:22
Dec 27	6:41	7:19	7:53	12:13	16:33	17:07	17:45	8.66	1.15	9.81	6:09:18
Dec 28	6:41	7:19	7:53	12:13	16:34	17:08	17:46	8.67	1.15	9.82	6:13:15
Dec 29	6:41	7:19	7:54	12:14	16:34	17:09	17:47	8.68	1.15	9.83	6:17:12
Dec 30	6:41	7:19	7:54	12:14	16:35	17:10	17:48	8.69	1.15	9.84	6:21:08
Dec 31	6:42	7:20	7:54	12:15	16:36	17:11	17:48	8.70	1.15	9.85	6:25:05

average: 12.24 1.10 13.33

Longitude	Latitude	Station No	Climate ID	Date/Time	Year	Month	Day	Data Quali	Max Temp	Max Temp	Min Temp	Min Temp	Mean Temp	Mean Temp	Flag	Heat Deg Da	Heat Deg C	Cool Deg C	Cool Deg C	Total Rain	Total Rain	Total Snow	Total Snow	Total Preci	Total Preci	Snow on G	Snow on G	Dir of Max	Dir of Max	Spd of Max	Spd of Max	Gust Flag
-63.12	46.29	CHARLOTT	83000301	2016-01-01	2016	1	1	-0.2	-6	-3.1	-2.1	0	0	0	0	0.6	0.4	25	27	48												
-63.12	46.29	CHARLOTT	83000301	2016-01-02	2016	1	2	0.2	-6.1	-3	-1.9	0	0	0	0	0	0	0	0	25	27	44										
-63.12	46.29	CHARLOTT	83000301	2016-01-03	2016	1	3	-0.6	-5	-4.8	-1.8	0	0	0	0	0.6	2.4	25	25	33												
-63.12	46.29	CHARLOTT	83000301	2016-01-04	2016	1	4	-1	-9.8	-5.4	-2.3	0	0	0	0	0	0	0	0	26	25	44										
-63.12	46.29	CHARLOTT	83000301	2016-01-05	2016	1	5	-6.8	-13.2	-10	-28	0	0	0	0	4.4	0.6	33	33	33												
-63.12	46.29	CHARLOTT	83000301	2016-01-06	2016	1	6	-4.1	-8.5	-6.3	-24.3	0	0	0	0	0	0	0	0	35	25	56										
-63.12	46.29	CHARLOTT	83000301	2016-01-07	2016	1	7	-0.1	-7.6	-3.9	-21.9	0	0	0	0	0	0	0	0	35	25	<31										
-63.12	46.29	CHARLOTT	83000301	2016-01-08	2016	1	8	-2.4	-4.7	-4.6	-22.6	0	0	0	0	0	0	0	0	30	25	<31										
-63.12	46.29	CHARLOTT	83000301	2016-01-09	2016	1	9	-2.5	-5.1	-3.8	-21.8	0	0	0	0	0	0	0	0	30	25	<31										
-63.12	46.29	CHARLOTT	83000301	2016-01-10	2016	1	10	4.7	-3.1	0.8	-17.2	0	0	0.2	0	0.2	0	0	25	13	67											
-63.12	46.29	CHARLOTT	83000301	2016-01-11	2016	1	11	9.4	-5.1	2.2	15.8	0	0	16	0	16	9	13	82													
-63.12	46.29	CHARLOTT	83000301	2016-01-12	2016	1	12	-3.1	-9.2	-6.2	-24.2	0	0	0	0	0	0	0	2	26	48											
-63.12	46.29	CHARLOTT	83000301	2016-01-13	2016	1	13	0.5	-6.5	-3.2	-22	0	0	0.4	0	16	12	9	27	78												
-63.12	46.29	CHARLOTT	83000301	2016-01-14	2016	1	14	-6.8	-12.2	-8.5	-27.5	0	0	0	0.8	0.4	8	27	63													
-63.12	46.29	CHARLOTT	83000301	2016-01-15	2016	1	15	-8.2	-13.1	-10.7	-28.7	0	0	0	0	0	0	0	8	26	69											
-63.12	46.29	CHARLOTT	83000301	2016-01-16	2016	1	16	-2.6	-15.9	-9.3	-27.3	0	0	0	0	0	0	0	7	1	57											
-63.12	46.29	CHARLOTT	83000301	2016-01-17	2016	1	17	-1.7	-6.3	-1.4	-22	0	0	0	0	0	0	0	7	31	37											
-63.12	46.29	CHARLOTT	83000301	2016-01-18	2016	1	18	-1.8	-6.4	-1.4	-22.6	0	0	0	0	0	0	0	7	31	37											
-63.12	46.29	CHARLOTT	83000301	2016-01-19	2016	1	19	-7.3	-12.3	-8.8	-27.8	0	0	0	0	0	0	0	7	25	54											
-63.12	46.29	CHARLOTT	83000301	2016-01-20	2016	1	20	-2.3	-8	-5.2	-23.2	0	0	0	0	0	0	0	6	26	69											
-63.12	46.29	CHARLOTT	83000301	2016-01-21	2016	1	21	-6.8	-8.8	-7.8	-25.8	0	0	0.4	2	2	5	28		46												
-63.12	46.29	CHARLOTT	83000301	2016-01-22	2016	1	22	-6.3	-10	-8.2	-26.2	0	0	0	0.4	0.2	7	28		44												
-63.12	46.29	CHARLOTT	83000301	2016-01-23	2016	1	23	-4.9	-10.7	-8.8	-25.8	0	0	0	0	0	0	0	3	35												
-63.12	46.29	CHARLOTT	83000301	2016-01-24	2016	1	24	-3.2	-8.1	-5.7	-23.7	0	0	0	0	0	0	0	6	3	52											
-63.12	46.29	CHARLOTT	83000301	2016-01-25	2016	1	25	-2.8	-12.9	-7.9	-25.9	0	0	0	0.4	0.4	6	34		35												
-63.12	46.29	CHARLOTT	83000301	2016-01-26	2016	1	26	5.8	-9.4	-1.8	-19.8	0	0	0	0	0	0	0	6	23	61											
-63.12	46.29	CHARLOTT	83000301	2016-01-27	2016	1	27	5.3	-8.7	-1.2	-19.8	0	0	0	0	0.4	3	24														
-63.12	46.29	CHARLOTT	83000301	2016-01-28	2016	1	28	-0.4	-2.5	-5.3	-23.3	0	0	0	0	0	0	0	5	32												
-63.12	46.29	CHARLOTT	83000301	2016-01-29	2016	1	29	1	-1.7	-0.4	-18.4	0	0	0	0	16.2	3	3	70													
-63.12	46.29	CHARLOTT	83000301	2016-01-30	2016	1	30	-1.6	-6.3	-4	-22	0	0	0.6	3.6	3.6	22		34													
-63.12	46.29	CHARLOTT	83000301	2016-01-31	2016	1	31	2.4	-3	-0.3	-18.3	0	0	0	0	3.2	24	16	39													
-63.12	46.29	CHARLOTT	83000301	2016-02-01	2016	2	1	0	-2.8	-13.5	-26.2	0	0	0	0	0	0	0	18		48											
-63.12	46.29	CHARLOTT	83000301	2016-02-02	2016	2	2	1.2	-12.1	-7	-25	0	0	0	0	2.2	43	13	48													
-63.12	46.29	CHARLOTT	83000301	2016-02-03	2016	2	3	-12	-7.4	-15.5	-23.7	0	0	0	0	0	0	0	27	48												
-63.12	46.29	CHARLOTT	83000301	2016-02-04	2016	2	4	1.4	-18.8	-8.8	-23.2	0	0	0	0	4.8	9.6	8	16	76												
-63.12	46.29	CHARLOTT	83000301	2016-02-05	2016	2	5	3.1	-5.1	-1.1	-19.1	0	0	0	0	3.8	35.8	1	36	70												
-63.12	46.29	CHARLOTT	83000301	2016-02-06	2016	2	6	-0.5	-9.8	-8.3	-23.2	0	0	0	0	0.4	0.8	5	35	67												
-63.12	46.29	CHARLOTT	83000301	2016-02-07	2016	2	7	2.4	-9.7	-3.4	-21.4	0	0	0	0	0.8	0.2	36	27	65												
-63.12	46.29	CHARLOTT	83000301	2016-02-08	2016	2	8	-4.1	-7.9	-6	-24	0	0	0	0	0	0	0	27													
-63.12	46.29	CHARLOTT	83000301	2016-02-09	2016	2	9	-3.1	-5.2	-4.2	-22.2	0	0	0	0	14.2	12	40	5	78												
-63.12	46.29	CHARLOTT	83000301	2016-02-10	2016	2	10	-2.8	-13.5	-8.2	-26.2	0	0	0	0	0	0	0	44	28												
-63.12	46.29	CHARLOTT	83000301	2016-02-11	2016	2	11	-1.1	-11	-7	-25	0	0	0	0	0	0	0	33													
-63.12	46.29	CHARLOTT	83000301	2016-02-12	2016	2	12	2.2	-8.5	-3.7	-23.7	0	0	0	0	0	0	0	37													
-63.12	46.29	CHARLOTT	83000301	2016-02-13	2016	2	13	-1.3	-8.8	-8.8	-26.8	0	0	0	0	0	0	0	28													
-63.12	46.29	CHARLOTT	83000301	2016-02-14	2016	2	14	-2	-7.6	-4.9	-1.1	-19.1	0	0	0.6	0.6	0	0	0	28												
-63.12	46.29	CHARLOTT	83000301	2016-02-15	2016	2	15	2.1	-7.7	-2.8	-22.8	0	0	0	0	0	0	0	2	41												
-63.12	46.29	CHARLOTT	83000301	2016-02-16	2016	2	16	-1.9	-8.2	-1.1	-21.9	0	0	0	0	0	0	0	2	43												
-63.12	46.29	CHARLOTT	83000301	2016-02-17	2016	2	17	10.5	-3.3	3.6	-14.4	0	0	0	0	0	0	0	2	46												
-63.12	46.29	CHARLOTT	83000301	2016-02-18	2016	2	18	5.7	-6.4	-0.4	-18.4	0	0	0	0	0	0	0	3	52												
-63.12	46.29	CHARLOTT	83000301	2016-02-19	2016	2	19	4.9	-4.2	-2.5	-15.5	0	0	0	0	0	0	0	4	32												
-63.12	46.29	CHARLOTT	83000301	2016-02-20	2016	2	20	-4.5	-9.2	-6.9	-24.9	0	0	0	0	0	0	0	5	37												
-63.12	46.29	CHARLOTT	83000301	2016-02-21	2016	2	21	-1.1	-11	-5.4	-																					

-6312	46.29	CHARLOTT	8300301	2016-06-10	2016	6	10	11.9	6.7	9.3	8.7	0	2	0	2	1	44	
-6312	46.29	CHARLOTT	8300301	2016-06-11	2016	6	11	21.3	8.9	15.1	2.9	0	0	0	0	25	35	
-6312	46.29	CHARLOTT	8300301	2016-06-12	2016	6	12	15.5	11.1	13.3	4.7	0	6.4	0	6.4	11	50	
-6312	46.29	CHARLOTT	8300301	2016-06-13	2016	6	13	17.6	11.1	14.3	3.7	0	0.4	0	0.4	17	43	
-6312	46.29	CHARLOTT	8300301	2016-06-14	2016	6	14	11.4	7.4	9.3	8.7	0	14.2	0	14.2	23	56	
-6312	46.29	CHARLOTT	8300301	2016-06-15	2016	6	15	8.9	7.7	8.3	9.7	0	6	0	6	33	41	
-6312	46.29	CHARLOTT	8300301	2016-06-16	2016	6	16	10.5	6.5	8.5	9.5	0	1.6	0	1.6	32	54	
-6312	46.29	CHARLOTT	8300301	2016-06-17	2016	6	17	13.7	2.3	8	10	0	0	0	0	1	44	
-6312	46.29	CHARLOTT	8300301	2016-06-18	2016	6	18	24.9	2.2	15.6	4.4	0	0	0	0	25	33	
-6312	46.29	CHARLOTT	8300301	2016-06-19	2016	6	19	25.4	14.2	19.8	0	1.8	0	0	0	24	61	
-6312	46.29	CHARLOTT	8300301	2016-06-20	2016	6	20	25.5	12.9	19.2	0	1.2	0	0	0	23	56	
-6312	46.29	CHARLOTT	8300301	2016-06-21	2016	6	21	25	12.1	18.6	0	0.6	0	0	0	18	43	
-6312	46.29	CHARLOTT	8300301	2016-06-22	2016	6	22	22.4	13.7	18.1	0	0.1	0	0	0	19	30	
-6312	46.29	CHARLOTT	8300301	2016-06-23	2016	6	23	23.1	12.6	17.9	0.1	0	0	0	0	24	39	
-6312	46.29	CHARLOTT	8300301	2016-06-24	2016	6	24	20.3	11.9	16.1	1.9	0	0.4	0	0.4	29	37	
-6312	46.29	CHARLOTT	8300301	2016-06-25	2016	6	25	25.4	11.4	18.4	0	0.4	0	0	0	21	41	
-6312	46.29	CHARLOTT	8300301	2016-06-26	2016	6	26	26.4	12.5	19.5	0	1.5	0	0	0	12	32	
-6312	46.29	CHARLOTT	8300301	2016-06-27	2016	6	27	26.8	21.1	20.0	3.1	0	0	0	0	23	43	
-6312	46.29	CHARLOTT	8300301	2016-06-28	2016	6	28	25.3	15	20.2	0	2.2	0	0	0	21	48	
-6312	46.29	CHARLOTT	8300301	2016-06-29	2016	6	29	25.4	18.7	22.1	0	4.1	0	0	0	24	61	
-6312	46.29	CHARLOTT	8300301	2016-06-30	2016	6	30	25.4	15.8	20.6	0	2.6	2.8	0	2.8	17	37	
-6312	46.29	CHARLOTT	8300301	2016-07-01	2016	7	1	27.9	15.2	21.6	0	3.6	0	0	0	21	37	
-6312	46.29	CHARLOTT	8300301	2016-07-02	2016	7	2	22.8	15.6	19.2	0	1.2	0	T	0	15	48	
-6312	46.29	CHARLOTT	8300301	2016-07-03	2016	7	3	20.3	14.2	17.3	0.1	0	0	0	0	20	52	
-6312	46.29	CHARLOTT	8300301	2016-07-04	2016	7	4	25.3	13.2	19.3	0	1.3	0	0	0	27	43	
-6312	46.29	CHARLOTT	8300301	2016-07-05	2016	7	5	26.9	16.8	21.9	0	3.9	1.2	0	1.2	32	56	
-6312	46.29	CHARLOTT	8300301	2016-07-06	2016	7	6	17.1	10.6	13.9	4.1	0	0.4	0	0.4	2	35	
-6312	46.29	CHARLOTT	8300301	2016-07-07	2016	7	7	10.3	13.7	14.3	4.3	0	1.7	0	1.7	23	43	
-6312	46.29	CHARLOTT	8300301	2016-07-08	2016	7	8	15.7	10.2	13	5	0	1.2	0	1.2	5	35	
-6312	46.29	CHARLOTT	8300301	2016-07-09	2016	7	9	16.1	11.6	13.9	4.1	0	0	0	0	20	43	
-6312	46.29	CHARLOTT	8300301	2016-07-10	2016	7	10	15.3	12.3	13.8	4.2	0	9.8	0	9.8	4	32	
-6312	46.29	CHARLOTT	8300301	2016-07-11	2016	7	11	17.4	14.3	17.1	3.7	0	1.6	0	1.6	35	44	
-6312	46.29	CHARLOTT	8300301	2016-07-12	2016	7	12	25.5	10.2	17.9	0.1	0	0	0	0	21	31	
-6312	46.29	CHARLOTT	8300301	2016-07-13	2016	7	13	24.4	9.5	15.5	1.5	0	0	M	M	M	<31	
-6312	46.29	CHARLOTT	8300301	2016-07-14	2016	7	14	27.9	15.8	21.9	0	3.9	0	0	0	22	56	
-6312	46.29	CHARLOTT	8300301	2016-07-15	2016	7	15	27.4	19.1	23.3	0	5.3	3.8	0	3.8	22	48	
-6312	46.29	CHARLOTT	8300301	2016-07-16	2016	7	16	24.4	15.2	19.8	0	1.8	3.8	0	3.8	4	39	
-6312	46.29	CHARLOTT	8300301	2016-07-17	2016	7	17	12.7	12.8	18.5	0.5	0.4	0.4	0	0.4	21	43	
-6312	46.29	CHARLOTT	8300301	2016-07-18	2016	7	18	26	12.4	17	0	3.7	0	0	0	0	21	43
-6312	46.29	CHARLOTT	8300301	2016-07-19	2016	7	19	23	11.3	17.2	0.8	0	0	0	0	20	43	
-6312	46.29	CHARLOTT	8300301	2016-07-20	2016	7	20	21.2	12.2	16.7	1.3	0	0	0	0	26	46	
-6312	46.29	CHARLOTT	8300301	2016-07-21	2016	7	21	27	14.1	20.6	0	2.6	0	0	0	23	35	
-6312	46.29	CHARLOTT	8300301	2016-07-22	2016	7	22	26.9	18.3	21.6	0	4.6	0	0	0	22	44	
-6312	46.29	CHARLOTT	8300301	2016-07-23	2016	7	23	27.5	15.5	21.9	0	3.9	0.4	0	0.4	32	46	
-6312	46.29	CHARLOTT	8300301	2016-07-24	2016	7	24	25.4	14.7	20.1	0	2.1	0	0	0	21	33	
-6312	46.29	CHARLOTT	8300301	2016-07-25	2016	7	25	27.9	14.5	21.2	0	2.2	0	0	0	17	33	
-6312	46.29	CHARLOTT	8300301	2016-07-26	2016	7	26	22.3	18	20.2	0	2.2	10.2	0	10.2	17	33	
-6312	46.29	CHARLOTT	8300301	2016-07-27	2016	7	27	25.6	17.5	21.4	0	3.4	0	0	0	21	33	
-6312	46.29	CHARLOTT	8300301	2016-07-28	2016	7	28	28.1	18.3	23.2	0	5.2	20.8	0	20.8	22	33	
-6312	46.29	CHARLOTT	8300301	2016-07-29	2016	7	29	24.1	18.9	21.5	0	3.5	0.4	0	0.4	21	43	
-6312	46.29	CHARLOTT	8300301	2016-07-30	2016	7	30	24.1	15.7	19.9	0	1.9	0	0	0	20	39	
-6312	46.29	CHARLOTT	8300301	2016-07-31	2016	7	31	25.4	15.4	18.2	0	0.2	0	0	0	2	33	
-6312	46.29	CHARLOTT	8300301	2016-08-01	2016	8	2	23.2	10.8	15.6	0.1	0	0	0	0	4	35	
-6312	46.29	CHARLOTT	8300301	2016-08-02	2016	8	3	22.3	8.9	15.6	2.4	0	0	0	0	2	33	
-6312	46.29	CHARLOTT	8300301	2016-08-03	2016	8	4	23.3	15.4	25.4	21	0	0	0	0	16	32	
-6312	46.29	CHARLOTT	8300301	2016-08-04	2016	8	5	24.3	15.4	25.4	21	0	3.7	0	3.7	4	36	
-6312	46.29	CHARLOTT	8300301	2016-08-05	2016	8	6	17.6	14.5	18.6	0	0.6	0	0	0	21	33	
-6312	46.29	CHARLOTT	8300301	2016-08-06	2016	8	7	17.6	15.3	17	1.1	0	41.8	0	41.8	10	54	
-6312	46.29	CHARLOTT	8300301	2016-08-07	2016	8	8	22.9	15.6	20	0	2	19.2	0	19.2	28	48	
-6312	46.29	CHARLOTT	8300301	2016-08-08	2016	8	9	21.9	16.2	19.1	0	1.1	0	T	0	2	32	
-6312	46.29	CHARLOTT	8300301	2016-08-09	2016	8	10	21	15.4	18.8	0	0.8	0	0	0	17	33	
-6312	46.29	CHARLOTT	8300301	2016-08-10	2016	8	11	21	14.8	18.4	0	2.4	0	0	0	24	39	
-6312	46.29	CHARLOTT	8300301	2016-08-11	2016	8	12	20.9	15.1	17.3	0.5	0	0	0	0	31	37	
-6312	46.29	CHARLOTT	8300301	2016-08-12	2016	8	13	20.3	15.6	18.6	0	0	0	0	0	18	39	
-6312	46.29	CHARLOTT	8300301	2016-08-13	2016	8	14	19.4	15.5	17.9	0.1	0	0	0	0	21	41	
-6312	46.29	CHARLOTT	8300301	2016-08-14	2016	8	15	18.1	6.4	12.3	0	0	0	0	0	21	41	
-6312	46.29	CHARLOTT	8300301	2016-08-15	2016	8	16	20.4	8.6	14.5	3.5	0	0	0	0	22	35	
-6312	46.29	CHARLOTT	8300301	2016-08-16	2016	8	17	22.4	12.3	16.8	1.2	0	5.4	0	5.4	22	57	
-6312	46.29	CHARLOTT	8300301	2016-08-17	2016	8	18	19	15.4	17.2	0.8	2.1	0	4.1	0	4.1	22	43
-6312	46.29	CHARLOTT	8300301	2016-08-18	2016	8	19	24.7	18.1	20.4	0	2.4	0	0	0	24	43	
-6312	46.29	CHARLOTT	8300301	2016-08-19	2016	8	20	20.1	15.1	17.3	0.5	0	0	0	0	31	37	
-6312	46.29	CHARLOTT	8300301	2016-08-20	2016	8	21	23.4	14.6	19	0	1	4.2</td					

-63.12	46.29	CHARLOTT	8300301	2016-11-19	2016	11	19	9.7	5.7	7.7	10.3	0	7.2	0	7.2	2	48
-63.12	46.29	CHARLOTT	8300301	2016-11-21	2016	11	21	11.7	4.3	8	10	0	0.2	0	0.2	18	35
-63.12	46.29	CHARLOTT	8300301	2016-11-23	2016	11	23	4.8	2.7	2.7	13.3	0	1.2	0	1.2	18	44
-63.12	46.29	CHARLOTT	8300301	2016-11-23	2016	11	23	4.2	0.6	2.4	15.6	0	0.6	0.2	0.2	18	41
-63.12	46.29	CHARLOTT	8300301	2016-11-24	2016	11	24	3.3	0.7	2	16	0	1	0.4	1.4	35	52
-63.12	46.29	CHARLOTT	8300301	2016-11-25	2016	11	25	2.4	-0.2	1.1	16.9	0	0	0.2	0.2	36	43
-63.12	46.29	CHARLOTT	8300301	2016-11-26	2016	11	26	4.9	-2.5	1.2	16.8	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2016-11-26	2016	11	27	4	-0.5	1.9	15.1	0	0	0	0	0	48
-63.12	46.29	CHARLOTT	8300301	2016-11-28	2016	11	28	1	-0.6	0.2	17.8	0	M	6.6	12.2	24.6	8
-63.12	46.29	CHARLOTT	8300301	2016-11-29	2016	11	29	1.4	-1.2	0.1	17.9	0	0	2	2	12	29
-63.12	46.29	CHARLOTT	8300301	2016-11-30	2016	11	30	2.5	-0.5	1	17	0	0	21.8	21.8	14	44
-63.12	46.29	CHARLOTT	8300301	2016-11-30	2016	12	1	4.2	-0.3	2	16	0	0	3.2	3.2	32	43
-63.12	46.29	CHARLOTT	8300301	2016-11-30	2016	12	2	4.2	0.9	2.6	15.4	0	4.8	0	4.8	11	37
-63.12	46.29	CHARLOTT	8300301	2016-11-30	2016	12	3	3	0.1	1.6	15.4	0	2.6	4.2	6.8	67	52
-63.12	46.29	CHARLOTT	8300301	2016-12-03	2016	12	4	0.8	-3.3	-1.3	19.3	0	0	0.8	0.8	15	27
-63.12	46.29	CHARLOTT	8300301	2016-12-06	2016	12	5	-1.2	-3.5	-2.4	20.4	0	0	0	0	43	46
-63.12	46.29	CHARLOTT	8300301	2016-12-05	2016	12	6	-1.6	-3.2	-2.4	20.4	0	0	0	0	33	33
-63.12	46.29	CHARLOTT	8300301	2016-12-05	2016	12	7	-0.8	-3.2	-2.4	20.4	0	0	0	0	30	33
-63.12	46.29	CHARLOTT	8300301	2016-12-08	2016	12	8	1.7	-2.5	-0.4	18.4	0	0	2.8	2.8	21	20
-63.12	46.29	CHARLOTT	8300301	2016-12-09	2016	12	9	-0.9	-5.3	-3.1	21.1	0	0	0.8	0.8	9	48
-63.12	46.29	CHARLOTT	8300301	2016-12-10	2016	12	10	-5.3	-10.6	-8	26	0	0	0	0	29	46
-63.12	46.29	CHARLOTT	8300301	2016-12-10	2016	12	11	-6.1	-10.7	-8.4	26.4	0	0	0	0	3	27
-63.12	46.29	CHARLOTT	8300301	2016-12-12	2016	12	12	-2.3	-13.7	-9	26	0	0	1.4	10.6	9	39
-63.12	46.29	CHARLOTT	8300301	2016-12-13	2016	12	13	0	-5.4	-2.7	20.7	0	0	1.8	1.8	19	43
-63.12	46.29	CHARLOTT	8300301	2016-12-14	2016	12	14	1.9	-7.2	-2.7	20.7	0	1.4	2.6	4	17	39
-63.12	46.29	CHARLOTT	8300301	2016-12-15	2016	12	15	-5.2	-14.3	-9.8	27.8	0	M	10	7.8	14	28
-63.12	46.29	CHARLOTT	8300301	2016-12-17	2016	12	16	-14.3	-16.5	-15.4	33.4	0	0	3.8	2.2	29	55
-63.12	46.29	CHARLOTT	8300301	2016-12-17	2016	12	17	0	-15.5	-15.8	33.6	0	0	0.4	2.3	12	48
-63.12	46.29	CHARLOTT	8300301	2016-12-18	2016	12	18	10.1	-2.7	3.7	14.3	0	0	0.4	0	29	70
-63.12	46.29	CHARLOTT	8300301	2016-12-19	2016	12	19	-2.7	-14.1	-8.4	26.4	0	0	0	0	9	57
-63.12	46.29	CHARLOTT	8300301	2016-12-20	2016	12	20	-4.8	-17.6	-11.2	29.2	0	0	0	0	9	43
-63.12	46.29	CHARLOTT	8300301	2016-12-21	2016	12	21	1.2	-5.1	-2	20	0	0	0.4	0.4	8	52
-63.12	46.29	CHARLOTT	8300301	2016-12-22	2016	12	22	1.5	-1.3	-1.3	20.3	0	0	7	5.6	21	30
-63.12	46.29	CHARLOTT	8300301	2016-12-23	2016	12	23	0.2	-5.1	-2.5	20.5	0	0	0.4	0.4	10	33
-63.12	46.29	CHARLOTT	8300301	2016-12-24	2016	12	24	3.1	-3.8	-0.4	18.4	0	4.2	0	4.2	9	28
-63.12	46.29	CHARLOTT	8300301	2016-12-25	2016	12	25	1.3	-6.6	-2.7	20.7	0	0	1	0.6	4	29
-63.12	46.29	CHARLOTT	8300301	2016-12-26	2016	12	26	-5.7	-9.4	-7.6	23.0	0	0	2.8	2.4	5	59
-63.12	46.29	CHARLOTT	8300301	2016-12-27	2016	12	27	7	-5.5	0.3	27.7	0	M	10	6.4	16	15
-63.12	46.29	CHARLOTT	8300301	2016-12-28	2016	12	28	0.6	-4.1	-1.8	19.8	0	0	1	1	8	<31
-63.12	46.29	CHARLOTT	8300301	2016-12-29	2016	12	29	1.1	-3.6	-1.3	19.3	0	0	0.2	0.2	9	63
-63.12	46.29	CHARLOTT	8300301	2016-12-30	2016	12	30	4.8	-1	1.9	16.1	0	3.8	0	3.8	8	95
-63.12	46.29	CHARLOTT	8300301	2016-12-31	2016	12	31	-0.8	-8.3	-4.6	22.6	0	0	0.2	0.2	6	41

January 713
February 608 Missing Data for February 18, 2016 - see tab for February 2016.

March 654

April 675

May 239

June 121

July 30

August 23

September 101

October 155

November 401

December 665

4,305

4,326

February 628

Adjustment for February 2018 from Harrington data

Longitude	Latitude	Station ID	Climate	Date/Time	Year	Month	Day	Data Qual	Max Temp	Min Temp	Mean Temp	Heat Deg C	Cool Deg C	Total Rain	Total Snow	Total Preci	Total Preci	Snow on G	Dir of Max Preci	Dir of Max Gust
-63.17	46.34	HARRINGT 8309001	1	2016-01-01	2016	1	1	-0.9	-8.3	-4.6	22.6	0	M	M	3.7	18	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-02	2016	1	2	-0.3	-5.2	-2.8	20.8	0	M	M	2.1	18	26	37		
-63.17	46.34	HARRINGT 8309001	1	2016-01-03	2016	1	3	-0.7	-4.1	-2.4	20.4	0	M	M	4.1	16	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-04	2016	1	4	-1.2	-5.5	-3.4	23.4	0	M	M	1.9	21	36	44		
-63.17	46.34	HARRINGT 8309001	1	2016-01-05	2016	1	5	-7	-15.4	-11.2	29.2	0	M	M	2.1	21	25	43		
-63.17	46.34	HARRINGT 8309001	1	2016-01-06	2016	1	6	-4.3	-8.6	-6.5	24.5	0	M	M	0.9	19	24	52		
-63.17	46.34	HARRINGT 8309001	1	2016-01-07	2016	1	7	-0.5	-6.8	-3.7	21.7	0	M	M	2.3	16	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-08	2016	1	8	-2.5	-4.8	-3.7	21.7	0	M	M	2.2	15	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-09	2016	1	9	-2.7	-5.3	-4	22	0	M	M	2.2	15	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-10	2016	1	10	4.5	3.5	0.5	17.5	0	M	M	0.7	14	14	54		
-63.17	46.34	HARRINGT 8309001	1	2016-01-11	2016	1	11	8.6	-5.2	1.7	16.3	0	M	M	11.2	2	13	76		
-63.17	46.34	HARRINGT 8309001	1	2016-01-12	2016	1	12	-3.2	-9.3	-6.3	24.3	0	M	M	2.2	0 T	25	44		
-63.17	46.34	HARRINGT 8309001	1	2016-01-13	2016	1	13	0.1	-7.1	-3.5	21.5	0	M	M	10.9	12	6	63		
-63.17	46.34	HARRINGT 8309001	1	2016-01-14	2016	1	14	-7	-9.6	-7.6	27.6	0	M	M	0.2	14	25	46		
-63.17	46.34	HARRINGT 8309001	1	2016-01-15	2016	1	15	-8.3	-13.1	-10.2	26.7	0	M	M	0.5	11	25	59		
-63.17	46.34	HARRINGT 8309001	1	2016-01-16	2016	1	16	-2.6	-14.7	-8.7	26.7	0	M	M	3	14	2	44		
-63.17	46.34	HARRINGT 8309001	1	2016-01-17	2016	1	17	-2	-5.8	-3.9	21.9	0	M	M	0.9	13	32	32		
-63.17	46.34	HARRINGT 8309001	1	2016-01-18	2016	1	18	-4.7	-11.5	-8.1	26.1	0	M	M	4.2	13	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-01-19	2016	1	19	-7.3	-12.5	-9.9	27.9	0	M	M	1.3	20	52	52		
-63.17	46.34	HARRINGT 8309001	1	2016-01-20	2016	1	20	M	-10.5 E	M	M	M	M	M	13	20	44			
-63.17	46.34	HARRINGT 8309001	1	2016-01-21	2016	1	21	-6.8	-8.7	-7.8	25.8	0	M	M	2.2	12	30	37		
-63.17	46.34	HARRINGT 8309001	1	2016-01-22	2016	1	22	-5.9	-9.9	-7.9	25.9	0	M	M	3.4	13	28	33		
-63.17	46.34	HARRINGT 8309001	1	2016-01-23	2016	1	23	-5.2	-10.7	-8	26	0	M	M	5.9	13	6	33		
-63.17	46.34	HARRINGT 8309001	1	2016-01-24	2016	1	24	-3.4	-7.4	-5.4	23.4	0	M	M	0.7	13	2	44		
-63.17	46.34	HARRINGT 8309001	1	2016-01-25	2016	1	25	-3.4	-10.3	-6.9	24.9	0	M	M	5.5	13	34	32		
-63.17	46.34	HARRINGT 8309001	1	2016-01-26	2016	1	26	-5.5	-9.5	-8.5	25.9	0	M	M	5.4	13	22	56		
-63.17	46.34	HARRINGT 8309001	1	2016-01-27	2016	1	27	5.4	-7.6	-1.1	15.1	0	M	M	9	20	41			
-63.17	46.34	HARRINGT 8309001	1	2016-01-28	2016	1	28	-0.3	-9.6	-5	23	0	M	M	8	1	54			
-63.17	46.34	HARRINGT 8309001	1	2016-01-29	2016	1	29	0.8	-1.8	-0.5	18.5	0	M	M	21	35	43			
-63.17	46.34	HARRINGT 8309001	1	2016-01-30	2016	1	30	-1.8	-6.7	-4.3	22.3	0	M	M	20	35	35			
-63.17	46.34	HARRINGT 8309001	1	2016-01-31	2016	1	31	2.2	-0.5	-0.5	18.5	0	M	M	12	32	37			
-63.17	46.34	HARRINGT 8309001	1	2016-02-01	2016	2	1	M	0 E	M	M	M	M	3	12	18	43			
-63.17	46.34	HARRINGT 8309001	1	2016-02-02	2016	2	2	M	-5.6 E	M	M	M	M	0	2	26	44			
-63.17	46.34	HARRINGT 8309001	1	2016-02-03	2016	2	3	2.1	-11.5	-4.7	22.7	0	M	M	2.2	44	16	63		
-63.17	46.34	HARRINGT 8309001	1	2016-02-04	2016	2	4	8.3	2	5.2	12.8	0	M	M	1.1	36	48			
-63.17	46.34	HARRINGT 8309001	1	2016-02-05	2016	2	5	2.9	-5.3	-1.2	15.8	0	M	M	0.4	23	33	54		
-63.17	46.34	HARRINGT 8309001	1	2016-02-06	2016	2	6	2	-9.9	-7.8	25.4	0	M	M	0	24	24	54		
-63.17	46.34	HARRINGT 8309001	1	2016-02-07	2016	2	7	2	-8.9	-3.5	21.5	0	M	M	1.4	21	5	69		
-63.17	46.34	HARRINGT 8309001	1	2016-02-08	2016	2	8	-4	-7.6	-5.8	23.8	0	M	M	4.6	25	5	67		
-63.17	46.34	HARRINGT 8309001	1	2016-02-09	2016	2	9	-3.2	-5.4	-4.3	22.3	0	M	M	0.2	26	30	32		
-63.17	46.34	HARRINGT 8309001	1	2016-02-10	2016	2	10	-2.8	-11.1	-7	25	0	M	M	1.6	24	<31			
-63.17	46.34	HARRINGT 8309001	1	2016-02-11	2016	2	11	-1.1	-11.3	-8.4	24.4	0	M	M	0.2	27	35			
-63.17	46.34	HARRINGT 8309001	1	2016-02-12	2016	2	12	-7.5	-16.9	-12.2	30.0	0	M	M	0.5	29	36	39		
-63.17	46.34	HARRINGT 8309001	1	2016-02-13	2016	2	13	-8.1	-17.9	-13	31	0	M	M	0.5	29	36	39		
-63.17	46.34	HARRINGT 8309001	1	2016-02-14	2016	2	14	-9.1	-19.1	-14.1	32.1	0	M	M	0.7	47	30	43		
-63.17	46.34	HARRINGT 8309001	1	2016-02-15	2016	2	15	-9.1	-19.8	-14.5	32.5	0	M	M	0	44	27	39		
-63.17	46.34	HARRINGT 8309001	1	2016-02-16	2016	2	16	9.7	-9.7	0	18	0	M	M	2.2	44	16	69		
-63.17	46.34	HARRINGT 8309001	1	2016-02-17	2016	2	17	2	-2.1	-3.1	13.9	0	M	M	5.9	13	37			
-63.17	46.34	HARRINGT 8309001	1	2016-02-18	2016	2	18	0	-5.3	-2.7	20.7	0	M	M	0.2	8	35			
-63.17	46.34	HARRINGT 8309001	1	2016-02-19	2016	2	19	-3.4	-6.1	-4.8	22.8	0	M	M	0	9	35			
-63.17	46.34	HARRINGT 8309001	1	2016-02-20	2016	2	20	2.9	-7.2	-2.2	20.2	0	M	M	2.7	10	15	56		
-63.17	46.34	HARRINGT 8309001	1	2016-02-21	2016	2	21	4.1	-0.7	-2.4	15.6	0	M	M	6.4	7	16	39		
-63.17	46.34	HARRINGT 8309001	1	2016-02-22	2016	2	22	-0.5	-1.1	-0.5	22.2	0	M	M	0	4	36	37		
-63.17	46.34	HARRINGT 8309001	1	2016-02-23	2016	2	23	-5.5	-11.3	-8.4	26.4	0	M	M	0	4	32	32		
-63.17	46.34	HARRINGT 8309001	1	2016-02-24	2016	2	24	6.1	-1.7	-2	16	0	M	M	0.5	1	32	32		
-63.17	46.34	HARRINGT 8309001	1	2016-02-25	2016	2	25	17	-1.4	-2.7	20.7	0	M	M	2.4	<31				
-63.17	46.34	HARRINGT 8309001	1	2016-02-26	2016	2	26	28	-2.3	-5.8	25.2	0	M	M	5	36	41			
-63.17	46.34	HARRINGT 8309001	1	2016-02-27	2016	2	27	3	-0.1	-10.1	23.0	0	M	M	1.4	13	52			
-63.17	46.34	HARRINGT 8309001	1	2016-02-28	2016	2	28	5.6	-2.6	1.5	16.5	0	M	M	17.2	11	9			
-63.17	46.34	HARRINGT 8309001	1	2016-02-29	2016	2	29	4.8	-2.3	1.3	16.7	0	M	M	6.7	3	31			
-63.17	46.34	HARRINGT 8309001	1	2016-03-01	2016	3	1	4.6	-7.3	-4.4	24.9	0	M	M	0	1	22	46		
-63.17	46.34	HARRINGT 8309001	1	2016-03-02	2016	3	2	-3.7	-1.6	-0.4	24.9	0	M	M	11.1	2	35			
-63.17	46.34	HARRINGT 8309001	1	2016-03-03	2016	3	3	-0.7	-1.6	-0.7	20.9	0	M	M	0	1	24	44		
-63.17	46.34	HARRINGT 8309001	1	2016-03-04	2016	3	4	14.8	-1.7	-0.7	17.3	0	M	M	8.7	1	28	46		
-63.17	46.34	HARRINGT 8309001	1	2016-03-05	2016	3	5	1.1	-1.7	-0.7	17.3	0	M	M	0.2	0 T	8	33		
-63.17	46.34	HARRINGT 8309001	1	2016-03-06	2016	3	6	1.6	-0.1	-0.1	14.1	0	M	M	0.2	0 T	2	37		

-63.17	46.34	HARRINGT	830P001	2016-06-06	2016	6	6	13.8	10.3	12.1	5.9	0	M	M	3.6	14	50	
-63.17	46.34	HARRINGT	830P001	2016-06-07	2016	6	7	24.4	11	17.7	0.3	0	M	M	0	15	33	
-63.17	46.34	HARRINGT	830P001	2016-06-08	2016	6	8	19.2	11.2	15.2	2.8	0	M	M	3.6	15	39	
-63.17	46.34	HARRINGT	830P001	2016-06-09	2016	6	9	11.7	6.8	9.3	8.7	0	M	M	12.4	32	41	
-63.17	46.34	HARRINGT	830P001	2016-06-10	2016	6	10	11.3	6.7	9	9	0	M	M	1.4	2	46	
-63.17	46.34	HARRINGT	830P001	2016-06-11	2016	6	11	21.3	8.3	14.8	3.2	0	M	M	0	22	33	
-63.17	46.34	HARRINGT	830P001	2016-06-12	2016	6	12	15.9	11	13.5	4.5	0	M	M	17.7	12	50	
-63.17	46.34	HARRINGT	830P001	2016-06-13	2016	6	13	17.2	11	14.1	3.9	0	M	M	0.2	18	37	
-63.17	46.34	HARRINGT	830P001	2016-06-14	2016	6	14	11.6	7.2	9.4	8.6	0	M	M	17.9	32	37	
-63.17	46.34	HARRINGT	830P001	2016-06-15	2016	6	15	8.7	7.5	8.1	9.9	0	M	M	5.4	32	45	
-63.17	46.34	HARRINGT	830P001	2016-06-16	2016	6	16	10.2	7.4	9.8	9.2	0	M	M	0.2	35	49	
-63.17	46.34	HARRINGT	830P001	2016-06-17	2016	6	17	12.8	4.3	8.6	9.4	0	M	M	0	0	41	
-63.17	46.34	HARRINGT	830P001	2016-06-18	2016	6	18	24.8	4.9	14.9	3.1	0	M	M	0	25	46	
-63.17	46.34	HARRINGT	830P001	2016-06-19	2016	6	19	24.6	13.9	19.3	0	1.3	M	M	0	24	61	
-63.17	46.34	HARRINGT	830P001	2016-06-20	2016	6	20	24.7	12.3	18.5	0	0.5	M	M	0	23	50	
-63.17	46.34	HARRINGT	830P001	2016-06-21	2016	6	21	11.9	15.5	15.5	0.5	0	M	M	0	20	44	
-63.17	46.34	HARRINGT	830P001	2016-06-22	2016	6	22	21.1	13.8	17.5	0.5	0	M	M	0	<31	44	
-63.17	46.34	HARRINGT	830P001	2016-06-23	2016	6	23	23.1	12.8	18	0	0	M	M	0	28	39	
-63.17	46.34	HARRINGT	830P001	2016-06-24	2016	6	24	19.8	11.5	15.7	2.3	0	M	M	0	<31	37	
-63.17	46.34	HARRINGT	830P001	2016-06-25	2016	6	25	25.5	11.5	18.5	0	0.5	M	M	0	21	37	
-63.17	46.34	HARRINGT	830P001	2016-06-26	2016	6	26	26.6	13.2	19.9	0	1.9	M	M	0	<31	45	
-63.17	46.34	HARRINGT	830P001	2016-06-27	2016	6	27	17	14.7	20.9	0	2.9	M	M	0	21	44	
-63.17	46.34	HARRINGT	830P001	2016-06-28	2016	6	28	25.6	15.3	20.5	0	2.5	M	M	0	20	48	
-63.17	46.34	HARRINGT	830P001	2016-06-29	2016	6	29	25.3	18.6	22	0	4	M	M	0	19	43	
-63.17	46.34	HARRINGT	830P001	2016-06-30	2016	6	30	25.6	15.1	20.4	0	2.4	M	M	0.8	18	33	
-63.17	46.34	HARRINGT	830P001	2016-06-31	2016	7	1	28.2	14.2	21.2	0	3.2	M	M	0	<31	33	
-63.17	46.34	HARRINGT	830P001	2016-07-01	2016	7	2	23.1	15.3	23.9	0	1.3	M	M	0	17	46	
-63.17	46.34	HARRINGT	830P001	2016-07-02	2016	7	3	20.7	13.7	17.2	0.8	0	M	M	0	25	50	
-63.17	46.34	HARRINGT	830P001	2016-07-04	2016	7	4	25.9	12.9	19.4	0	1.4	M	M	0	28	41	
-63.17	46.34	HARRINGT	830P001	2016-07-05	2016	7	5	25.5	16.3	20.9	0	2.9	M	M	2.4	30	59	
-63.17	46.34	HARRINGT	830P001	2016-07-06	2016	7	6	16.9	10.5	13.7	4.3	0	M	M	0.4	1	33	
-63.17	46.34	HARRINGT	830P001	2016-07-07	2016	7	7	17.1	10.4	13.8	4.2	0	M	M	13.8	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-08	2016	7	8	15.6	10.1	12.0	5.1	0	M	M	1	5	32	
-63.17	46.34	HARRINGT	830P001	2016-07-09	2016	7	9	15.5	11.7	13.6	4.4	0	M	M	0	<31	32	
-63.17	46.34	HARRINGT	830P001	2016-07-10	2016	7	10	15	11.9	13.5	4.5	0	0	M	M	9.5	<31	33
-63.17	46.34	HARRINGT	830P001	2016-07-11	2016	7	11	16.6	11.7	14.2	3.8	0	M	M	0.6	36	39	
-63.17	46.34	HARRINGT	830P001	2016-07-12	2016	7	12	25.4	11.1	18.1	0.2	0	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-13	2016	7	13	24.2	10.5	17.4	0.6	0	M	M	0	20	32	
-63.17	46.34	HARRINGT	830P001	2016-07-14	2016	7	14	27.2	16.4	21.8	0	3.8	M	M	0	21	50	
-63.17	46.34	HARRINGT	830P001	2016-07-15	2016	7	15	26.9	19	23	0	5	M	M	1.9	24	41	
-63.17	46.34	HARRINGT	830P001	2016-07-16	2016	7	16	23.2	15.2	19.2	0	1.2	M	M	0.5	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-17	2016	7	17	24.7	14.4	19.1	0	1.1	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-18	2016	7	18	26.1	16.7	21.4	0	3.4	M	M	0.2	21	35	
-63.17	46.34	HARRINGT	830P001	2016-07-19	2016	7	19	22.7	11.7	17.2	0.9	0	M	M	0	27	37	
-63.17	46.34	HARRINGT	830P001	2016-07-20	2016	7	20	20.8	11.5	16.2	1.8	0	M	M	0	28	41	
-63.17	46.34	HARRINGT	830P001	2016-07-21	2016	7	21	27.3	13.4	20.4	0	2.4	M	M	0	23	33	
-63.17	46.34	HARRINGT	830P001	2016-07-22	2016	7	22	26.7	17.3	22	0	4	M	M	0	20	44	
-63.17	46.34	HARRINGT	830P001	2016-07-23	2016	7	23	27.8	16.5	22.2	0	2.2	M	M	0.3	31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-24	2016	7	24	24.9	15.5	20.3	0	2.3	M	M	0.3	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-25	2016	7	25	27.7	15.2	21.5	0	3.5	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-26	2016	7	26	22.5	17.6	20.1	0	2.1	M	M	3.9	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-27	2016	7	27	24.4	16.5	20.5	0	2.5	M	M	0	20	43	
-63.17	46.34	HARRINGT	830P001	2016-07-28	2016	7	28	28.8	18.6	23.7	0	5.7	M	M	4.3	34	35	
-63.17	46.34	HARRINGT	830P001	2016-07-29	2016	7	29	29	19	21.1	0	3.3	M	M	0.3	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-07-30	2016	7	30	24.6	11.1	15.9	2.1	0	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-08-01	2016	8	1	25	11.8	18.4	0	0.4	M	M	0.3	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-08-02	2016	8	2	23.2	12.4	17.8	0.2	0	M	M	0	3	33	
-63.17	46.34	HARRINGT	830P001	2016-08-03	2016	8	3	23.3	11	17.2	0.8	0	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-08-04	2016	8	4	25.3	15.4	20.6	0	2.4	M	M	14.8	24	46	
-63.17	46.34	HARRINGT	830P001	2016-08-05	2016	8	5	26.7	15.5	21.1	0	3.1	M	M	12.9	20	43	
-63.17	46.34	HARRINGT	830P001	2016-08-06	2016	8	6	27.8	17.5	22.7	0	4.7	M	M	0	19	48	
-63.17	46.34	HARRINGT	830P001	2016-08-07	2016	8	7	23.1	12.2	16.2	0.5	0	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-08-08	2016	8	8	22.8	11.1	14.4	0.9	0	M	M	0	<31	41	
-63.17	46.34	HARRINGT	830P001	2016-08-09	2016	8	9	24.6	16.1	20.4	0	2.4	M	M	0	34	41	
-63.17	46.34	HARRINGT	830P001	2016-08-10	2016	8	10	20.4	13.8	17.1	0.9	0	M	M	0.3	22	37	
-63.17	46.34	HARRINGT	830P001	2016-08-11	2016	8	11	25.5	12.5	18.9	0.5	0	M	M	5.4	31	44	
-63.17	46.34	HARRINGT	830P001	2016-08-12	2016	8	12	20.1	11.2	15.7	2.3	0	M	M	0.2	21	32	
-63.17	46.34	HARRINGT	830P001	2016-08-13	2016	8	13	23.4	12.7	18.1	0	0.1	M	M	0	24	48	
-63.17	46.34	HARRINGT	830P001	2016-08-14	2016	8	14	22.4	11.3	16.9	1.1	0	M	M	7.5	22	48	
-63.17	46.34	HARRINGT	830P001	2016-08-15	2016	8	15	14.6	6.3	10.5	7.5	0	M	M	0	36	43	
-63.17	46.34	HARRINGT	830P001	2016-08-16	2016	8	16	18.8	6.4	12.6	5.4	0	M	M	0	20	39	
-63.17	46.34	HARRINGT	830P001	2016-08-17	2016	8	17	21.1	12	16.4	1.4	0	M	M	0	19	43	
-63.17	46.34	HARRINGT	830P001	2016														

-63.17	46.34	HARRINGT 830P001	2016-11-11	2016	11	11	9	3.1	6.1	11.9	0	M	M	3	34	52
-63.17	46.34	HARRINGT 830P001	2016-11-12	2016	11	12	5.9	0.2	3.1	14.9	0	M	M	0.5	25	56
-63.17	46.34	HARRINGT 830P001	2016-11-13	2016	11	13	9.3	2.3	5.8	12.2	0	M	M	0	23	54
-63.17	46.34	HARRINGT 830P001	2016-11-14	2016	11	14	12.5	1.7	7.1	10.6	0	M	M	0	22	35
-63.17	46.34	HARRINGT 830P001	2016-11-15	2016	11	15	9.7	0.1	4.9	13.1	0	M	M	0	<31	
-63.17	46.34	HARRINGT 830P001	2016-11-16	2016	11	16	12.4	6.5	9.5	8.5	0	M	M	15	10	41
-63.17	46.34	HARRINGT 830P001	2016-11-17	2016	11	17	12	6.5	9.3	8.7	0	M	M	0	13	33
-63.17	46.34	HARRINGT 830P001	2016-11-18	2016	11	18	6.9	5.3	6.1	11.9	0	M	M	0	36	44
-63.17	46.34	HARRINGT 830P001	2016-11-19	2016	11	19	9.8	5.6	7.7	10.3	0	M	M	0	3	39
-63.17	46.34	HARRINGT 830P001	2016-11-20	2016	11	20	15.1	8.5	11.8	6.2	0	M	M	0.2	20	33
-63.17	46.34	HARRINGT 830P001	2016-11-21	2016	11	21	11.3	4.4	7.9	10.1	0	M	M	1	18	42
-63.17	46.34	HARRINGT 830P001	2016-11-22	2016	11	22	4.7	0.6	2.7	15.3	0	M	M	1.9	23	37
-63.17	46.34	HARRINGT 830P001	2016-11-23	2016	11	23	4.2	0.4	2.3	15.7	0	M	M	12.3	2	50
-63.17	46.34	HARRINGT 830P001	2016-11-24	2016	11	24	2.9	0.5	1.7	16.3	0	M	M	0.7	36	44
-63.17	46.34	HARRINGT 830P001	2016-11-25	2016	11	25	2.4	1.4	1.6	16.6	0	M	M	0	0	<31
-63.17	46.34	HARRINGT 830P001	2016-11-26	2016	11	26	4.6	-1.5	1.6	16.4	0	M	M	0.3	0	<31
-63.17	46.34	HARRINGT 830P001	2016-11-27	2016	11	27	4.4	-0.3	2.1	15.9	0	M	M	27.8	34	83
-63.17	46.34	HARRINGT 830P001	2016-11-28	2016	11	28	0.9	-0.7	0.1	17.9	0	M	M	10.1	12	32
-63.17	46.34	HARRINGT 830P001	2016-11-29	2016	11	29	1.4	-1.1	0.2	17.8	0	M	M	1.6	14	36
-63.17	46.34	HARRINGT 830P001	2016-11-30	2016	11	30	2.6	0	1.3	16.7	0	M	M	24.9	28	7
-63.17	46.34	HARRINGT 830P001	2016-12-01	2016	12	1	4	-0.1	2	16	0	M	M	20.3	23	59
-63.17	46.34	HARRINGT 830P001	2016-12-02	2016	12	2	3.8	1.1	2.5	15.5	0	M	M	2.9	18	25
-63.17	46.34	HARRINGT 830P001	2016-12-03	2016	12	3	3	0.2	1.6	16.4	0	M	M	3.2	13	4
-63.17	46.34	HARRINGT 830P001	2016-12-04	2016	12	4	0.6	-3.2	-1.3	19.3	0	M	M	0.9	8	33
-63.17	46.34	HARRINGT 830P001	2016-12-05	2016	12	5	-1.1	-3.5	-2.3	20.3	0	M	M	0	9	<31
-63.17	46.34	HARRINGT 830P001	2016-12-06	2016	12	6	-1.0	-3.2	-2.4	20.4	0	M	M	0.4	8	<31
-63.17	46.34	HARRINGT 830P001	2016-12-07	2016	12	7	0.1	-2.9	-1.4	20.4	0	M	M	0	10	<31
-63.17	46.34	HARRINGT 830P001	2016-12-08	2016	12	8	1.3	-2.2	-0.5	18.5	0	M	M	2.6	9	<31
-63.17	46.34	HARRINGT 830P001	2016-12-09	2016	12	9	-0.8	-5.3	-3.1	21.1	0	M	M	0.2	11	28
-63.17	46.34	HARRINGT 830P001	2016-12-10	2016	12	10	-5.3	-10.5	-7.9	25.9	0	M	M	0	10	41
-63.17	46.34	HARRINGT 830P001	2016-12-11	2016	12	11	-6	-11.3	-8.7	26.7	0	M	M	0.2	9	26
-63.17	46.34	HARRINGT 830P001	2016-12-12	2016	12	12	-2	-13.1	-7.6	25.6	0	M	M	8.6	10	41
-63.17	46.34	HARRINGT 830P001	2016-12-13	2016	12	13	M	-7.5	E	M	M	M	M	21	1	52
-63.17	46.34	HARRINGT 830P001	2016-12-14	2016	12	14	1.7	-7.3	-2.8	20.8	0	M	M	2.7	20	39
-63.17	46.34	HARRINGT 830P001	2016-12-15	2016	12	15	-5	-13.5	-9.3	27.3	0	M	M	5.8	18	25
-63.17	46.34	HARRINGT 830P001	2016-12-16	2016	12	16	-13.5	-16.5	-15	33	0	M	M	1.3	17	29
-63.17	46.34	HARRINGT 830P001	2016-12-17	2016	12	17	0	-1.9	-0.5	27.5	0	M	M	5.5	17	54
-63.17	46.34	HARRINGT 830P001	2016-12-18	2016	12	18	10.5	-2.9	3.8	24.2	0	M	M	8.1	21	59
-63.17	46.34	HARRINGT 830P001	2016-12-19	2016	12	19	-2.9	-13.8	-8.4	26.4	0	M	M	0	6	28
-63.17	46.34	HARRINGT 830P001	2016-12-20	2016	12	20	-4.8	-16.4	-10.6	28.6	0	M	M	0	7	20
-63.17	46.34	HARRINGT 830P001	2016-12-21	2016	12	21	1.1	-5.3	-2.1	20.1	0	M	M	0	7	19
-63.17	46.34	HARRINGT 830P001	2016-12-22	2016	12	22	1.2	-4.4	-1.6	19.6	0	M	M	0	8	41
-63.17	46.34	HARRINGT 830P001	2016-12-23	2016	12	23	0.2	-6.2	-2	21	0	M	M	0.6	12	<31
-63.17	46.34	HARRINGT 830P001	2016-12-24	2016	12	24	3.3	-4	0.4	18.4	0	M	M	4.9	11	18
-63.17	46.34	HARRINGT 830P001	2016-12-25	2016	12	25	1.3	-6.5	-2.6	20.6	0	M	M	0	7	27
-63.17	46.34	HARRINGT 830P001	2016-12-26	2016	12	26	-5.8	-9.3	-7.6	25.6	0	M	M	2.4	6	32
-63.17	46.34	HARRINGT 830P001	2016-12-27	2016	12	27	7.1	-6.6	0.3	17.7	0	M	M	10.6	15	56
-63.17	46.34	HARRINGT 830P001	2016-12-28	2016	12	28	0.8	-3.7	-1.5	18.5	0	M	M	0.8	11	<31
-63.17	46.34	HARRINGT 830P001	2016-12-29	2016	12	29	1.1	-1.8	-0.4	18.4	0	M	M	0.3	12	11
-63.17	46.34	HARRINGT 830P001	2016-12-30	2016	12	30	5.1	-1.9	1.6	16.4	0	M	M	6.4	12	87
-63.17	46.34	HARRINGT 830P001	2016-12-31	2016	12	31	-1.2	-8.8	-5	23	0	M	M	0	12	39

SECTION 7 – ENERGY SALES FORECAST

7.0 ENERGY SALES FORECAST

7.1 Economic Outlook²

The Conference Board of Canada, in its most recent Provincial Economic Outlook publications, provides the following outlook for Prince Edward Island.

“Thanks to the one-two punch of construction and manufacturing, as well as a surging export sector, the Island possesses solid economic prospects this year and next. The past winter saw a record amount of snowfall that postponed the opening of lobster season; however, despite the winter setback, the fishing industry is still expected to perform well this year, thanks to strong demand for lobster from China. In general, the Island’s export sector will be a major positive for the province due mainly to a booming U.S. economy and the weaker Canadian dollar. As well, building construction intentions are strong for 2015 and that, combined with a surge in housing starts next year, will support the construction sector over the near term. All these signs point to a healthy economy over the next two years on the Island, putting the province ahead of the national average. In particular, real GDP is expected to grow by 2.4 per cent this year and 1.9 per cent in 2016. The recently re-elected Liberal government released its annual budget on June 19 and, as expected, the province continued its mandate of controlled spending. Despite the frugality, the province had to push out its balanced-budget target by one year to 2016-17. Tight spending measures translate into weak growth in non-commercial services such as education and health and social services, which puts a damper on overall economic growth. This makes the positive economic outlook for the Island that much more impressive. With the combination of a strong economy and tighter spending, the province should certainly achieve its new fiscal balance goal for 2016-17.”

7.2 Weather Normalization Reserve

Weather normalization reserves are common in approach throughout the utility industry and are part of a broader group of deferral reserves designed to mitigate volume or demand fluctuations. The purpose of a Weather Normalization

² See attached Appendix 5 - The Conference Board of Canada - Provincial Outlook Executive Summary and Provincial Outlook Economic Forecast (Summer 2015)

SECTION 7 – ENERGY SALES FORECAST

Reserve is to stabilize electricity rates to customers by removing the volatility in sales and energy supply costs caused by temperature changes relative to historical averages. Where the Heating Degree Days³ (HDD) variation is above normal, the Company will experience incremental marginal net revenue (revenue less energy costs) which would need to be returned to customers but when HDD variation is below normal there will be a shortfall in net revenue which will need to be recovered from customers.

Due to increases in the use of electricity for space heating in recent years, Maritime Electric's sales revenues and energy supply costs have become subject to greater volatility due to variations in the number of HDDs from normal or historic levels.

To mitigate this increasing volatility and uncertainty with respect to customer electricity rates, the Company is proposing the implementation of a Weather Normalization Reserve effective January 1, 2016.

Conceptually, the balance in the Weather Normalization Reserve on the Company's balance sheet will represent the cumulative change in contribution from sales resulting from variations in HDD from normal and should, over time, net to zero (contribution equals revenue from additional kWh sales minus the cost of purchasing additional kWh sales or marginal net revenue times the additional kWh sales). As illustrated in Schedule 1 of Appendix 6, in a year when HDD are higher than normal (2013 and 2014), a marginal net revenue amount will be subtracted on the Company's income statement and added to the Reserve. When HDD are lower than normal (2010 – 2012), a marginal net revenue amount will be added to the Company's income statement and subtracted from the Reserve. Over the ten year period, the variation from average HDD balances to zero as

³ http://climate.weather.gc.ca/glossary_e.html - Heating degree-days for a given day are the number of degrees Celsius that the mean temperature is below 18°C. If the temperature is equal to or greater than 18°C, then the number will be zero. For example, a day with a mean temperature of 15.5°C has 2.5 heating degree-days; a day with a mean temperature of 20.5°C has zero heating degree-days.

SECTION 7 – ENERGY SALES FORECAST

does the balance in the reserve account. Thus, there would be no need for an adjustment mechanism to deal with Reserve balances if approved by the Commission.

The following describes the components and operation of the Weather Normalization Reserve.

Determination of Average HDD Value

The first step in establishing the mechanics of the Weather Normalization Reserve is the determination of the Average HDD Value. The Company proposes using the rolling 10 year average HDD value based upon the most recent 10 years of information available as measured by Environment Canada for the Charlottetown Airport weather station. As calculated in Schedule 2 of Appendix 6, the average annual HDD value to be used for 2016 is calculated to be 4,339 (2005-2014).

Calculation of MWh/HDD Coefficient

The next step is the determination of the annual MWh/HDD Coefficient (the “Coefficient”) to be used for the upcoming year using econometric modelling. As shown in Schedule 3 of Appendix 6, using a linear regression analysis the Company has calculated the Coefficient at 41.73 (based on October 2014 to May 2015 data), which is the estimated change in MWh sales (customer usage) resulting from a unit variation in HDD (i.e. 41.73 MWh per HDD). The Company has excluded from the analysis the data for the months of June to September as these months are primarily cooling months, which would distort the Coefficient calculation for HDD and reduce its accuracy. In addition, only sales for year round Residential, General Service and Small Industrial classes were used as these are the only classes materially affected by variations in HDD.

Calculation of Marginal Net Revenue

The final variable is the Marginal Net Revenue rate which is calculated as the

SECTION 7 – ENERGY SALES FORECAST

forecast unit revenue per kWh less the forecast energy cost per kWh. For the same reason noted above, the Company recommends that the unit revenue be comprised of only demand and energy charge revenues (i.e. excluding the service charge or site revenue) for Residential, General Service and Small Industrial classes as these are the only revenue factors and rate classes affected by variations in HDD. In addition, with the proposed continued operation of the ECAM, the energy cost per kWh is set in the Company's income statement at the Base Rate in the ECAM as approved by the Commission. Schedule 4 of Appendix 6 shows the calculation of the Marginal Net Revenue Rate of \$50.42/MWh based upon the proposals contained in this Application.

Summary

To mitigate the increased volatility resulting from the growing load of electricity for space heating, the Company requests that the Commission approve the adoption of a Weather Normalization Reserve, effective January 1, 2016. The Company proposes to calculate the Weather Normalization Reserve adjustment on a monthly basis as described above so that timely adjustments can be made to address the variations caused by HDD.

7.3 Energy Sales Forecast

The energy sales forecast is the basis of the short-term and long-term energy supply planning process. The sales forecast is used to calculate the total energy required to serve customers and the associated energy related costs. The development of the sales growth forecast involves a detailed sales regression analysis which reflects a number of variables such as population growth, changes in the Consumer Price Index, the number of customers expected to exit and enter the system, furnace oil prices, heating and cooling degree day experience and the rate of adoption of electricity based space heating. Management also conducts a review of trends in historic sales growth which includes a two-year average growth rate calculation and an analysis of year-to-date growth over the previous

SECTION 7 – ENERGY SALES FORECAST

period. These results are then compared to actual results to date and any other known economic inputs. Based on this process, a forecast of energy sales is made.

Schedule 7-1 shows the results of the regression analysis model, the two-year average growth rate calculation and the year-to-date growth over the previous period for 2014-2016.

SCHEDULE 7-1			
Energy Sales (GWh)			
Measure	2014 Actual	2015 Forecast	2016 Forecast
Regression analysis growth	1,167.7	1,195.3	1,193.8
Two-year average growth	1,173.3	1,207.1	1,249.5
Year-to-date growth	1,167.7	1,203.5	1,243.3

There are a number of factors contributing to the lower sales growth level forecast for 2016 based on regression analysis as compared to the forecasts based on historical/trend analysis. These include:

- the closure of the McCain Foods processing facility in Borden-Carleton in October 2014;
- an assumption of Heating Degree Days based upon a 10 year historical average for 2016, whereas HDD for 2015 are forecast to be above average (the two year average and year to date growth rate projections reflect above normal Heating Degree Days experience in recent years).
- the large reduction in oil prices beginning in the fourth quarter of 2014, which is expected to reduce the growth in electric space heating as compared to prior years. The US Energy Information Agency's ("EIA") oil price forecast shows that oil prices are not expected to increase significantly until 2016; and

SECTION 7 – ENERGY SALES FORECAST

- the Company's proposed Demand Side Management plan filed with IRAC which will have a minimal electricity sales impact of 0.1 per cent annually starting in 2016.
- the transition to more energy efficient LED street and area lighting.

Management's forecast of energy sales for 2015 and 2016 is based upon the energy sales regression analysis for the above stated reasons. Schedule 7-2 shows the actual energy sales for 2014 and the forecast of energy sales for 2015 and 2016.

SCHEDULE 7-2			
Energy Sales (GWh) (%)			
	2014 Actual	2015 Forecast	2016 Forecast
Energy Sales (GWh)			
Residential	541.4	573.0	563.7
General Service I	377.2	378.1	381.0
General Service II ⁴	9.4	10.1	10.8
Large Industrial	142.2	132.6	131.3
Small Industrial	88.9	93.1	98.9
Street Lighting/Unmetered	8.6	8.4	8.1
Total Energy Sales	1,167.7	1,195.3	1,193.8
Growth Rate (%)			
Residential	5.27	5.84	(1.62)
General Service I	1.81	0.24	0.77
General Service II ⁴	-	7.45	6.93
Large Industrial	(0.84)	(6.75)	(0.98)
Small Industrial	9.89	7.72	6.23
Street Lighting/Unmetered	-	(2.33)	(3.57)
Overall Growth Rate	3.60	2.36	(0.13)

⁴ The Company is proposing in Section 13 of this Application, that customers currently in the General Service II rate class begin to be billed as General Service I customers effective March 1, 2016.

SECTION 7 – ENERGY SALES FORECAST

7.4 Summary

A summary of this section follows:

- The Company proposes the adoption of a Weather Normalization Reserve to adjust the marginal net revenue associated with sales variances caused by fluctuations in temperature.
- Energy sales are forecast to be 1,195.3 GWh for 2015 and 1,193.8 GWh for 2016.

Longitude	Latitude	IV Station ID	Climate ID	Date/Time	Year	Month	Day	Data Qual	Max Temp	Max Temp	Min Temp	Min Temp	Mean Temp	Mean Temp	Heat Deg Days	Heat Deg Day	Cool Deg D	Cool Deg D	Total Rain	Total Rain	Total Snow	Total Snow	Total Preci	Total Preci	Snow on C	Dir of Max Snd	Dir of Max Spd	Max Spd	Max Gust	Flag	
-63.12	46.29	CHARLOTT	8300301	2018-01-01	2018	1	1	-12.3	-15.5	-14.5	-16.3	-14.5	-15.5	31.9	0	0	0	0	T	0	T	5	27	35							
-63.12	46.29	CHARLOTT	8300301	2018-01-02	2018	1	2	-12.6	-16.3	-14.5	-16.6	-14.5	-15.5	32.5	0	0	0	0	T	0	T	3	26	43							
-63.12	46.29	CHARLOTT	8300301	2018-01-03	2018	1	3	-6.8	-11.7	-9.5	-11.7	-9.5	-10.5	29.7	0	0	0	0	T	0	T	3	24	37							
-63.12	46.29	CHARLOTT	8300301	2018-01-04	2018	1	4	-6.8	-6.6	-6.6	-6.6	-6.6	-6.6	17.4	0	0	0	0.4	0	10.4	0	3	13	95							
-63.12	46.29	CHARLOTT	8300301	2018-01-05	2018	1	5	6.6	-15	-4.2	-15	-4.2	-15	22.2	0	0	M	1	0.6	0	T	3	21	95							
-63.12	46.29	CHARLOTT	8300301	2018-01-06	2018	1	6	-15	-18.6	-18.6	-18.6	-18.6	-18.6	34.8	0	0	0	0	T	0	T	1	24	72							
-63.12	46.29	CHARLOTT	8300301	2018-01-07	2018	1	7	-13.3	-20.2	-16.8	-20.2	-16.8	-20.2	34.8	0	0	0	0.2	0.2	0.2	0.2	1	28	56							
-63.12	46.29	CHARLOTT	8300301	2018-01-08	2018	1	8	-5.1	-13.8	-9.5	-13.8	-9.5	-13.8	27.5	0	0	0.3	0.3	6.5	6.8	6.8	3	14	39							
-63.12	46.29	CHARLOTT	8300301	2018-01-09	2018	1	9	-1.7	-7.7	-4.7	-7.7	-4.7	-7.7	27.7	0	0	0	0	T	0	T	1	31	48							
-63.12	46.29	CHARLOTT	8300301	2018-01-10	2018	1	10	-6.5	-12.3	-9.5	-12.3	-9.5	-12.3	27.9	0	0	0	0	T	0	T	5	30	56							
-63.12	46.29	CHARLOTT	8300301	2018-01-11	2018	1	11	7.4	-10.4	-1.5	-10.4	-1.5	-10.4	19.5	0	0	0	0	T	0	T	6	24	50							
-63.12	46.29	CHARLOTT	8300301	2018-01-12	2018	1	12	12	12	6	9	9	9	6	0	0	0	0	0	0	0	1	19	67							
-63.12	46.29	CHARLOTT	8300301	2018-01-13	2018	1	13	14.5	-5.4	4.6	-5.4	4.6	-5.4	13.4	0	0	1.4	0	1.4	0	1.4	21	80								
-63.12	46.29	CHARLOTT	8300301	2018-01-14	2018	1	14	-4.2	-8.4	-6.7	-8.4	-6.7	-8.4	24.7	0	0	M	1.5	0.2	0.2	0.2	0	T	32	37						
-63.12	46.29	CHARLOTT	8300301	2018-01-15	2018	1	15	-5	-7.5	-5.5	-7.5	-5.5	-7.5	24.5	0	0	0	0	T	0	T	3	48								
-63.12	46.29	CHARLOTT	8300301	2018-01-16	2018	1	16	-3.3	-7.2	-5.3	-7.2	-5.3	-7.2	23.3	0	0	M	4	2.6	4	2.6	4	3	43							
-63.12	46.29	CHARLOTT	8300301	2018-01-17	2018	1	17	-2.7	-7.9	-5.3	-7.9	-5.3	-7.9	23.3	0	0	M	19.6	13.7	3	13	<31									
-63.12	46.29	CHARLOTT	8300301	2018-01-18	2018	1	18	-2.1	-12.2	-7.2	-12.2	-7.2	-12.2	25.2	0	0	0	1	0.6	21	32	33									
-63.12	46.29	CHARLOTT	8300301	2018-01-19	2018	1	19	-5.9	-15	-10.5	-15	-10.5	-15	28.5	0	0	0	0.2	0.2	0.2	0.2	0	T	<31							
-63.12	46.29	CHARLOTT	8300301	2018-01-20	2018	1	20	2.5	-10.5	-4.2	-10.5	-4.2	-10.5	22.2	0	0	12	0	12	16	19	63									
-63.12	46.29	CHARLOTT	8300301	2018-01-21	2018	1	21	-0.2	-10.4	-5.3	-10.4	-5.3	-10.4	23.3	0	0	0	0	0	0	12	31	46								
-63.12	46.29	CHARLOTT	8300301	2018-01-22	2018	1	22	-9.2	-19.7	-14.5	-19.7	-14.5	-19.7	32.5	0	0	0	0	0	0	13	28	50								
-63.12	46.29	CHARLOTT	8300301	2018-01-23	2018	1	23	7	-14.5	-3.8	-14.5	-3.8	-14.5	21.8	0	0	3.4	3.8	7.6	16	15	72									
-63.12	46.29	CHARLOTT	8300301	2018-01-24	2018	1	24	8.8	-8	0.4	-8	0.4	-8	17.6	0	0	2.6	0.4	3	0	T	30	61								
-63.12	46.29	CHARLOTT	8300301	2018-01-25	2018	1	25	-8.6	M	M	M	M	M	12.4	0	0	0	0	0	0	T	0	T	27	46						
-63.12	46.29	CHARLOTT	8300301	2018-01-26	2018	1	26	-5.6	M	M	M	M	M	20.4	0	0	0	0	0	0	T	0	T	30	41						
-63.12	46.29	CHARLOTT	8300301	2018-01-27	2018	1	27	4.5	-14.4	-5	-14.4	-5	-14.4	23	0	0	0	0	0	0	T	0	T	18	56						
-63.12	46.29	CHARLOTT	8300301	2018-01-28	2018	1	28	6.5	-2.9	1.8	-2.9	1.8	-2.9	16.2	0	0	2.6	0	2.6	2.6	2.6	24	43								
-63.12	46.29	CHARLOTT	8300301	2018-01-29	2018	1	29	-2.9	-7.8	-5.4	-7.8	-5.4	-7.8	23.4	0	0	0	0	T	0	T	0	T	3	46						
-63.12	46.29	CHARLOTT	8300301	2018-01-30	2018	1	30	-4.8	-8.6	-6.7	-8.6	-6.7	-8.6	24.7	0	0	0.5	18.6	16.4	0	T	0	T	0	96						
-63.12	46.29	CHARLOTT	8300301	2018-01-31	2018	1	31	-31	-11.5	-10.1	-11.5	-10.1	-11.5	26.1	0	0	0	0	0	0	T	0	T	23	88						
-63.12	46.29	CHARLOTT	8300301	2018-02-01	2018	2	1	2.4	-9.3	-3.4	-9.3	-3.4	-9.3	21.4	0	0	0	0	3.4	3.4	3.4	17	18	39							
-63.12	46.29	CHARLOTT	8300301	2018-02-02	2018	2	2	4.8	-14.5	-4.9	-14.5	-4.9	-14.5	22.9	0	0	5.9	1.7	7.2	12	12	32	67								
-63.12	46.29	CHARLOTT	8300301	2018-02-03	2018	2	3	-14.5	-17.5	-16	-17.5	-16	-17.5	34	0	0	0	0	T	0	T	2	27	57							
-63.12	46.29	CHARLOTT	8300301	2018-02-04	2018	2	4	2.8	-16.8	-7	-16.8	-7	-16.8	25	0	0	0	0	0	0	0	0	3	16	59						
-63.12	46.29	CHARLOTT	8300301	2018-02-05	2018	2	5	15	4.8	-2.7	1.1	-2.7	1.1	-2.7	16.9	0	0	0	0	T	0	T	3	27	51						
-63.12	46.29	CHARLOTT	8300301	2018-02-06	2018	2	6	4.8	-6.6	-1.9	-6.6	-1.9	-6.6	18.9	0	0	0	0	1.2	1.2	1.2	2	32	63							
-63.12	46.29	CHARLOTT	8300301	2018-02-07	2018	2	7	0.3	-10	-4.9	-10	-4.9	-10	22.9	0	0	0	0	T	0	T	3	31	63							
-63.12	46.29	CHARLOTT	8300301	2018-02-08	2018	2	8	5.3	-11.9	-3.3	-11.9	-3.3	-11.9	23.5	0	0	0	0	5.4	5.4	5	32	56								
-63.12	46.29	CHARLOTT	8300301	2018-02-09	2018	2	9	-5	-14.5	-9.8	-14.5	-9.8	-14.5	23.8	0	0	0	0	T	0	T	5	27	33							
-63.12	46.29	CHARLOTT	8300301	2018-02-10	2018	2	10	2.0	3.5	-12.1	-12.1	-12.1	-12.1	24.4	0	0	0	0	11.4	11.4	11.4	0	T	3	46						
-63.12	46.29	CHARLOTT	8300301	2018-02-11	2018	2	11	1.4	-2.5	-0.6	-2.5	-0.6	-2.5	17.7	0	0	0	0	3.3	3.3	3.3	17	18	44							
-63.12	46.29	CHARLOTT	8300301	2018-02-12	2018	2	12	0.4	-3.1	-1.4	-3.1	-1.4	-3.1	15.4	0	0	0	0	0	0	0	10	3	39							
-63.12	46.29	CHARLOTT	8300301	2018-02-13	2018	2	13	2.1	-0.5	-1.5	-0.5	-1.5	-0.5	15.5	0	0	0	0	0	0	0	1	28	54							
-63.12	46.29	CHARLOTT	8300301	2018-02-14	2018	2	14	3.3	-1.5	-0.5	-1.5	-0.5	-1.5	15.5	0	0	0	0	0	0	0	1	27	41							
-63.12	46.29	CHARLOTT	8300301	2018-02-15	2018	2	15	2.5	-16.6	-6.4	-16.6	-6.4	-16.6	24.9	0	0	0	0	0	0	0	0	3	30							
-63.12	46.29	CHARLOTT	8300301	2018-02-16	2018	2	16	1.6	-6.9	-0.4	-6.9	-0.4	-6.9	18.2	0	0	0	0	8.8	8.8	8.8	6	4	54							
-63.12	46.29	CHARLOTT	8300301	2018-02-17	2018	2	17	3.7	-3	-0.2	-3	-0.2	-3	17.7	0	0	0	0	3.3	3.3	3.3	7	8.8	44							
-63.12	46.29	CHARLOTT	8300301	2018-02-18	2018	2	18	1.8	-9.7	-7.9	-9.7</																				

-63.12	46.29	CHARLOTT	8300301	2018-06-07	2018	6	7	20.7	4.3	12.5	5.5	0	0	0	0	0	24	44	
-63.12	46.29	CHARLOTT	8300301	2018-06-08	2018	6	8	17.4	10.1	13.8	4.2	0	1.8	0	1.8	0	21	48	
-63.12	46.29	CHARLOTT	8300301	2018-06-09	2018	6	8	18.4	8.4	13.4	4.6	0	0	0	0	0	2	32	
-63.12	46.29	CHARLOTT	8300301	2018-06-10	2018	6	10	11.6	2.6	7.1	10.9	0	0	0	0	0	2	43	
-63.12	46.29	CHARLOTT	8300301	2018-06-11	2018	6	11	12.5	0.5	6.5	11.5	0	0	0	0	0	32	37	
-63.12	46.29	CHARLOTT	8300301	2018-06-12	2018	6	12	21.8	3.4	12.6	5.4	0	0	0	0	0	21	63	
-63.12	46.29	CHARLOTT	8300301	2018-06-13	2018	6	13	19.6	8.5	14.1	3.9	0	0.2	0	0.2	0	23	50	
-63.12	46.29	CHARLOTT	8300301	2018-06-14	2018	6	14	9.4	5.8	7.6	10.4	0	17	0	17	0	3	43	
-63.12	46.29	CHARLOTT	8300301	2018-06-15	2018	6	15	19.4	5.6	12.5	5.5	0	0.8	0	0.8	0	2	41	
-63.12	46.29	CHARLOTT	8300301	2018-06-16	2018	6	16	21.2	5.8	13.5	4.5	0	0	0	0	0	3	35	
-63.12	46.29	CHARLOTT	8300301	2018-06-17	2018	6	17	18.6	4	11.5	5.7	0	0	M	M	0	M	M	
-63.12	46.29	CHARLOTT	8300301	2018-06-18	2018	6	18	17.1	9.8	13.5	4.5	0	6.4	0	6.4	0	18	56	
-63.12	46.29	CHARLOTT	8300301	2018-06-19	2018	6	19	18.4	12.9	15.7	2.3	0	10.4	0	10.4	0	31	52	
-63.12	46.29	CHARLOTT	8300301	2018-06-20	2018	6	20	24.5	11.4	18	0	0	1.6	0	1.6	0	24	52	
-63.12	46.29	CHARLOTT	8300301	2018-06-21	2018	6	21	17.4	5.2	11.3	6.7	0	3.2	0	3.2	0	35	54	
-63.12	46.29	CHARLOTT	8300301	2018-06-22	2018	6	22	20.7	4.2	12.5	5.5	0	0	0	0	0	23	39	
-63.12	46.29	CHARLOTT	8300301	2018-06-23	2018	6	23	23.8	12.3	18.1	0	0.1	0	T	0	0	20	46	
-63.12	46.29	CHARLOTT	8300301	2018-06-24	2018	6	24	19.9	10.6	15.3	2.7	0	7.1	0	7.1	0	1	39	
-63.12	46.29	CHARLOTT	8300301	2018-06-25	2018	6	25	10.8	7.6	9.2	8.8	0	24.7	0	24.7	0	3	61	
-63.12	46.29	CHARLOTT	8300301	2018-06-26	2018	6	26	15.9	8.2	12.1	5.9	0	0	0	0	0	25	47	
-63.12	46.29	CHARLOTT	8300301	2018-06-27	2018	6	27	15.5	8.8	18.8	0	0	0	0	0	0	0	0	
-63.12	46.29	CHARLOTT	8300301	2018-06-28	2018	6	28	22.1	15.5	18.8	0	0.9	1.8	0	1.8	0	18	54	
-63.12	46.29	CHARLOTT	8300301	2018-06-29	2018	6	29	23.8	16.4	20.1	0	2.1	31.4	0	31.4	0	18	52	
-63.12	46.29	CHARLOTT	8300301	2018-06-30	2018	6	30	24.7	15.8	20.3	0	2.3	0.2	0	0.2	0	<31		
-63.12	46.29	CHARLOTT	8300301	2018-07-01	2018	7	1	20.4	11.3	15.9	2.1	0	0	T	0	0	1	35	
-63.12	46.29	CHARLOTT	8300301	2018-07-02	2018	7	2	23.1	12.3	17.7	0.3	0	0.2	0	0.2	0	19	30	
-63.12	46.29	CHARLOTT	8300301	2018-07-03	2018	7	3	23	16.4	22.3	0.5	4.5	0	0	0	0	0	22	48
-63.12	46.29	CHARLOTT	8300301	2018-07-04	2018	7	4	30.1	16.1	23.1	0	5.1	0	0	0	0	0	28	33
-63.12	46.29	CHARLOTT	8300301	2018-07-05	2018	7	5	30	14.7	22.4	0	4.4	0	0	0	0	0	22	30
-63.12	46.29	CHARLOTT	8300301	2018-07-06	2018	7	6	23.8	19.8	21.8	0	E	3.8	E	M	M	M	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-07	2018	7	7	21.8	11.9	16.9	1.1	0	0	0	0	0	31	46	
-63.12	46.29	CHARLOTT	8300301	2018-07-08	2018	7	8	27.1	14.3	20.7	0	E	2.7	E	M	M	M	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-09	2018	7	9	27.3	16.5	22	0	4	0	0	0	0	22	63	
-63.12	46.29	CHARLOTT	8300301	2018-07-10	2018	7	10	28.3	16.1	22.2	0	4.2	11.8	0	11.8	0	21	41	
-63.12	46.29	CHARLOTT	8300301	2018-07-11	2018	7	11	19.4	12.2	15.8	2.2	0	0	0	0	0	4	32	
-63.12	46.29	CHARLOTT	8300301	2018-07-12	2018	7	12	18.4	8	13.2	4.8	0	0	0	0	0	2	48	
-63.12	46.29	CHARLOTT	8300301	2018-07-13	2018	7	13	22.5	8.3	15.4	2.6	0	0	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-14	2018	7	14	22.7	7.7	15.5	0	M	M	M	M	M	<31		
-63.12	46.29	CHARLOTT	8300301	2018-07-15	2018	7	15	24.2	14.8	19.5	0	1.5	0	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-16	2018	7	16	26.5	16.7	21.6	0	3.6	0	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-17	2018	7	17	28.2	17.4	22.8	0	4.8	0	0	0	0	0	18	37
-63.12	46.29	CHARLOTT	8300301	2018-07-18	2018	7	18	22.8	15.8	19.3	0	1.3	0.8	0	0.8	0	18	44	
-63.12	46.29	CHARLOTT	8300301	2018-07-19	2018	7	19	23.8	15.5	18.9	0	0.9	0	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2018-07-20	2018	7	20	27.2	16.1	21.7	0	3.7	0	0	0	0	0	17	33
-63.12	46.29	CHARLOTT	8300301	2018-07-21	2018	7	21	23.8	16.9	19.9	0	1.9	0	T	0	0	0	12	33
-63.12	46.29	CHARLOTT	8300301	2018-07-22	2018	7	22	26.9	19.1	23	0	5	0.2	0	0.2	0	0	21	33
-63.12	46.29	CHARLOTT	8300301	2018-07-23	2018	7	23	28.7	21.5	25.1	0	7.1	0	T	0	0	0	22	44
-63.12	46.29	CHARLOTT	8300301	2018-07-24	2018	7	24	29.1	21.2	25.2	0	7.2	0	0	0	0	0	25	44
-63.12	46.29	CHARLOTT	8300301	2018-07-25	2018	7	25	28.9	21.1	25	0	7	0	0	0	0	0	24	48
-63.12	46.29	CHARLOTT	8300301	2018-07-26	2018	7	26	26.6	21.9	24.3	0	6.3	4.9	0	4.9	0	20	54	
-63.12	46.29	CHARLOTT	8300301	2018-07-27	2018	7	27	28	20.3	24.2	0	6.2	0.6	0	0.6	0	25	46	
-63.12	46.29	CHARLOTT	8300301	2018-07-28	2018	7	28	27.6	19.6	23.6	0	5.6	0	0	0	0	0	16	37
-63.12	46.29	CHARLOTT	8300301	2018-07-29	2018	7	29	26.5	19	22.8	0	4.8	5.6	0	5.6	0	20	33	
-63.12	46.29	CHARLOTT	8300301	2018-07-30	2018	7	30	26.9	17.7	22.3	0	4.3	0	0	0	0	0	29	41
-63.12	46.29	CHARLOTT	8300301	2018-07-31	2018	7	31	28.1	17.5	28.8	0	4.9	0	0	0	0	0	23	30
-63.12	46.29	CHARLOTT	8300301	2018-08-01	2018	8	1	26.9	20.7	23.8	0	5.8	0	0	0	0	0	21	33
-63.12	46.29	CHARLOTT	8300301	2018-08-02	2018	8	2	26	19.4	24.3	0	5.8	1.8	0	1.8	0	23	56	
-63.12	46.29	CHARLOTT	8300301	2018-08-03	2018	8	3	29.2	19.4	24.3	0	6.3	0	0	0	0	0	<31	
-63.12	46.29	CHARLOTT	8300301	2018-08-04	2018	8	4	27.1	20.4	23.8	0	5.6	0.1	T	0	0	0	22	41
-63.12	46.29	CHARLOTT	8300301	2018-08-05	2018	8	5	21.9	15.7	23.6	0	3.8	0	0	0	0	0	21	35
-63.12	46.29	CHARLOTT	8300301	2018-08-06	2018	8	6	29	16.7	22.9	0	4.9	0	T	0	0	0	24	43
-63.12	46.29	CHARLOTT	8300301	2018-08-07	2018	8	7	29.6	20.1	24.9	0	6.9	1	0	1	0	0	23	32
-63.12	46.29	CHARLOTT	8300301	2018-08-08	2018	8	8	25.8	16.7	21.3	0	3.3	0	0	0	0	0	32	30
-63.12	46.29	CHARLOTT	8300301	2018-08-09	2018	8	9	24.7	14.4	21.3	0	3.5	0	0	0	0	0	24	33
-63.12	46.29	CHARLOTT	8300301	2018-08-10	2018	8	10	26	14.4	24.1	0	5.7	0	0	0	0	0	25	44
-63.12	46.29	CHARLOTT	8300301	2018-08-11	2018	8	11	27.3	14.2	24.3	0	5.7	0	0	0	0	0	21	35
-63.12	46.29	CHARLOTT	8300301	2018-08-12	2018	8	12	24.1	14.2	21.3	0	5.7	0	0	0	0	0	22	44
-63.12	46.29	CHARLOTT	8300301	2018-08-13	2018	8	13	27.9	12.4	21.3	0	3.3	0	0	0	0	0	2	

-63.12	46.29	CHARLOTT	8300301	2018-11-12	2018	11	12	0.3	-4	-1.9	19.9	0	0	0 T	0 T	30	50	
-63.12	46.29	CHARLOTT	8300301	2018-11-13	2018	11	13	5.1	-4.8	0.2	17.8	0	9.5	13	22.5	12	58	
-63.12	46.29	CHARLOTT	8300301	2018-11-14	2018	11	14	6	-8.8	-1.4	19.4	0	0	0.4	0.4	27	87	
-63.12	46.29	CHARLOTT	8300301	2018-11-15	2018	11	15	4	-4.4	-7.1	5.8	23.8	0	0	0 T	0 T	31	59
-63.12	46.29	CHARLOTT	8300301	2018-11-16	2018	11	16	0.6	-7.5	3.5	21.5	0	0	11.8	10.9	4	61	
-63.12	46.29	CHARLOTT	8300301	2018-11-17	2018	11	17	0.1	-4	-2	20	0	0	1.5	1.5	32	41	
-63.12	46.29	CHARLOTT	8300301	2018-11-18	2018	11	18	-2.2	-11.8	-7	25	0	0	0	0	10	M	
-63.12	46.29	CHARLOTT	8300301	2018-11-19	2018	11	19	-0.2	-15.2	-7.7	25.7	0	0	0.2	0.2	10 E	M	
-63.12	46.29	CHARLOTT	8300301	2018-11-20	2018	11	20	2.1	-0.5	0.8	17.2	0	0	5.5	8	3	45	
-63.12	46.29	CHARLOTT	8300301	2018-11-21	2018	11	21	0.1	-5.4	-2.3	20.3	0	0	13.4	8.6	22	46	
-63.12	46.29	CHARLOTT	8300301	2018-11-22	2018	11	22	-5.4	-12.3	8.8	26.8	0	0	4.3	3.1	22	55	
-63.12	46.29	CHARLOTT	8300301	2018-11-23	2018	11	23	-6.3	-11.1	-8.7	26.7	0	0	1.5	0 T	18	30	
-63.12	46.29	CHARLOTT	8300301	2018-11-24	2018	11	24	-0.7	-8.9	-4.8	22.8	0	0	0	0	29	52	
-63.12	46.29	CHARLOTT	8300301	2018-11-25	2018	11	25	0.6	-11.6	-5.5	23.5	0	0	0	0	M	M	
-63.12	46.29	CHARLOTT	8300301	2018-11-26	2018	11	26	1.6	-1.2	0.2	17.8	0	0	0 T	0 T	13	41	
-63.12	46.29	CHARLOTT	8300301	2018-11-27	2018	11	27	0.8	1.6	16.2	0	1.9	0 T	1.9	11	10		
-63.12	46.29	CHARLOTT	8300301	2018-11-28	2018	11	28	4.2	0.3	2.3	15.7	0	1.8	5.2	5	3	74	
-63.12	46.29	CHARLOTT	8300301	2018-11-29	2018	11	29	1.6	0.3	1	17	0	2.8	10	15	10	89	
-63.12	46.29	CHARLOTT	8300301	2018-11-30	2018	11	30	2	-0.4	0.8	17.2	0	0	0 T	0 T	8	2	
-63.12	46.29	CHARLOTT	8300301	2018-12-01	2018	12	1	M	M	M	M	M	M	0.2	0.2	8	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-02	2018	12	2	M	M	M	M	M	M	0.7	0 T	8	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-03	2018	12	3	5.8	-0.1	2.8	15.2	0	4.3	1	5.3	6	55	
-63.12	46.29	CHARLOTT	8300301	2018-12-04	2018	12	4	-0.2	-5.5	-2.9	20.9	0	0	3	1.9	4	28	
-63.12	46.29	CHARLOTT	8300301	2018-12-05	2018	12	5	-5.2	-18.4	-11.8	29.8	0	0	1	0.9	6	29	
-63.12	46.29	CHARLOTT	8300301	2018-12-06	2018	12	6	-4.4	-14.7	-9.6	27.6	0	0	0 T	0 T	4 E	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-07	2018	12	7	-1	-9.3	-5.2	23.2	0	0	0.6	0.6	5	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-08	2018	12	8	-4.1	-12.8	-8.5	26.5	0	0	0 T	0 T	20	33	
-63.12	46.29	CHARLOTT	8300301	2018-12-09	2018	12	9	-7.1	-12.9	-10	28	0	0	1	1	8	37	
-63.12	46.29	CHARLOTT	8300301	2018-12-10	2018	12	10	M	M	M	M	M	M	0.4	0.2	9	28	
-63.12	46.29	CHARLOTT	8300301	2018-12-11	2018	12	11	-6	-12.4	-9.2	27.2	0	0	0 T	0 T	8	33	
-63.12	46.29	CHARLOTT	8300301	2018-12-12	2018	12	12	-4.3	-15.8	-10.1	28.1	0	0	5	1.2	7	34	
-63.12	46.29	CHARLOTT	8300301	2018-12-13	2018	12	13	-5.8	-10.7	-8.3	26.3	0	0	0.4	0 T	7 E	32	
-63.12	46.29	CHARLOTT	8300301	2018-12-14	2018	12	14	1.2	-9.6	-4.2	22.2	0	0	0 T	0 T	7 E	37	
-63.12	46.29	CHARLOTT	8300301	2018-12-15	2018	12	15	4.2	-0.3	2	16	0	0.2	0.4	0.6	6	30	
-63.12	46.29	CHARLOTT	8300301	2018-12-16	2018	12	16	1.5	-4.8	-1.7	19.7	0	0	0	0	M	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-17	2018	12	17	0.6	-3.4	-1.4	19.4	0	0.2	9.2	9.6	2	55	
-63.12	46.29	CHARLOTT	8300301	2018-12-18	2018	12	18	0.1	-3.6	-1.8	19.8	0	0.2	13.4	11.2	19	71	
-63.12	46.29	CHARLOTT	8300301	2018-12-19	2018	12	19	-3	-6.4	-4.7	22.7	0	0	0 T	0 T	31	58	
-63.12	46.29	CHARLOTT	8300301	2018-12-20	2018	12	20	-1.4	-8.3	-4.9	22.9	0	0	0	0	11	28	
-63.12	46.29	CHARLOTT	8300301	2018-12-21	2018	12	21	7.3	-6.1	0.6	17.4	0	6.2	0	6.2	11	50	
-63.12	46.29	CHARLOTT	8300301	2018-12-22	2018	12	22	12	6.6	9.3	8.7	0	14.8	0	14.8	4	15	
-63.12	46.29	CHARLOTT	8300301	2018-12-23	2018	12	23	6.8	-7.2	-0.2	18.2	0	0	0	0 T	30	52	
-63.12	46.29	CHARLOTT	8300301	2018-12-24	2018	12	24	-4	-10.5	-8.3	26.3	0	0	0	0	M	M	
-63.12	46.29	CHARLOTT	8300301	2018-12-25	2018	12	25	M	M	M	M	M	M	0 T	0 T	27	35	
-63.12	46.29	CHARLOTT	8300301	2018-12-26	2018	12	26	-5.7	-10.9	-8.3	26.3	0	0	0 T	0 T	30	37	
-63.12	46.29	CHARLOTT	8300301	2018-12-27	2018	12	27	-9.5	-12.1	-10.8	28.8	0	0	0.8	0.8	0 T	32	58
-63.12	46.29	CHARLOTT	8300301	2018-12-28	2018	12	28	0.2	-12.4	-6.1	24.1	0	5.1	3.9	9	1	15	
-63.12	46.29	CHARLOTT	8300301	2018-12-29	2018	12	29	2.5	-5.5	-1.5	19.5	0	5.2	0.4	5.4	5	14	
-63.12	46.29	CHARLOTT	8300301	2018-12-30	2018	12	30	-5.5	-10.8	-8.2	26.2	0	0	2	0.2	6	32	
-63.12	46.29	CHARLOTT	8300301	2018-12-31	2018	12	31	-6.6	-13.9	-10.3	28.3	0	0	0 T	0 T	7	M	

Chtown Total	Missing Data		Revised Total
	Harrington	Total	
January	754	28.4	-
February	621	620.8	620.8
March	602	602.0	602.0
April	445	445.1	445.1
May	268	11.8	279.9
June	168	168.4	168.4 (0.8)
July	13	0.7	13.4 14.0 (0.2)
August	9	3.4	8.4
September	119	7	125.7 124.7 1.0
October	339	338.7	338.2 0.5
November	505	14.6	519.5 519.5 -
December	619	89.7	769.9 769.9 -
	4444	4555.9	

Longitude	Latitude	Station ID	Climate	Date/Time	Year	Month	Day	1	Data Qualif	Max Temp	Max Temp	Min Temp	Min Temp	Mean Temp	Mean Temp	Heat Deg C	Heat Deg C	Cool Deg C	Cool Deg C	Total Rain	Total Rain	Total Snow	Total Snow	Total Preci	Total Preci	Snow on G	Snow on G	Dir of Max Preci	Dir of Max Preci	Sod of Max Preci	Sod of Max Preci	Flag
-63.17	46.34	HARRINGT 8309001	2018-01-01	2018	1	1	-12.3	-15	-13.7	31.7	0	M	M	M	M	0	7	<31														
-63.17	46.34	HARRINGT 8309001	2018-01-02	2018	1	2	-12.2	-16.8	-14.5	32.5	0	M	M	M	M	0	6	26	39													
-63.17	46.34	HARRINGT 8309001	2018-01-03	2018	1	3	-6.2	-16	-11.4	28.4	0	M	M	M	M	0	6	16	32													
-63.17	46.34	HARRINGT 8309001	2018-01-04	2018	1	4	7.7	-6.5	6.6	17.4	0	M	M	M	M	9.4	6	12	32													
-63.17	46.34	HARRINGT 8309001	2018-01-05	2018	1	5	6.8	-15.2	-4.2	22.2	0	M	M	M	M	0.3	3	21	87													
-63.17	46.34	HARRINGT 8309001	2018-01-06	2018	1	6	-15.2	-18.5	-16.9	34.9	0	M	M	M	M	0	3	19	59													
-63.17	46.34	HARRINGT 8309001	2018-01-07	2018	1	7	-12.8	-20.3	-16.6	34.6	0	M	M	M	M	0	3	24	50													
-63.17	46.34	HARRINGT 8309001	2018-01-08	2018	1	8	-5.2	-13.5	-9.4	27.4	0	M	M	M	M	4.7	4	16	35													
-63.17	46.34	HARRINGT 8309001	2018-01-09	2018	1	9	-2.2	-7.8	-5	23	0	M	M	M	M	0.7	10	27	44													
-63.17	46.34	HARRINGT 8309001	2018-01-10	2018	1	10	-6.7	-12.7	-10.2	23.2	0	M	M	M	M	0.2	9	29	52													
-63.17	46.34	HARRINGT 8309001	2018-01-11	2018	1	11	7.9	-8.3	-0.2	18.2	0	M	M	M	M	0	8	25	54													
-63.17	46.34	HARRINGT 8309001	2018-01-12	2018	1	12	11	6.6	9.8	8.2	0	M	M	M	M	0	3	18	63													
-63.17	46.34	HARRINGT 8309001	2018-01-13	2018	1	13	-15.5	-5.4	5.1	12.9	0	M	M	M	M	1.7	2	19	70													
-63.17	46.34	HARRINGT 8309001	2018-01-14	2018	1	14	-5.1	-8.6	-6.9	24.6	0	M	M	M	M	0	4	31	32													
-63.17	46.34	HARRINGT 8309001	2018-01-15	2018	1	15	-4.9	-5.1	5.5	24.5	0	M	M	M	M	0.2	5	5	46													
-63.17	46.34	HARRINGT 8309001	2018-01-16	2018	1	16	-3.5	-7.4	-5.5	23.5	0	M	M	M	M	1.4	9	4	43													
-63.17	46.34	HARRINGT 8309001	2018-01-17	2018	1	17	-2.9	-8	-5.5	23.5	0	M	M	M	M	10.7	8	<31														
-63.17	46.34	HARRINGT 8309001	2018-01-18	2018	1	18	-2.2	-10.2	-6.2	24.2	0	M	M	M	M	0.7	22	<31														
-63.17	46.34	HARRINGT 8309001	2018-01-19	2018	1	19	-6.2	-14	-10.1	28.1	0	M	M	M	M	0.3	19	<31														
-63.17	46.34	HARRINGT 8309001	2018-01-20	2018	1	20	-2.5	-5.5	-4	22	0	M	M	M	M	1.2	18	26	52													
-63.17	46.34	HARRINGT 8309001	2018-01-21	2018	1	21	-0.2	-10.6	-5.4	23.4	0	M	M	M	M	0	19	30	44													
-63.17	46.34	HARRINGT 8309001	2018-01-22	2018	1	22	-9.4	-17.4	-13.4	31.4	0	M	M	M	M	0.8	18	29	43													
-63.17	46.34	HARRINGT 8309001	2018-01-23	2018	1	23	8	-14.1	-3.1	21.1	0	M	M	M	M	8.6	18	16	65													
-63.17	46.34	HARRINGT 8309001	2018-01-24	2018	1	24	8.7	-8	0.4	28.4	0	M	M	M	M	2.1	5	25	61													
-63.17	46.34	HARRINGT 8309001	2018-01-25	2018	1	25	-8.7	-12.8	-10.4	28.4	0	M	M	M	M	0	4	31	37													
-63.17	46.34	HARRINGT 8309001	2018-01-26	2018	1	26	-4.7	-10	-7.4	25.4	0	M	M	M	M	16	9	15	61													
-63.17	46.34	HARRINGT 8309001	2018-01-27	2018	1	27	4.5	-13.9	-4.7	22.7	0	M	M	M	M	0.2	4	18	52													
-63.17	46.34	HARRINGT 8309001	2018-01-28	2018	1	28	6.2	-3	1.6	16.4	0	M	M	M	M	2.8	4	24	37													
-63.17	46.34	HARRINGT 8309001	2018-01-29	2018	1	29	-3	-7.7	-5.4	23.4	0	M	M	M	M	0	5	4	74													
-63.17	46.34	HARRINGT 8309001	2018-01-30	2018	1	30	-5	-8.8	-6.9	24.9	0	M	M	M	M	4.6	5	2	70													
-63.17	46.34	HARRINGT 8309001	2018-01-31	2018	1	31	-8.4	-10	-10.2	28.2	0	M	M	M	M	10.7	18	4	37													
-63.17	46.34	HARRINGT 8309001	2018-02-01	2018	2	1	2.8	-9.7	-3.5	21.5	0	M	M	M	M	1.1	12	11	33													
-63.17	46.34	HARRINGT 8309001	2018-02-02	2018	2	2	4.4	-14.5	-5.1	23.1	0	M	M	M	M	8.5	11	32	59													
-63.17	46.34	HARRINGT 8309001	2018-02-03	2018	2	3	-14.5	-17.8	-16.2	34.2	0	M	M	M	M	0	10	29	48													
-63.17	46.34	HARRINGT 8309001	2018-02-04	2018	2	4	3.2	-16.6	-6.7	24.7	0	M	M	M	M	1.9	9	15	52													
-63.17	46.34	HARRINGT 8309001	2018-02-05	2018	2	5	-2.3	-8.8	-5.9	23.9	0	M	M	M	M	0.9	9	35	46													
-63.17	46.34	HARRINGT 8309001	2018-02-06	2018	2	6	24	-1.1	-0.2	18.7	0	M	M	M	M	0.6	9	32	48													
-63.17	46.34	HARRINGT 8309001	2018-02-07	2018	2	7	5.1	-11.8	-3.4	21.4	0	M	M	M	M	8.1	11	31	48													
-63.17	46.34	HARRINGT 8309001	2018-02-08	2018	2	8	-1.1	-10.7	-10.7	28.7	0	M	M	M	M	0	11	24	32													
-63.17	46.34	HARRINGT 8309001	2018-02-09	2018	2	9	-5.9	-15.5	-10.7	28.7	0	M	M	M	M	9.8	11	18	35													
-63.17	46.34	HARRINGT 8309001	2018-02-10	2018	2	10	3.6	-9.6	-3.6	24.9	0	M	M	M	M	4.6	5	2	70													
-63.17	46.34	HARRINGT 8309001	2018-02-11	2018	2	11	0.5	-1.3	-2.3	20.3	0	M	M	M	M	10.7	18	4	37													
-63.17	46.34	HARRINGT 8309001	2018-02-12	2018	2	12	-0.4	-3	-1.7	19.7	0	M	M	M	M	1.1	13	11	33													
-63.17	46.34	HARRINGT 8309001	2018-02-13	2018	2	13	2.3	-2.5	-0.1	18.1	0	M	M	M	M	2.2	15	8	63													
-63.17	46.34	HARRINGT 8309001	2018-02-14	2018	2	14	3.3	-0.8	-1.3	19.7	0	M	M	M	M	4.9	15	21	65													
-63.17	46.34	HARRINGT 8309001	2018-02-15	2018	2	15	-0.5	-8.6	-4.6	24.6	0	M	M	M	M	0	14	25	30													
-63.17	46.34	HARRINGT 8309001	2018-02-16	2018	2	16	-9.3	-3.9	-9.9	21.9	0	M	M	M	M	0	32	4	32													
-63.17	46.34	HARRINGT 8309001	2018-02-17	2018	2	17	-1.1	-1.1	-1	17	0	M	M	M	M	10.4	29	31	33													
-63.17	46.34	HARRINGT 8309001	2018-02-18	2018	2	18	3.8	-1.2	1.3	16.7	0	M	M	M	M	0.2	27	33	32													
-63.17	46.34	HARRINGT 8309001	2018-02-19	2018	2	19	-3.8	-10.4	-7.1	25.1	0	M	M	M	M	2.6	15	34	37													
-63.17	46.34	HARRINGT 8309001	2018-02-20	2018	2	20	-1.2	-5.8	-3.5	21.5	0	M	M	M	M	0	13	27	33													
-63.17	46.34	HARRINGT 8309001	2018-02-21	2018	2	21	1.2	-7.8	-3.3	21.3	0	M	M	M	M	0	13	27	46													
-63.17	46.34	HARRINGT 8309001	2018-02-22	2018	2	22	-0.6	-3.1	-1.5	25.9	0	M																				

-63.17	46.34	HARRINGT	8309001	2018-06-07	2018	6	7	20.7	4.7	12.7	5.3	0	M	M	0	21	35	
-63.17	46.34	HARRINGT	8309001	2018-06-08	2018	6	8	17.1	8.8	13	5	0	M	M	6.2	21	50	
-63.17	46.34	HARRINGT	8309001	2018-06-09	2018	6	9	18.3	7.7	13	5	0	M	M	0.6	<31		
-63.17	46.34	HARRINGT	8309001	2018-06-10	2018	6	10	11	4.4	7.7	10.3	0	0	M	M	0.6	34	41
-63.17	46.34	HARRINGT	8309001	2018-06-11	2018	6	11	11.7	2.2	7	11	0	M	M	0.8	32	32	
-63.17	46.34	HARRINGT	8309001	2018-06-12	2018	6	12	21.6	3.3	12.5	5.5	0	M	M	0	24	54	
-63.17	46.34	HARRINGT	8309001	2018-06-13	2018	6	13	20.2	8.5	14.4	3.6	0	M	M	0	22	46	
-63.17	46.34	HARRINGT	8309001	2018-06-14	2018	6	14	9.5	5.7	7.6	10.4	0	M	M	11.2	4	37	
-63.17	46.34	HARRINGT	8309001	2018-06-15	2018	6	15	19.6	5.8	12.7	5.3	0	M	M	0.4	1	37	
-63.17	46.34	HARRINGT	8309001	2018-06-16	2018	6	16	21.2	5.9	13.6	4.4	0	M	M	0.3	36	33	
-63.17	46.34	HARRINGT	8309001	2018-06-17	2018	6	17	18.8	5.4	12.1	5.9	0	M	M	1.1	18	22	
-63.17	46.34	HARRINGT	8309001	2018-06-18	2018	6	18	17.1	9.9	13.5	4.5	0	M	M	4.9	19	56	
-63.17	46.34	HARRINGT	8309001	2018-06-19	2018	6	19	17.6	12.4	12.4	15	0	M	M	9.1	32	46	
-63.17	46.34	HARRINGT	8309001	2018-06-20	2018	6	20	M	M	M	M	M	M	M	M	<31		
-63.17	46.34	HARRINGT	8309001	2018-06-21	2018	6	21	16.5	7.9	12.1	5.9	0	M	M	2.3	3	35	
-63.17	46.34	HARRINGT	8309001	2018-06-22	2018	6	22	20.7	5.9	13.3	4.7	0	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-06-23	2018	6	23	23	11.9	17.5	0.5	0	M	M	0	23	46	
-63.17	46.34	HARRINGT	8309001	2018-06-24	2018	6	24	19	10.4	14.7	3.3	0	0	M	M	6.7	1	33
-63.17	46.34	HARRINGT	8309001	2018-06-25	2018	6	25	10.5	7.8	9.2	8.8	0	M	M	19	4	52	
-63.17	46.34	HARRINGT	8309001	2018-06-26	2018	6	26	16.2	8.7	12.5	5.5	0	M	M	0	36	37	
-63.17	46.34	HARRINGT	8309001	2018-06-27	2018	6	27	25.3	11.5	18.5	0.5	0	M	M	0	24	46	
-63.17	46.34	HARRINGT	8309001	2018-06-28	2018	6	28	22	15	18.5	0	0.5	M	M	0.3	23	50	
-63.17	46.34	HARRINGT	8309001	2018-06-29	2018	6	29	23.6	16.7	20.2	0	2.2	M	M	35.2	18	48	
-63.17	46.34	HARRINGT	8309001	2018-06-30	2018	6	30	24.4	15.8	20.1	0	2.1	M	M	0.6	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-01	2018	7	1	19.5	11.2	15.4	2.6	0	M	M	0	36	32	
-63.17	46.34	HARRINGT	8309001	2018-07-02	2018	7	2	22.6	12.2	17.4	0.6	0	M	M	0.4	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-03	2018	7	3	18	15.8	22.8	0	4.4	M	M	0	22	50	
-63.17	46.34	HARRINGT	8309001	2018-07-04	2018	7	4	29.4	17.6	23.5	0	5.5	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-05	2018	7	5	29	16	22.5	0	4.5	M	M	0	22	37	
-63.17	46.34	HARRINGT	8309001	2018-07-06	2018	7	6	22.9	12.7	17.8	0.2	0	M	M	2.3	21	54	
-63.17	46.34	HARRINGT	8309001	2018-07-07	2018	7	7	21.4	11.7	16.6	1.4	0	M	M	0	32	39	
-63.17	46.34	HARRINGT	8309001	2018-07-08	2018	7	8	26.3	13.5	20	0	2	M	M	0	24	52	
-63.17	46.34	HARRINGT	8309001	2018-07-09	2018	7	9	26.8	16	21.4	0	3.4	M	M	0	24	54	
-63.17	46.34	HARRINGT	8309001	2018-07-10	2018	7	10	27.7	16.2	22	0	4	M	M	1.7	23	35	
-63.17	46.34	HARRINGT	8309001	2018-07-11	2018	7	11	19	12.4	15.7	2.3	0	0	M	M	0	<31	
-63.17	46.34	HARRINGT	8309001	2018-07-12	2018	7	12	18.1	9.4	13.8	4.2	0	M	M	0	1	41	
-63.17	46.34	HARRINGT	8309001	2018-07-13	2018	7	13	22.1	9.4	15.8	2.2	0	M	M	0.2	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-14	2018	7	14	22.8	11.8	21.5	0.7	0	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-15	2018	7	15	24.6	15.8	20.2	0	2.2	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-16	2018	7	16	26	16.7	21.3	0	3.3	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-07-17	2018	7	17	27.6	16.9	22.3	0	4.3	M	M	0	18	35	
-63.17	46.34	HARRINGT	8309001	2018-07-18	2018	7	18	22.5	16.3	19.4	0	1.4	M	M	0.2	19	38	
-63.17	46.34	HARRINGT	8309001	2018-07-19	2018	7	19	21.5	15.4	18.5	0	0.5	M	M	0	12	31	
-63.17	46.34	HARRINGT	8309001	2018-07-20	2018	7	20	27.4	14.8	21.1	0	3.1	M	M	0	25	43	
-63.17	46.34	HARRINGT	8309001	2018-07-21	2018	7	21	23.8	14.7	19.2	0	1.2	M	M	0	25	42	
-63.17	46.34	HARRINGT	8309001	2018-07-22	2018	7	22	27.1	18.5	22.8	0	4.8	M	M	0	25	49	
-63.17	46.34	HARRINGT	8309001	2018-07-23	2018	7	23	28.6	21.1	24.9	0	6.9	M	M	0	25	42	
-63.17	46.34	HARRINGT	8309001	2018-07-24	2018	7	24	28.9	20.7	24.8	0	6.8	M	M	0	22	43	
-63.17	46.34	HARRINGT	8309001	2018-07-25	2018	7	25	28.5	20.6	24.6	0	6.6	M	M	0	25	49	
-63.17	46.34	HARRINGT	8309001	2018-07-26	2018	7	26	M	M	M	M	M	M	M	M	M	M	
-63.17	46.34	HARRINGT	8309001	2018-07-27	2018	7	27	27.7	19.6	23.7	0	5.7	M	M	0	23	40	
-63.17	46.34	HARRINGT	8309001	2018-07-28	2018	7	28	27.1	19.1	23.1	0	5.1	M	M	0	18	32	
-63.17	46.34	HARRINGT	8309001	2018-07-29	2018	7	29	26.5	18.9	22.7	0	4.7	M	M	4.7	25	40	
-63.17	46.34	HARRINGT	8309001	2018-07-30	2018	7	30	27	17.7	22.1	0	4.1	M	M	0	12	31	
-63.17	46.34	HARRINGT	8309001	2018-07-31	2018	8	1	29.9	16.5	23.2	0	5.2	M	M	0	22	45	
-63.17	46.34	HARRINGT	8309001	2018-08-02	2018	8	2	26.4	19.9	23.1	0	5.1	M	M	0	22	45	
-63.17	46.34	HARRINGT	8309001	2018-08-03	2018	8	3	28.5	19.1	23.8	0	5.8	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-08-04	2018	8	4	25.0	19.7	22.8	0	4.8	M	M	0	<31		
-63.17	46.34	HARRINGT	8309001	2018-08-05	2018	8	5	21.6	15.5	20.6	0	6.6	M	M	15.8			
-63.17	46.34	HARRINGT	8309001	2018-08-06	2018	8	6	29.3	16.1	22.7	0	4.7	M	M	0.2			
-63.17	46.34	HARRINGT	8309001	2018-08-07	2018	8	7	29.5	19.5	24.5	0	6.5	M	M	0.2			
-63.17	46.34	HARRINGT	8309001	2018-08-08	2018	8	8	24.3	17.4	20.8	0	2.8	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-09	2018	8	9	10	23.2	18.4	0	6.4	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-10	2018	8	10	21.1	15.3	21.3	0	6.0	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-11	2018	8	11	24.2	14.6	23.6	0	1.4	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-12	2018	8	12	27.5	17.5	21.4	0	3.4	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-13	2018	8	13	26.5	18.2	22.4	0	4.4	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-14	2018	8	14	24.5	18.2	23.4	0	5.4	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-15	2018	8	15	26.1	15.2	20.7	0	2.7	M	M	0			
-63.17	46.34	HARRINGT	8309001	2018-08-16	2018	8	16	21	13.3	17.2	0.8	0	0	M	M	0		
-63.17	46.34	HARRINGT	8309001	2018-08-17	2018	8	17	20	13.4	19.7	0	1.7	0	M	M	0		
-63.17	46.34	HARRINGT	8309001	2018-08-18	2018	8	18	19	14.6	10.1	12.3	0	5.7	M	M	0		
-63.17	46.34	HARRINGT	8309001	2018-08-19	2018	8	19	14.4	3.9	9.2	8.8	0	M	M	0.5			
-63.17	46.34	HARRINGT	8309001	2018-08-20	2018	8												

-63.17	46.34	HARRINGT	830P001	2018-11-12	2018	11	12	0.3	-4.5	-2.1	20.1	0	M	0	M	29	M	43	M
-63.17	46.34	HARRINGT	830P001	2018-11-13	2018	11	13	M	M	M	0	0.3	M	0.3	M	24	M	73	M
-63.17	46.34	HARRINGT	830P001	2018-11-14	2018	11	14	5.3	-8.8	-1.7	19.7	0	M	0	M	2	M	56	M
-63.17	46.34	HARRINGT	830P001	2018-11-15	2018	11	15	-4.3	-9.4	-6.9	24.9	0	M	0	M	2	M	5	M
-63.17	46.34	HARRINGT	830P001	2018-11-16	2018	11	16	0.3	-7.6	-3.6	21.6	0	M	11.3	M	5	M	63	M
-63.17	46.34	HARRINGT	830P001	2018-11-17	2018	11	17	-0.1	-5.7	-2.9	20.9	0	M	2.9	M	19	M	39	M
-63.17	46.34	HARRINGT	830P001	2018-11-18	2018	11	18	-2.5	-8.9	-5.7	23.7	0	M	0	M	16	M	16	M
-63.17	46.34	HARRINGT	830P001	2018-11-19	2018	11	19	-0.4	-10.9	-5.6	23.6	0	M	0	M	0	M	15	M
-63.17	46.34	HARRINGT	830P001	2018-11-20	2018	11	20	1.8	-0.7	0.6	17.4	0	M	4.6	M	14	M	3	M
-63.17	46.34	HARRINGT	830P001	2018-11-21	2018	11	21	0.3	-6	-2.8	20.8	0	M	9.3	M	20	M	45	M
-63.17	46.34	HARRINGT	830P001	2018-11-22	2018	11	22	-5.5	-12.3	-8.8	26.9	0	M	2.9	M	22	M	51	M
-63.17	46.34	HARRINGT	830P001	2018-11-23	2018	11	23	-6.7	-11	-8.9	26.9	0	M	1.3	M	23	M	52	M
-63.17	46.34	HARRINGT	830P001	2018-11-24	2018	11	24	-1	-8	-4.5	22.5	0	M	0	M	19	M	41	M
-63.17	46.34	HARRINGT	830P001	2018-11-25	2018	11	25	0.7	-7.9	-3.6	21.6	0	M	0	M	17	M	32	M
-63.17	46.34	HARRINGT	830P001	2018-11-26	2018	11	26	1.4	-1	0.2	17.8	0	M	0	M	16	M	35	M
-63.17	46.34	HARRINGT	830P001	2018-11-27	2018	11	27	2.8	1	1.9	15.1	0	M	3.9	M	12	M	53	M
-63.17	46.34	HARRINGT	830P001	2018-11-28	2018	11	28	4.1	0	2	16	0	M	6.3	M	4	M	2	M
-63.17	46.34	HARRINGT	830P001	2018-11-29	2018	11	29	M	M	M	0	M	M	M	M	5	M	62	M
-63.17	46.34	HARRINGT	830P001	2018-11-30	2018	11	30	2	-0.3	0.8	17.2	0	M	0	M	3	M	35	M
-63.17	46.34	HARRINGT	830P001	2018-12-01	2018	12	1	0.5	-1.1	-0.3	18.3	0	M	0.5	M	2	M	46	M
-63.17	46.34	HARRINGT	830P001	2018-12-02	2018	12	2	3	-1.8	0.6	17.4	0	M	9.8	M	2	M	55	M
-63.17	46.34	HARRINGT	830P001	2018-12-03	2018	12	3	5.5	-0.4	2.5	15.5	0	M	5	M	16	M	53	M
-63.17	46.34	HARRINGT	830P001	2018-12-04	2018	12	4	-0.2	-5.5	-2.9	20.9	0	M	3.6	M	1	M	31	M
-63.17	46.34	HARRINGT	830P001	2018-12-05	2018	12	5	-5.1	-13.7	-9.4	27.4	0	M	2	M	15	M	28	M
-63.17	46.34	HARRINGT	830P001	2018-12-06	2018	12	6	-4.7	-13.9	-9.3	27.3	0	M	0.2	M	8	M	34	M
-63.17	46.34	HARRINGT	830P001	2018-12-07	2018	12	7	-1.2	-11.3	-6.3	24.3	0	M	0	M	7	M	7	M
-63.17	46.34	HARRINGT	830P001	2018-12-08	2018	12	8	-4.3	-12.7	-8.5	25.5	0	M	0.2	M	9	M	20	M
-63.17	46.34	HARRINGT	830P001	2018-12-09	2018	12	9	-7.7	-13.1	-10.4	28.4	0	M	0.4	M	9	M	25	M
-63.17	46.34	HARRINGT	830P001	2018-12-10	2018	12	10	-5.8	-10.2	-8	26	0	M	0.4	M	10	M	31	M
-63.17	46.34	HARRINGT	830P001	2018-12-11	2018	12	11	-7.3	-11.7	-9.5	27.5	0	M	0	M	11	M	56	M
-63.17	46.34	HARRINGT	830P001	2018-12-12	2018	12	12	-4.2	-14.7	-9.5	27.5	0	M	0.7	M	9	M	35	M
-63.17	46.34	HARRINGT	830P001	2018-12-13	2018	12	13	-5.7	-14	-9.9	27.9	0	M	0	M	9	M	35	M
-63.17	46.34	HARRINGT	830P001	2018-12-14	2018	12	14	1.5	-10	-4.3	23.3	0	M	0	M	20	M	36	M
-63.17	46.34	HARRINGT	830P001	2018-12-15	2018	12	15	4.1	-0.1	2	16	0	M	2	M	8	M	28	M
-63.17	46.34	HARRINGT	830P001	2018-12-16	2018	12	16	1	-3.7	-1.4	19.4	0	M	0	M	7	M	34	M
-63.17	46.34	HARRINGT	830P001	2018-12-17	2018	12	17	0.8	-3.6	-1.4	19.4	0	M	10.3	M	7	M	56	M
-63.17	46.34	HARRINGT	830P001	2018-12-18	2018	12	18	-0.1	-3.3	-1.7	19.7	0	M	5.6	M	16	M	31	M
-63.17	46.34	HARRINGT	830P001	2018-12-19	2018	12	19	-2.6	-7	-4.5	23.9	0	M	0	M	39	M	53	M
-63.17	46.34	HARRINGT	830P001	2018-12-20	2018	12	20	-1.4	-8.8	-5.1	23.1	0	M	0	M	36	M	54	M
-63.17	46.34	HARRINGT	830P001	2018-12-21	2018	12	21	7.3	-6.6	0.4	17.6	0	M	6.7	M	34	M	15	M
-63.17	46.34	HARRINGT	830P001	2018-12-22	2018	12	22	12.2	6.7	9.5	8.5	0	M	21.2	M	15	M	55	M
-63.17	46.34	HARRINGT	830P001	2018-12-23	2018	12	23	6.7	-6.7	0	18	0	M	0	M	0	M	28	M
-63.17	46.34	HARRINGT	830P001	2018-12-24	2018	12	24	-6.3	-10.7	8.5	26.5	0	M	0	M	0	M	49	M
-63.17	46.34	HARRINGT	830P001	2018-12-25	2018	12	25	-8.4	-11.7	-10	28	0	M	0	M	1	M	29	M
-63.17	46.34	HARRINGT	830P001	2018-12-26	2018	12	26	-5.3	-10.8	-8.1	26.1	0	M	0	M	1	M	33	M
-63.17	46.34	HARRINGT	830P001	2018-12-27	2018	12	27	-9.3	-12.1	-10.7	28.7	0	M	0.5	M	2	M	53	M
-63.17	46.34	HARRINGT	830P001	2018-12-28	2018	12	28	0.2	-12.3	-6.1	24.1	0	M	8	M	2	M	53	M
-63.17	46.34	HARRINGT	830P001	2018-12-29	2018	12	29	2.5	-5.5	-1.5	19.5	0	M	5.9	M	8	M	46	M
-63.17	46.34	HARRINGT	830P001	2018-12-30	2018	12	30	-5.5	-10.8	-8.2	26.2	0	M	0.2	M	8	M	33	M
-63.17	46.34	HARRINGT	830P001	2018-12-31	2018	12	31	-6.7	-14.4	-10.6	28.6	0	M	0	M	8	M	53	M

Longitude	Latitude	Iy	Station	Na	Climate ID	Date/Time	Year	Month	Day	Data Qualif	Max Temp	Max Temp	Min Temp	Min Temp	Mean Temp	Mean Temp	Heat Deg E	Heat Deg E	Cool Deg C	Cool Deg C	Total Rain	Total Rain	Total Snow	Total Snow	Total Preci	Total Preci	Snow on G	Snow on G	Dir of Max	Dir of Max	Spd of Ma	Spd of Max	Gust Flag
-63.12	46.29	CHARLOTT	8300301	2018-07-01	2018	7	1	20.4	11.3	15.9	2.1	0	0	0	T	0	0	0	0	1	35												
-63.12	46.29	CHARLOTT	8300301	2018-07-02	2018	7	2	23.1	12.3	17.7	0.3	0	0	0.2						19	30												
-63.12	46.29	CHARLOTT	8300301	2018-07-03	2018	7	3	28.5	16.4	22.5	0	4.5	0	0						22	48												
-63.12	46.29	CHARLOTT	8300301	2018-07-04	2018	7	4	30.1	16.1	23.1	0	5.1	0	0						28	33												
-63.12	46.29	CHARLOTT	8300301	2018-07-05	2018	7	5	30	14.7	22.4	0	4.4	0	0						22	30												
-63.12	46.29	CHARLOTT	8300301	2018-07-06	2018	7	6	23.8 E	19.8 E	21.8 E	0 E	3.8 E	M	M	M						<31												
-63.12	46.29	CHARLOTT	8300301	2018-07-07	2018	7	7	21.8	11.9	16.9	1.1	0	0	0						31	46												
-63.12	46.29	CHARLOTT	8300301	2018-07-08	2018	7	8	27.1 E	14.3 E	20.7 E	0 E	2.7 E	M	M	M						M	M											
-63.12	46.29	CHARLOTT	8300301	2018-07-09	2018	7	9	27.3	16.6	22	0	4	0	0						22	63												
-63.12	46.29	CHARLOTT	8300301	2018-07-10	2018	7	10	28.3	16.1	22.3	0	4.2	11.8	0						21	41												
-63.12	46.29	CHARLOTT	8300301	2018-07-11	2018	7	11	19.4	12.2	15.8	2.2	0	0	0						4	32												
-63.12	46.29	CHARLOTT	8300301	2018-07-12	2018	7	12	18.4	8	13.2	4.8	0	0	0						2	48												
-63.12	46.29	CHARLOTT	8300301	2018-07-13	2018	7	13	22.5	8.3	15.4	2.6	0	0	0						<31													
-63.12	46.29	CHARLOTT	8300301	2018-07-14	2018	7	14	22.7 E	14.3 E	20.7 E	M	M	M	M						<31													
-63.12	46.29	CHARLOTT	8300301	2018-07-15	2018	7	15	24.2	14.8	19.5	0	1.5	0	0						<31													
-63.12	46.29	CHARLOTT	8300301	2018-07-16	2018	7	16	26.5	16.7	21.6	0	3.6	0	0						<31													
-63.12	46.29	CHARLOTT	8300301	2018-07-17	2018	7	17	28.2	17.4	22.8	0	4.8	0	0						18	37												
-63.12	46.29	CHARLOTT	8300301	2018-07-18	2018	7	18	22.8	15.8	19.3	0	1.3	0.8	0						18	44												
-63.12	46.29	CHARLOTT	8300301	2018-07-19	2018	7	19	22.8	15	18.9	0	0.9	0	0						<31													
-63.12	46.29	CHARLOTT	8300301	2018-07-20	2018	7	20	27.5	15.1	21.7	0	1.7	0	0						17	32												
-63.12	46.29	CHARLOTT	8300301	2018-07-21	2018	7	21	23.8	16	19.6	0	1.9	0 T	0						12	33												
-63.12	46.29	CHARLOTT	8300301	2018-07-22	2018	7	22	26.9	19.1	23	0	5	0.2	0						21	33												
-63.12	46.29	CHARLOTT	8300301	2018-07-23	2018	7	23	28.7	21.5	25.1	0	7.1	0 T	0						22	44												
-63.12	46.29	CHARLOTT	8300301	2018-07-24	2018	7	24	29.1	21.2	25.2	0	7.2	0	0						25	44												
-63.12	46.29	CHARLOTT	8300301	2018-07-25	2018	7	25	28.9	21.1	25	0	7	0	0						24	48												
-63.12	46.29	CHARLOTT	8300301	2018-07-26	2018	7	26	24.3	21.9	24.3	0	6.3	4.9	0						20	34												
-63.12	46.29	CHARLOTT	8300301	2018-07-27	2018	7	27	28	20.3	24.2	0	6.2	0.6	0						25	46												
-63.12	46.29	CHARLOTT	8300301	2018-07-28	2018	7	28	27.6	19.6	23.6	0	5.6	0	0						16	37												
-63.12	46.29	CHARLOTT	8300301	2018-07-29	2018	7	29	26.5	19	22.8	0	4.8	5.6	0						20	33												
-63.12	46.29	CHARLOTT	8300301	2018-07-30	2018	7	30	26.9	17.7	22.3	0	4.3	0	0						29	41												
-63.12	46.29	CHARLOTT	8300301	2018-07-31	2018	7	31	28.1	17.5	22.8	0	4.8	0	0						23	30												
-63.17	46.34	HARRINGT	830P001	2018-07-14	2018	7	14	22.8	11.8	17.3	13.1	0.7	0	M	M	M					<31												

Longitude	Latitude	Stn	Climate ID	Date/Time	Year	Month	Day	Data Qual	Max Temp	Max Temp	Min Temp	Min Temp	Mean Temp	Mean Temp	Heat Deg C	Heat Deg C	Cool Deg C	Cool Deg C	Total Rain	Total Rain	Total Snow	Total Snow	Total Preci	Total Preci	Snow on G	Snow on G	Dir of Max	Dir of Max	Spd of Max	Spd of Max	Gust Flag
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	1		M	5.8	-0.2	2.8	15.2	0	9.7	0 T	9.7	8 E	15	55												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	2		M	5.8	-0.2	2.8	15.2	0	4.3	1	5.3	6	16	52												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	3		M	5.8	-0.2	2.8	15.2	0	4.3	1	5.3	6	16	52												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	4		M	5	-5.2	-18.4	-11.8	29.8	0	0	1	0.9	4	28	41											
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	5		M	5	-5.2	-18.4	-11.8	29.8	0	0	1	0.9	6	29	42											
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	6		M	4.4	-14.7	-9.6	27.6	0	0	0 T	0 T	4 E	M	M												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	7		M	-1	-9.3	-5.2	23.2	0	0	0.6	0.6	5	M	M												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	8		M	-4.1	-12.8	-8.5	26.5	0	0	0 T	0 T	8	28	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	9		M	-1.1	-12.9	-10	28	0	0	1	1	8	27	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	10		M	-7.1	-12.9	-10	28	0	0	1	1	8	28	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	11		M	-6	-12.4	-9.2	27.2	0	0	0 T	0 T	8	28	33												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	12		M	-4.3	-15.8	-10.1	28.1	0	0	5	1.2	7	34	59												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	13		M	-5.8	-10.7	-8.3	26.3	0	0	0.4	0.4	7 E	32	46												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	14		M	-12	-9.6	-4.2	22.2	0	0	0 T	0 T	7 E	22	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	15		M	4.2	-9.3	2	16	0	0.2	0.4	0.6	6	30	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	16		M	1.5	-4.8	-1.7	19.7	0	0	0	0	M	M													
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	17		M	0.6	-3.4	-1.4	19.4	0	0.2	9.2	9.6	2	5	55												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	18		M	0.1	-3.6	-1.8	19.8	0	0.2	13.4	11.2	19	32	71												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	19		M	-3	-6.4	-4.7	22.7	0	0	0 T	0 T	11	31	58												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	20		M	-14	-8.3	-4.9	22.9	0	0	0	0	11	28	37												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	21		M	7.3	-6.1	0.6	17.4	0	6.2	0	6.2	11	15	60												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	22		M	12	6.6	9.3	8.7	0	14.8	0	14.8	4	15	61												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	23		M	6.8	-7.2	-0.2	18.2	0	0	0	0	0 T	30	52												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	24		M	-6	-10.5	-8.3	26.3	0	0	0	0	M	M													
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	25		M	0	-26	-5.7	10.9	0	0 T	0 T	0 T	0 T	27	35												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	26		M	0	-8.3	-26	10.9	0	0	0 T	0 T	0 T	0 T	27												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	27		M	-9.5	-12.1	-10.8	28.8	0	0	0.8	0.8	0 T	32	58												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	28		M	0.2	-12.4	-6.1	24.1	0	5.1	3.9	9	1	15	54												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	29		M	2.5	-5.5	-1.5	19.5	0	5.2	0.4	5.4	5	14	52												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	30		M	-5.5	-10.8	-8.2	26.2	0	0	2	2	6	32	54												
-63.12	46.29	CHARLOTT	8300301 #####	2018	12	31		M	-6.6	-13.9	-10.3	26.3	0	0	0 T	0 T	7	M	M												
-63.17	46.34	HARRINGT	830P001 #####	2018	12	1		M	0.5	-1.1	-0.3	18.3	0	M	0.5	2															
-63.17	46.34	HARRINGT	830P001 #####	2018	12	2		M	3	-1.8	0.6	17.4	0	M	9.8	2	15	55													
-63.17	46.34	HARRINGT	830P001 #####	2018	12	10		M	-5.8	-10.2	-8	26	0	M	0.4	10	31	32													
-63.17	46.34	HARRINGT	830P001 #####	2018	12	25		M	-8.4	-11.7	-10	28	0	M	0	1	29	33													

709

		Appendix 5 Schedule 1 Calculation of 10-Year Average HDD																								
Month	Normal	1990	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10 year average (2008 - 2017)							
Jan	805	728	745	864	898	854	626	737	728	866	686	744	715	812	771	829	713	712	758							
Feb	730	764	679	761	731	698	677	763	686	664	608	697	700	672	717	858	628	657	689							
Mar	655	683	633	695	656	654	594	643	694	675	556	621	572	603	760	743	654	690	657							
Apr	460	442	451	483	441	406	411	491	418	420	367	420	379	441	453	537	475	416	433							
May	277	337	265	310	292	314	204	308	286	245	262	259	224	235	308	233	259	264	258							
Jun	114	81	161	101	149	117	55	121	95	102	114	150	119	107	120	163	121	94	119							
Jul	30	33	41	6	29	29	5	29	0	42	13	21	12	13	1	28	30	27	19							
Aug	35	15	35	33	19	17	52	38	20	30	21	14	5	17	28	3	23	29	19							
Sep	138	141	108	68	146	82	116	120	121	135	107	90	76	106	118	73	101	92	102							
Oct	315	258	342	258	256	247	290	248	300	345	290	249	240	291	228	315	255	203	272							
Nov	471	467	486	432	462	402	374	446	421	392	429	397	424	472	461	420	401	440	426							
Dec	685	610	677	606	654	628	592	733	620	643	515	569	589	744	582	545	665	695	617							
								4,715	4,559	4,623	4,617	4,733	4,448	3,996	4,677	4,389	4,559	3,968	4,231	4,055	4,513	4,547	4,747	4,325	4,319	4,365
																				Standard Deviation	239					

Appendix 5

Schedule 2

Calculation of MWh/HDD Coefficient

Year	Month	Days in month	Actual HDD	HDD per day	Reported sales (MWh)	Fewer hours of daylight	Average HDD per day	Average MWh per day
2017	Jul	31	27	0.9	76,298			
	Aug	31	29	0.9	78,217			
	Sep	30	92	3.1	80,074			
	Oct	31	203	6.5	75,216	2.52	4.8	2,507
	Nov	30	440	14.7	82,686	4.07	10.6	2,667
	Dec	31	695	22.4	96,151	5.21	18.5	3,205
	Jan	31	764	24.7	111,163	5.40	23.5	3,586
	Feb	28	621	22.2	106,524	4.53	23.4	3,436
	Mar	31	602	19.4	89,909	3.11	20.8	3,211
	Apr	30	445	14.8	92,948	1.53	17.1	2,998
	May	31	280	9.0	78,410	0.00	11.9	2,614
	Jun	30	168	5.6	77,199			
Linear regression results: (Oct 2017 - May 2018)								
		HDD	Daylight hrs	b				
		50.19	51.18	2039.06	coefficients			
		5.35	18.99	82.54	standard error coefficients			
		0.97	81.40	#N/A	R^2, standard error y			
		81.77	5.00	#N/A	F, degrees of freedom			
		1083543	33128.63	#N/A	Regression SS, residual SS			
		9.38	2.70	24.70	t values			

Appendix 5
Schedule 3
Calculation of Forecast Marginal Net Revenue Rate for 2019

Appendix 5

Schedule 1

Rate Class	2019 (Forecast)		
	Revenue (\$)	Sales (MWh)	Unit Revenue (\$/MWh)
Residential	86,264,450	617,950	*
General Service	61,074,065	387,506	*
Small Industrial	<u>12,753,746</u>	<u>91,596</u>	
Total	160,092,260	1,097,052	\$ 145.93
ECAM Base Rate			\$ <u>(91.61)</u>
Marginal Net Revenue Rate			\$ <u>54.32</u>

* Excludes revenue and kWh sales from seasonal customers

Appendix 5 Schedule 4 Monthly Change in Weather Normalization Reserve - January 1, 2016 to October 31, 2019								
	Heating Degree Days (below 18 deg C)			Space heating load		Weather Normalization Reserve		
MM/YY	Actual HDD	10 Year Average Monthly HDD	Variation from 10 Year Average HDD	Coefficient (MWh/HDD)	Variation from Average (MWh)	Marginal Net Revenue (\$/MWh)	Increase (Decrease) (\$)	Balance Owing (Recoverable) (\$)
January, 2016	713.0	753.9	(40.9)	41.73	(1,707)	50.42	(86,055)	(86,055)
February, 2016	628.2	688.2	(60.0)	41.73	(2,504)	50.42	(126,242)	(212,296)
March, 2016	654.0	637.2	16.8	41.73	701	50.42	35,348	(176,949)
April, 2016	475.0	420.6	54.4	41.73	2,270	50.42	114,459	(62,490)
May, 2016	259.0	264.5	(5.5)	41.73	(230)	50.42	(11,572)	(74,062)
June, 2016	121.0	110.0	11.0	41.73	459	50.42	23,144	(50,917)
July, 2016	30.0	16.5	13.5	41.73	563	50.42	28,404	(22,513)
August, 2016	23.0	24.2	(1.2)	41.73	(50)	50.42	(2,525)	(25,038)
September, 2016	101.0	107.1	(6.1)	41.73	(255)	50.42	(12,835)	(37,872)
October, 2016	255.0	272.8	(17.8)	41.73	(743)	50.42	(37,452)	(75,324)
November, 2016	401.0	421.8	(20.8)	41.73	(868)	50.42	(43,764)	(119,088)
December, 2016	665.0	620.5	44.5	41.73	1,857	50.42	93,629	(25,459)
January, 2017	712.0	751.4	(39.4)	43.21	(1,702)	49.56	(84,375)	(109,833)
February, 2017	657.0	704.2	(47.2)	43.21	(2,040)	49.56	(101,078)	(210,912)
March, 2017	690.0	646.1	43.9	43.21	1,897	49.56	94,011	(116,900)
April, 2017	416.0	433.7	(17.7)	43.21	(765)	49.56	(37,904)	(154,805)
May, 2017	264.0	256.4	7.6	43.21	328	49.56	16,275	(138,529)
June, 2017	94.0	114.6	(20.6)	43.21	(890)	49.56	(44,115)	(182,644)
July, 2017	27.0	16.4	10.6	43.21	458	49.56	22,700	(159,944)
August, 2017	29.0	22.8	6.2	43.21	268	49.56	13,277	(146,667)
September, 2017	92.0	106.2	(14.2)	43.21	(614)	49.56	(30,409)	(177,076)
October, 2017	202.8	279.6	(76.8)	43.21	(3,319)	49.56	(164,466)	(341,542)
November, 2017	439.7	423.6	16.1	43.21	696	49.56	34,478	(307,064)
December, 2017	695.4	613.2	82.2	43.21	3,552	49.56	176,030	(131,034)
January, 2018	764.4	760.1	4.3	46.66	201	51.38	10,309	(120,725)
February, 2018	620.8	699.3	(78.5)	46.66	(3,663)	51.38	(188,195)	(308,920)
March, 2018	602.0	652.1	(50.1)	46.66	(2,338)	51.38	(120,109)	(429,030)
April, 2018	445.1	440.1	5.0	46.66	233	51.38	11,987	(417,043)
May, 2018	279.9	261.9	18.0	46.66	840	51.38	43,153	(373,890)
June, 2018	167.6	121.2	46.4	46.66	2,165	51.38	111,239	(262,651)
July, 2018	13.8	18.9	(5.1)	46.66	(238)	51.38	(12,227)	(274,878)
August, 2018	9.4	19.9	(10.5)	46.66	(490)	51.38	(25,173)	(300,050)
September, 2018	125.7	104.7	21.0	46.66	980	51.38	50,345	(249,705)
October, 2018	338.7	276.1	62.6	46.66	2,921	51.38	150,077	(99,628)
November, 2018	519.5	426.3	93.2	46.66	4,349	51.38	223,437	123,809
December, 2018	709.0	620.5	88.5	46.66	4,129	51.38	212,169	335,978
January, 2019	756.5	757.6	(1.1)	50.19	(55)	54.32	(2,998.92)	332,979
February, 2019	736.8	688.7	48.1	50.19	2,414	54.32	131,134.77	464,114
March, 2019	637.5	656.8	(19.3)	50.19	(969)	54.32	(52,617.49)	411,496
April, 2019	448.8	432.6	16.2	50.19	813	54.32	44,165.97	455,662
May, 2019	351.6	257.5	94.1	50.19	4,723	54.32	256,544.32	712,206
June, 2019	105.9	118.5	(12.6)	50.19	(632)	54.32	(34,351.31)	677,855
July, 2019	25.5	18.7	6.8	50.19	341	54.32	18,538.80	696,394
August, 2019	17.3	19.0	(1.7)	50.19	(85)	54.32	(4,634.70)	691,759
September, 2019	142.6	101.9	40.7	50.19	2,043	54.32	110,960.19	802,719
October, 2019	298.9	271.6	27.3	50.19	1,371	54.32	74,482.37	877,202

Weather Normalization Reserve

16-09-07

AST for 2015

	Sunrise time	Sunset time	Ave. daily hours of daylight for month	Average for month and prev month	Fewer hours of daylight than May
Jan 15	750	1653	9.05	8.86	5.39
Feb 15	715	1738	10.38	9.72	4.53
Mar 15	625	1818	11.88	11.13	3.12
Apr 15	526	1859	13.55	12.72	1.53
May 15	440	1937	14.95	14.25	
Jun 15	421	2005	15.73	15.34	
Jul 15	436	2000	15.40	15.57	
Aug 15	511	1921	14.17	14.78	
Sep 15	550	1824	12.57	13.37	
Oct 15	628	1727	10.98	11.78	2.48
Nov 15	712	1641	9.48	10.23	4.02
Dec 15	747	1627	8.67	9.08	5.18

Location: W063 00, N46 00

kWh Sales (from Sales Frct)

	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	
RESIDENTIAL URBAN	12,625,982	12,403,908	13,153,051	12,317,370	13,663,399	16,879,259	21,574,139	20,940,285	17,206,133	18,115,400	13,960,248	12,756,452	excludes seasonals
RESIDENTIAL RURAL	23,477,622	23,720,372	24,053,024	24,047,236	30,982,752	39,777,068	47,538,669	42,694,844	35,364,571	35,916,148	27,818,390	26,063,605	excludes seasonals
GENERAL SERVICE 1	30,536,731	31,603,406	32,205,080	29,694,829	29,822,755	31,963,582	34,932,089	35,594,755	31,123,775	32,214,430	29,585,993	29,769,881	excludes seasonals
SMALL INDUSTRIAL	9,657,947	10,489,446	10,663,230	9,156,747	8,217,190	7,530,934	7,118,503	7,293,702	6,214,915	6,702,079	7,045,245	8,608,563	

kWh Sales (from Sales Frct)

	ACTUAL												FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19		
RESIDENTIAL URBAN & RURAL	69,978,778	72,257,912	62,242,138	53,862,230	47,157,176	42,647,846	35,800,697	40,884,008	38,476,665	38,482,664	51,076,086	65,084,129	617,950,328	rural and urban
GENERAL SERVICE 1	35,051,135	36,775,814	33,429,040	32,422,341	30,128,438	29,754,023	29,057,650	32,522,299	31,388,442	28,854,185	33,248,236	34,874,102	387,505,705	
SMALL INDUSTRIAL	7,447,164	7,497,263	6,671,027	6,736,363	7,111,026	8,628,560	8,234,404	8,393,738	8,314,196	7,820,842	7,693,694	7,047,925	91,596,203	

Sales Revenue (from Sales Frct)

	ACTUAL												FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19		
RESIDENTIAL URBAN & RURAL	9,678,473	9,942,179	8,651,227	7,582,348	6,676,144	6,043,265	5,078,549	5,797,602	5,472,316	5,475,023	7,020,461	8,846,864	86,264,450	rural and urban
GENERAL SERVICE 1	5,485,019	5,718,230	5,283,005	5,140,735	4,783,140	4,748,294	4,646,591	5,127,654	4,981,024	4,620,256	5,143,705	5,396,413	61,074,065	
SMALL INDUSTRIAL	1,036,989	1,024,760	947,273	943,588	1,036,919	1,206,526	1,179,003	1,196,533	1,176,611	1,126,375	970,916	908,251	12,753,746	

0.139246157 0.136684599 0.14199815 0.14007385 0.14581853 0.13982931 0.14318016 0.142550723 0.14151835 0.14402221 0.126196265 0.128867848

		Appendix 5 Schedule 1 Calculation of 10-Year Average HDD																								
Month	Normal	1990	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10 year average (2008 - 2017)							
Jan	805	728	745	864	898	854	626	737	728	866	686	744	715	812	771	829	713	712	758							
Feb	730	764	679	761	731	698	677	763	686	664	608	697	700	672	717	858	628	657	689							
Mar	655	683	633	695	656	654	594	643	694	675	556	621	572	603	760	743	654	690	657							
Apr	460	442	451	483	441	406	411	491	418	420	367	420	379	441	453	537	475	416	433							
May	277	337	265	310	292	314	204	308	286	245	262	259	224	235	308	233	259	264	258							
Jun	114	81	161	101	149	117	55	121	95	102	114	150	119	107	120	163	121	94	119							
Jul	30	33	41	6	29	29	5	29	0	42	13	21	12	13	1	28	30	27	19							
Aug	35	15	35	33	19	17	52	38	20	30	21	14	5	17	28	3	23	29	19							
Sep	138	141	108	68	146	82	116	120	121	135	107	90	76	106	118	73	101	92	102							
Oct	315	258	342	258	256	247	290	248	300	345	290	249	240	291	228	315	255	203	272							
Nov	471	467	486	432	462	402	374	446	421	392	429	397	424	472	461	420	401	440	426							
Dec	685	610	677	606	654	628	592	733	620	643	515	569	589	744	582	545	665	695	617							
								4,715	4,559	4,623	4,617	4,733	4,448	3,996	4,677	4,389	4,559	3,968	4,231	4,055	4,513	4,547	4,747	4,325	4,319	4,365
																				Standard Deviation	239					

Appendix 5

Schedule 2

Calculation of MWh/HDD Coefficient

Year	Month	Days in month	Actual HDD	HDD per day	Reported sales (MWh)	Fewer hours of daylight	Average HDD per day	Average MWh per day
2017	Jul	31	27	0.9	76,298			
	Aug	31	29	0.9	78,217			
	Sep	30	92	3.1	80,074			
	Oct	31	203	6.5	75,216	2.52	4.8	2,507
	Nov	30	440	14.7	82,686	4.07	10.6	2,667
	Dec	31	695	22.4	96,151	5.21	18.5	3,205
	Jan	31	764	24.7	111,163	5.40	23.5	3,586
	Feb	28	621	22.2	106,524	4.53	23.4	3,436
	Mar	31	602	19.4	89,909	3.11	20.8	3,211
	Apr	30	445	14.8	92,948	1.53	17.1	2,998
	May	31	280	9.0	78,410	0.00	11.9	2,614
	Jun	30	168	5.6	77,199			
Linear regression results: (Oct 2017 - May 2018)								
		HDD	Daylight hrs	b				
		50.19	51.18	2039.06	coefficients			
		5.35	18.99	82.54	standard error coefficients			
		0.97	81.40	#N/A	R^2, standard error y			
		81.77	5.00	#N/A	F, degrees of freedom			
		1083543	33128.63	#N/A	Regression SS, residual SS			
		9.38	2.70	24.70	t values			

Appendix 5
Schedule 3
Calculation of Forecast Marginal Net Revenue Rate for 2019

Rate Class	2019 (Forecast)		
	Revenue (\$)	Sales (MWh)	Unit Revenue (\$/MWh)
Residential	84,777,377	617,950	*
General Service	60,108,478	387,506	*
Small Industrial	<u>12,759,419</u>	<u>91,596</u>	
Total	157,645,274	1,097,052	\$ 143.70
ECAM Base Rate			<u>\$ (91.61)</u>
Marginal Net Revenue Rate			<u>\$ 52.09</u>

* Excludes revenue and kWh sales from seasonal customers

Appendix 5 Schedule 4 Monthly Change in Weather Normalization Reserve - January 1, 2016 to October 31, 2019								
MM/YY	Heating Degree Days (below 18 deg C)			Space heating load		Weather Normalization Reserve		
	Actual HDD	10 Year Average Monthly HDD	Variation from 10 Year Average HDD	Coefficient (MWh/HDD)	Variation from Average (MWh)	Marginal Net Revenue (\$/MWh)	Increase (Decrease) (\$)	Balance Owing (Recoverable) (\$)
January, 2016	713.0	753.9	(40.9)	41.73	(1,707)	50.42	(86,055)	(86,055)
February, 2016	628.2	688.2	(60.0)	41.73	(2,504)	50.42	(126,242)	(212,296)
March, 2016	654.0	637.2	16.8	41.73	701	50.42	35,348	(176,949)
April, 2016	475.0	420.6	54.4	41.73	2,270	50.42	114,459	(62,490)
May, 2016	259.0	264.5	(5.5)	41.73	(230)	50.42	(11,572)	(74,062)
June, 2016	121.0	110.0	11.0	41.73	459	50.42	23,144	(50,917)
July, 2016	30.0	16.5	13.5	41.73	563	50.42	28,404	(22,513)
August, 2016	23.0	24.2	(1.2)	41.73	(50)	50.42	(2,525)	(25,038)
September, 2016	101.0	107.1	(6.1)	41.73	(255)	50.42	(12,835)	(37,872)
October, 2016	255.0	272.8	(17.8)	41.73	(743)	50.42	(37,452)	(75,324)
November, 2016	401.0	421.8	(20.8)	41.73	(868)	50.42	(43,764)	(119,088)
December, 2016	665.0	620.5	44.5	41.73	1,857	50.42	93,629	(25,459)
January, 2017	712.0	751.4	(39.4)	43.21	(1,702)	49.56	(84,375)	(109,833)
February, 2017	657.0	704.2	(47.2)	43.21	(2,040)	49.56	(101,078)	(210,912)
March, 2017	690.0	646.1	43.9	43.21	1,897	49.56	94,011	(116,900)
April, 2017	416.0	433.7	(17.7)	43.21	(765)	49.56	(37,904)	(154,805)
May, 2017	264.0	256.4	7.6	43.21	328	49.56	16,275	(138,529)
June, 2017	94.0	114.6	(20.6)	43.21	(890)	49.56	(44,115)	(182,644)
July, 2017	27.0	16.4	10.6	43.21	458	49.56	22,700	(159,944)
August, 2017	29.0	22.8	6.2	43.21	268	49.56	13,277	(146,667)
September, 2017	92.0	106.2	(14.2)	43.21	(614)	49.56	(30,409)	(177,076)
October, 2017	202.8	279.6	(76.8)	43.21	(3,319)	49.56	(164,466)	(341,542)
November, 2017	439.7	423.6	16.1	43.21	696	49.56	34,478	(307,064)
December, 2017	695.4	613.2	82.2	43.21	3,552	49.56	176,030	(131,034)
January, 2018	764.4	760.1	4.3	46.66	201	51.38	10,309	(120,725)
February, 2018	620.8	699.3	(78.5)	46.66	(3,663)	51.38	(188,195)	(308,920)
March, 2018	602.0	652.1	(50.1)	46.66	(2,338)	51.38	(120,109)	(429,030)
April, 2018	445.1	440.1	5.0	46.66	233	51.38	11,987	(417,043)
May, 2018	279.9	261.9	18.0	46.66	840	51.38	43,153	(373,890)
June, 2018	168.4	121.2	47.2	46.66	2,202	51.38	113,157	(260,733)
July, 2018	14.0	18.9	(4.9)	46.66	(229)	51.38	(11,747)	(272,480)
August, 2018	9.4	19.9	(10.5)	46.66	(490)	51.38	(25,173)	(297,653)
September, 2018	124.7	104.7	20.0	46.66	933	51.38	47,948	(249,705)
October, 2018	338.7	276.1	62.6	46.66	2,921	51.38	150,077	(99,628)
November, 2018	519.5	426.3	93.2	46.66	4,349	51.38	223,437	123,809
December, 2018	709.0	620.5	88.5	46.66	4,129	51.38	212,169	335,978
January, 2019	756.5	757.6	(1.1)	50.19	(55)	52.09	(2,876)	333,102
February, 2019	736.8	688.7	48.1	50.19	2,414	52.09	125,750	458,852
March, 2019	637.5	656.8	(19.3)	50.19	(969)	52.09	(50,457)	408,395
April, 2019	448.8	432.6	16.2	50.19	813	52.09	42,352	450,747
May, 2019	351.6	257.5	94.1	50.19	4,723	52.09	246,010	696,757
June, 2019	105.9	118.5	(12.6)	50.19	(632)	52.09	(32,941)	663,817
July, 2019	25.5	18.7	6.8	50.19	341	52.09	17,778	681,594
August, 2019	17.3	19.0	(1.7)	50.19	(85)	52.09	(4,444)	677,150
September, 2019	142.6	101.9	40.7	50.19	2,043	52.09	106,404	783,554
October, 2019	298.9	271.6	27.3	50.19	1,371	52.09	71,424	854,977

Weather Normalization Reserve

16-09-07

AST for 2015

	Sunrise time	Sunset time	Ave. daily hours of daylight for month	Average for month and prev month	Fewer hours of daylight than May
Jan 15	750	1653	9.05	8.86	5.39
Feb 15	715	1738	10.38	9.72	4.53
Mar 15	625	1818	11.88	11.13	3.12
Apr 15	526	1859	13.55	12.72	1.53
May 15	440	1937	14.95	14.25	
Jun 15	421	2005	15.73	15.34	
Jul 15	436	2000	15.40	15.57	
Aug 15	511	1921	14.17	14.78	
Sep 15	550	1824	12.57	13.37	
Oct 15	628	1727	10.98	11.78	2.48
Nov 15	712	1641	9.48	10.23	4.02
Dec 15	747	1627	8.67	9.08	5.18

Location: W063 00, N46 00

kWh Sales (from Sales Frctst)

	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	
	MWh	76,298	78,217	80,074	75,216	82,686	96,151	111,163	106,524	89,909	92,948	78,410	77,199
RESIDENTIAL URBAN	12,625,982	12,403,908	13,153,051	12,317,370	13,663,399	16,879,259	21,574,139	20,940,285	17,206,133	18,115,400	13,960,248	12,756,452	excludes seasonals
RESIDENTIAL RURAL	23,477,622	23,720,372	24,053,024	24,047,236	30,982,752	39,777,068	47,538,669	42,694,844	35,364,571	35,916,148	27,818,390	26,063,605	excludes seasonals
GENERAL SERVICE 1	30,536,731	31,603,406	32,205,080	29,694,829	29,822,755	31,963,582	34,932,089	35,594,755	31,123,775	32,214,430	29,585,993	29,769,881	excludes seasonals
SMALL INDUSTRIAL	9,657,947	10,489,446	10,663,230	9,156,747	8,217,190	7,530,934	7,118,503	7,293,702	6,214,915	6,702,079	7,045,245	8,608,563	

kWh Sales (from Sales Frctst)

	ACTUAL												FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19		
RESIDENTIAL URBAN & RURAL	69,978,778	72,257,912	62,242,138	53,862,230	47,157,176	42,647,846	35,800,697	40,884,008	38,476,665	38,482,664	51,076,086	65,084,129	617,950,328	rural and urban
GENERAL SERVICE 1	35,051,135	36,775,814	33,429,040	32,422,341	30,128,438	29,754,023	29,057,650	32,522,299	31,388,442	28,854,185	33,248,236	34,874,102	387,505,705	
SMALL INDUSTRIAL	7,447,164	7,497,263	6,671,027	6,736,363	7,111,026	8,628,560	8,234,404	8,393,738	8,314,196	7,820,842	7,693,694	7,047,925	91,596,203	

Revised Sales Revenue (from Sales Frctst)

	ACTUAL												FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19		
RESIDENTIAL URBAN & RURAL	9,469,400	9,739,625	8,475,305	7,418,237	6,537,796	5,923,334	4,972,696	5,674,449	5,348,210	5,350,999	7,020,461	8,846,864	84,777,377	rural and urban
GENERAL SERVICE 1	5,386,773	5,615,783	5,185,843	5,015,085	4,699,300	4,652,755	4,558,749	5,035,000	4,881,224	4,537,848	5,143,705	5,396,413	60,108,478	
SMALL INDUSTRIAL	1,022,588	1,004,068	928,570	924,996	1,017,315	1,182,711	1,156,276	1,173,388	1,153,605	1,104,789	1,078,944	1,012,169	12,759,419	

Small Industrial \$/kWh

0.137312366 0.133924599 0.13919453 0.13731385 0.1430616 0.13706931 0.14042016 0.139793271 0.13875129 0.141262211 0.140237374 0.143612329

Previous Amounts Submitted

RESIDENTIAL URBAN & RURAL	9,678,473	9,942,179	8,651,227	7,582,348	6,676,144	6,043,265	5,078,549	5,797,602	5,472,316	5,475,023	7,020,461	8,846,864
GENERAL SERVICE 1	5,485,019	5,718,230	5,283,005	5,140,735	4,783,140	4,748,294	4,646,591	5,127,654	4,981,024	4,620,256	5,143,705	5,396,413
SMALL INDUSTRIAL	1,036,989	1,024,760	947,273	943,588	1,036,919	1,206,526	1,179,003	1,196,533	1,176,611	1,126,375	970,916	908,251

ECAM Adjustment

RESIDENTIAL URBAN & RURAL	(193,141)	(199,432)	(171,788)	(148,660)	(130,154)	(117,708)	(98,810)	(112,840)	(106,196)	(106,212)	
GENERAL SERVICE 1	(96,741)	(101,501)	(92,264)	(89,486)	(83,154)	(82,121)	(80,199)	(89,762)	(86,632)	(79,638)	
SMALL INDUSTRIAL	(20,554)	(20,692)	(18,412)	(18,592)	(19,626)	(23,815)	(22,727)	(23,167)	(22,947)	(21,586)	

Revenue Adjustments

RESIDENTIAL URBAN & RURAL	(15,931)	(3,122)	(4,134)	(15,451)	(8,194)	(2,223)	(7,043)	(10,313)	(17,911)	(17,812)	
GENERAL SERVICE 1	(1,505)	(946)	(4,897)	(36,164)	(685)	(13,418)	(7,642)	(2,892)	(13,167)	(2,771)	
SMALL INDUSTRIAL	6,153	-	(291)	-	22	-	-	21	(59)	-	

Forecast Adjustment to Small Industrial

108,028 103,918

Matter	Request #	Question/request	Response								
WNR	GT-RFI-2019-2	What is the source for daylight hours used in the calculation of MWh per HDD Coefficient.	<p>https://www.nrc-cnrc.gc.ca/eng/services/sunrise/advanced.html</p> <p>Using the year 2015 with the coordinates Location: W063 00, N46 00. I have attached a pdf of the results as well.</p>								
WNR	GT-RFI-2019-3	During our review of the 10 year average of HDD, we noted that the Environment Canada dataset for December 2013 HDD value has a HDD value as 744, however the MECL filings since introduction of the reserve is 750 HDD. Is there a reason for this discrepancy? If not, quantify the dollar impact on the WNR since inception if calculated at 750 HDD and provide workings.	<p>The 750 that was originally used for December 2013 may have been an estimate "E" at the time the original data was prepared and updated with actual data at a later date. The discrepancy will impact the 10 year average monthly HDD for December and resulting adjustment to the WNRA in each of 2016, 2017, 2018 as follows:</p> <table> <tr> <td>December 2016</td> <td>\$3,366</td> </tr> <tr> <td>December 2017</td> <td>1,285</td> </tr> <tr> <td>December 2018</td> <td><u>1,438</u></td> </tr> <tr> <td>Total Increase</td> <td><u>\$6,089</u></td> </tr> </table> <p>The supporting calculations of these amounts are provided in the attached Appendix 5 - Weather Normalization Reserve with Updates from GT Matters FT-FRI-2019-3,4,5.xlsx.</p>	December 2016	\$3,366	December 2017	1,285	December 2018	<u>1,438</u>	Total Increase	<u>\$6,089</u>
December 2016	\$3,366										
December 2017	1,285										
December 2018	<u>1,438</u>										
Total Increase	<u>\$6,089</u>										
WNR	GT-RFI-2019-4	In MECL's filings of the Weather Normalization Mechanism and Reserve, we identified a potential discrepancy on HDD values for February 2016 as being 626, when filings since October 2017 noted February 2016 as being 608. Please confirm the correct HDD for February 2016. If 626 HDD for February 2016 is correct, please quantify the impact on the WNR since February 2016 and provide workings.	<p>The data for the Charlottetown weather station for February 18, 2016 is missing "M" data (see attached 2016 Data Download from Environment Canada) which resulted in the original reported total of 608. Using the data from nearby station in Harrington PEI for that day as an estimate, the total for February 2016 is 628 (the 626 might have been based on an estimate "E" in Harrington for that date). The discrepancy will result in an increase in the WRNA:</p> <table> <tr> <td>February 2016</td> <td><u>\$42,501</u></td> </tr> </table> <p>In addition, the discrepancy will impact the 10 year average monthly HDD for February beginning in 2018 and will result in an adjustment in February of 2018 & 2019 as follows:</p> <table> <tr> <td>February 2018</td> <td>\$ (4,795)</td> </tr> <tr> <td>February 2019</td> <td>(5,453)</td> </tr> <tr> <td>Total Adj</td> <td><u>(10,248)</u></td> </tr> </table> <p>The supporting calculations of these amounts are provided in the attached Appendix 5 - Weather Normalization Reserve with Updates from GT Matters FT-FRI-2019-3,4,5.xlsx.</p>	February 2016	<u>\$42,501</u>	February 2018	\$ (4,795)	February 2019	(5,453)	Total Adj	<u>(10,248)</u>
February 2016	<u>\$42,501</u>										
February 2018	\$ (4,795)										
February 2019	(5,453)										
Total Adj	<u>(10,248)</u>										

WNR	GT-RFI-2019-5	<p>In the General Rate Application filed November 30th, 2018, Appendix 5 – Schedule 4 “Monthly Change in Weather Normalization Reserve – January 1, 2016 to October 31, 2018” states the “Actual HDD” recorded for October 2018 is 341 but according to the revised General Rate Application filed September 25th, 2019, October 2018 Actual HDD is 338.2. We noted the Environment Canada’s website states the HDD for October 2018 as 338.7</p> <p>Additional in MECL’s Excel document provided to Grant Thornton with the Appendix 5 calculations for all schedules in the revised General Rate Application filed September 25th, 2019, October 2018 HDD in Schedule 1 states 341 and in Schedule 4 it states 338.2. Please confirm that correct HDD for October 2018. If different than filings, please quantify impact on WNR since October 2018 and provide workings.</p>	<p>It is likely that the original data query for October 2018 had one or more days estimated “E” which led to the initial total of 341 for October 2018 and then the update to 338.2. It is not uncommon for Environment Canada to estimate “E” or have missing data “M” that is later updated with actual data and this can result in minor variances in the HDD on any given month depending on when the data is downloaded.</p> <p>In response to this question, I have attached the daily data for the Charlottetown for 2018 as of 12/12/2019 and attached the results in the file 2018 Daily Data Download from Environment Canada.xlsx. In these results, I noted 4 discrepancies from those reported for 2018 – June (0.8), July (0.2), September 1.0 and October is now listed as 338.7 as indicated in your query.</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 10%;">June, 2018</td> <td style="width: 10%;">\$(1,918)</td> </tr> <tr> <td>July, 2018</td> <td>(479)</td> </tr> <tr> <td>Sept, 2018</td> <td>2,397</td> </tr> <tr> <td>Oct, 2018</td> <td><u>1,199</u></td> </tr> <tr> <td>Total</td> <td><u>\$ 1,199</u></td> </tr> </tbody> </table> <p>The supporting calculations of these amounts are provided in the attached Appendix 5 - Weather Normalization Reserve with Updates from GT Matters FT-FRI-2019-3,4,5.xlsx.</p>	June, 2018	\$(1,918)	July, 2018	(479)	Sept, 2018	2,397	Oct, 2018	<u>1,199</u>	Total	<u>\$ 1,199</u>
June, 2018	\$(1,918)												
July, 2018	(479)												
Sept, 2018	2,397												
Oct, 2018	<u>1,199</u>												
Total	<u>\$ 1,199</u>												
WNR	GT-RFI-2019-6	<p>Please quantify the cumulative impact on the WNR for all errors you agree relating to the three questions above and provide workings.</p>	<p>In summary, the total of all of the above noted discrepancies is as follows:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 10%;">GT-RFI-2019-3</td> <td style="width: 10%;">\$ 6,089</td> </tr> <tr> <td>GT-RFI-2019-4 - February 2016</td> <td>42,501</td> </tr> <tr> <td>GT-RFI-2019-4 - February 2017 & 2018</td> <td>(10,248)</td> </tr> <tr> <td>GT-RFI-2019-5</td> <td><u>1.199</u></td> </tr> <tr> <td>Total Cumulative Impact</td> <td><u>\$39,541</u></td> </tr> </tbody> </table> <p>The supporting calculations of these amounts are provided in the attached Appendix 5 - Weather Normalization Reserve with Updates from GT Matters FT-FRI-2019-3,4,5.xlsx.</p>	GT-RFI-2019-3	\$ 6,089	GT-RFI-2019-4 - February 2016	42,501	GT-RFI-2019-4 - February 2017 & 2018	(10,248)	GT-RFI-2019-5	<u>1.199</u>	Total Cumulative Impact	<u>\$39,541</u>
GT-RFI-2019-3	\$ 6,089												
GT-RFI-2019-4 - February 2016	42,501												
GT-RFI-2019-4 - February 2017 & 2018	(10,248)												
GT-RFI-2019-5	<u>1.199</u>												
Total Cumulative Impact	<u>\$39,541</u>												

WNR	GT-RFI-2019-7	<p>Supporting kWh sales and revenue data provided by MECL for 2019 marginal net revenue. We noted the \$/kWh for small industrial customer for forecast November and December was approximately \$0.126/kWh and \$0.129/kWh, respectively which is lower in comparison to actual average of approximately \$0.141/kWh for previous 10 months. Please explain why forecast \$/kWh is lower than previous 10 month actual \$/kWh rates.</p>	<p>In the latter part of 2017, early 2018 we had a number of small industrial customers move from the small industrial rate to large industrial rate and our forecast for small industrial revenue for subsequent years was adjusted to reflect this change. For small industrial demand, the 2019 forecast was approximately 295MW. Actual demand year to date is approximately 268MW which effectively reduced the demand forecast for each of November and December to approximately 13.5 MW versus a YTD average of 29 MW. Therefore we are revising the forecast demand for the year to 323MW for small industrials. This increases the revenue forecast for small industrials from our previous submission by the following amounts:</p> <p>November 2019 = (28100 KW – 13619 KW) X \$7.46 = \$108,028</p> <p>December 2019 = (27031 KW – 13101 KW) X \$7.46 = \$103,918</p> <p>This will bring the \$/kWh for small industrial more in line with the average experienced in the previous 10 months.</p>
WNR	GT-RFI-2019-8	<p>The attached spreadsheet notes form differences (highlighted in yellow). Please provide a reconciliation and explanation of the differences between the IRAC monthly reporting actual to date to October 31, 2019 and WNR actual to date October 31, 2019 provided for revenue dollars and kWh sales as illustrated in attached excel document.</p>	<p>As discussed in our 2016 GRA Section 7 evidence filed on October 21, 2015, the WNRA marginal net revenue calculation includes only sales from year round (non-seasonal) residential, general service and small industrial customers as these are the only classes materially affected by HDD. The difference between the kWh sales provided in Appendix 5 and the YTD sales in our October 31, 2019 monthly report page 12 is the seasonal kWh sales for residential and general service customers (there are no small industrial seasonal category). A reconciliation is included in the updates to the spreadsheet provided - Sales and Revenue actuals calculations GT-RFI.XLSX.</p> <p>Similarly, the revenue from seasonal residential and general service customers is excluded from the marginal net revenue calculation. The 2016 evidence also indicates that for the same reason, unit revenue is to be comprised of only demand and energy charges (exclude service charges) for these classes. To reconcile the revenues provided in Appendix 5 to the October 31, 2019 monthly report page 5, both of these items (seasonal revenue and service charges) need to be adjusted from the revenue reported on page 5.</p> <p>That being said, in performing this reconciliation, I noted there was an issue with the actual revenue reported for January to October in Appendix 5 as the revenue provided</p>

		<p>Included the ECAM collected which is not revenue to MECL and did not include the monthly billing adjustments to revenue which is a revenue item to MECL.</p> <p>A revenue reconciliation to the October 31, 2019 monthly report page 5 is included in the updates to the spreadsheet provided - Sales and Revenue actualscalculations GT-RFI.XLSX.</p>
WNR	GT-RFI-2019-9	<p>If errors in data are agreed by MECL as a result of Grant Thornton's questions, please file an updated Appendix 5 for which you seek approval from IRAC.</p> <p>Appendix 5 - Weather Normalization Reserve with Updates from GT Matters GT-RFI-2019-7,8,9.xlsx attached provides the updates to reflect the revenue items noted above (revised forecast for small industrial for November & December as well as updated actual revenue for January – October, 2019). It also includes the adjustments for HDD discrepancies provided in Appendix 5 - Weather Normalization Reserve with Updates from GT Matters GT-RFI-2019-3,4,5.xlsx discussed above. This is the updated Appendix 5 for which the Company seeks approval from IRAC.</p>

MECL's calculations in Appendix 5, schedule named "Sales&Rev Data"													
kWh Sales (from Sales Frct)	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	
RESIDENTIAL URBAN	12,625,982	12,403,908	13,153,051	12,317,370	13,663,399	16,879,259	21,574,139	20,940,285	17,206,133	18,115,400	13,960,248	12,756,452	excludes seasonals
RESIDENTIAL RURAL	23,477,622	23,720,372	24,053,024	24,047,236	30,982,752	39,777,668	47,538,669	42,694,844	35,364,571	35,916,148	27,818,390	26,603,605	excludes seasonals
GENERAL SERVICE 1	30,536,731	31,603,406	32,205,080	29,694,829	29,822,755	31,963,582	34,932,089	35,594,755	31,123,775	32,214,430	29,585,993	29,769,881	excludes seasonals
SMALL INDUSTRIAL	9,657,947	10,489,446	10,663,230	9,156,747	8,217,190	7,530,934	7,118,503	7,293,702	6,214,915	6,702,079	7,045,245	8,608,563	
MWh	76,298	78,217	80,074	75,216	82,686	96,151	111,163	106,524	89,909	92,948	78,410	77,199	1,044,796
kWh Sales (from Sales Frct)	ACTUAL											FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	
RESIDENTIAL URBAN & RURAL	69,978,778	72,257,912	62,242,138	53,862,230	47,157,176	42,647,846	35,800,697	40,884,008	38,476,665	38,482,664	51,076,086	65,084,129	617,950,328 rural and urban
GENERAL SERVICE 1	35,051,135	36,775,814	33,429,040	32,422,341	30,128,438	29,754,023	29,057,650	32,522,299	31,388,442	28,854,185	33,248,236	34,874,102	387,505,705
SMALL INDUSTRIAL	7,447,164	7,497,263	6,671,027	6,736,363	7,111,026	8,628,560	8,234,404	8,393,738	8,314,196	7,820,842	7,693,694	7,047,925	91,596,203
Sales Revenue (from Sales Frct)	ACTUAL											FORECAST	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	
RESIDENTIAL URBAN & RURAL	9,678,473	9,942,179	8,651,227	7,582,348	6,676,144	6,043,265	5,078,549	5,797,602	5,472,316	5,475,023	7,020,461	8,846,864	86,264,450 rural and urban
GENERAL SERVICE 1	5,485,019	5,718,230	5,283,005	5,140,735	4,783,140	4,748,294	4,646,591	5,127,654	4,981,024	4,620,256	5,143,705	5,396,413	61,074,065
SMALL INDUSTRIAL	1,036,989	1,024,760	947,273	943,588	1,036,919	1,206,526	1,179,003	1,196,533	1,176,611	1,126,375	970,916	908,251	12,753,746

GT calculations with comparison to MECL actuals in October 31, 2019 monthly report to IRAC													
kWh Sales (GT Calculation of Actuals)	ACTUAL											GT Calculated Sum	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19			
RESIDENTIAL URBAN & RURAL	69,978,778	72,257,912	62,242,138	53,862,230	47,157,176	42,647,846	35,800,697	40,884,008	38,476,665	38,482,664	501,790,114		
GENERAL SERVICE 1	35,051,135	36,775,814	33,429,040	32,422,341	30,128,438	29,754,023	29,057,650	32,522,299	31,388,442	28,854,185	319,383,367		
SMALL INDUSTRIAL	7,447,164	7,497,263	6,671,027	6,736,363	7,111,026	8,628,560	8,234,404	8,393,738	8,314,196	7,820,842	76,854,583		
Difference in comparisons	ACTUAL											Subtotal	
kWh Sales - Seasonals Excluded from WNRA	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19		YTD	
Residential Seasonal (Rate 131)	1,086,656	1,136,684	1,098,899	702,723	648,772	585,352	638,449	772,021	561,032	580,692	7,811,280		
Residential Seasonal Optional (Rate 133)	2,721	483	-1,223	17,901	3,095,843	1,514,989	2,194,554	2,718,514	1,946,807	1,610,353	13,100,942		
Subtotal Seasonal kWh Sales Excluded	1,089,377	1,137,167	1,097,676	720,624	3,744,615	2,100,341	2,833,003	3,490,535	2,507,839	2,191,045	20,912,222		
General Service Seasonal (Rate 233)	32		1,186	5,768	1,076,247	1,072,561	2,042,783	2,798,703	1,676,782	735,748	9,409,810		
Total kWh Seasonal Excluded	1,089,409	1,137,167	1,098,862	726,392	4,820,862	3,172,902	4,875,786	6,289,238	4,184,621	2,926,793	30,322,032		
Sales Revenue (GT Calculation of Actuals)	ACTUAL											GT Calculated Sum	
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19			
RESIDENTIAL URBAN & RURAL	9,678,473	9,942,179	8,651,227	7,582,348	6,676,144	6,043,265	5,078,549	5,797,602	5,472,316	5,475,023	70,397,125		
GENERAL SERVICE 1	5,485,019	5,718,230	5,283,005	5,140,735	4,783,140	4,748,294	4,646,591	5,127,654	4,981,024	4,620,256	50,533,946		
SMALL INDUSTRIAL	1,036,989	1,024,760	947,273	943,588	1,036,919	1,206,526	1,179,003	1,196,533	1,176,611	1,126,375	10,874,579		
ECAM Adjustment - Not included in Revenue													
RESIDENTIAL URBAN & RURAL	(193,141)	(199,432)	(171,788)	(148,660)	(130,154)	(117,708)	(98,810)	(112,840)	(106,196)	(106,212)	-1,384,941		
GENERAL SERVICE 1	(96,741)	(101,501)	(92,264)	(89,486)	(83,154)	(82,121)	(80,199)	(89,762)	(86,632)	(79,638)	-881,498		
SMALL INDUSTRIAL	(20,554)	(20,692)	(18,412)	(18,592)	(19,626)	(23,815)	(22,727)	(23,167)	(22,947)	(21,586)	-212,119		
Revenue Adjustments - Included in Revenue													
RESIDENTIAL URBAN & RURAL	(15,931)	(3,122)	(4,134)	(15,451)	(8,194)	(2,223)	(7,043)	(10,313)	(17,911)	(17,812)	-102,133		
GENERAL SERVICE 1	(1,505)	(946)	(4,897)	(36,164)	(685)	(13,418)	(7,642)	(2,892)	(13,167)	(2,771)	-84,088		
SMALL INDUSTRIAL	6,153	-	(291)	-	22	-	-	21	(59)	-	5,846		
Revised Revenue - WNRA													
RESIDENTIAL URBAN & RURAL	9,469,400	9,739,625	8,475,305	7,418,237	6,537,796	5,923,334	4,972,696	5,674,449	5,348,210	5,350,999	68,910,052		
GENERAL SERVICE 1	5,386,773	5,615,783	5,185,843	5,015,085	4,699,300	4,652,755	4,558,749	5,035,000	4,881,224	4,537,848	49,568,360		
SMALL INDUSTRIAL	1,022,588	1,004,068	928,570	924,996	1,017,315	1,182,711	1,156,276	1,173,388	1,153,605	1,104,789	10,668,307		
Revenue Excluded from WNRA													
Sales Revenue - Seasonals Excluded from WNRA	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19		YTD	
Residential Seasonal (Rate 131)	176,335	182,335	182,244	127,555	120,990	113,805	123,472	143,607	113,872	114,585	1,398,800		
Residential Seasonal Optional (Rate 133)	233	142	-44	2,847	645,854	452,176	547,650	621,649	513,425	465,992	3,249,925		
Subtotal Seasonal kWh Sales Excluded	176,568	182,477	182,201	130,402	766,844	565,980	671,122	765,257	627,297	580,577	4,648,725		
General Service Seasonal (Rate 233)	128	0	305	1,618	216,617	230,535	398,819	511,968	334,013	172,102	1,866,104		
Total Revenue Seasonal Excluded	176,696	182,477	182,505	132,020	983,461	796,515	1,069,941	1,277,225	961,310	752,679	6,514,829		
Sales Revenue - Service Charges Excluded from WNRA													
RESIDENTIAL URBAN & RURAL	1,560,150	1,559,485	1,560,695	1,563,187	1,565,304	1,565,681	1,567,424	1,570,060	1,574,374	1,573,804	15,660,166		
GENERAL SERVICE 1	178,855	178,644	178,643	178,905	179,435	179,902	180,838	181,277	181,535	181,069	1,799,101		

SMALL INDUSTRIAL

0

10,668,307

0