



Northland Utilities (NWT) Limited  
An ATCO Company

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May 1, 2017

Northwest Territories  
Public Utilities Board  
203 - 62 Woodland Drive  
Box 4211  
Hay River, NT X0E 1G1

**Attention: Mr. Gordon Van Tighem,  
Board Chairman**

Dear Sir:

**Re: Northland Utilities (NWT) Limited ("Northland")  
Annual Report of Finances and Operations**

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Pursuant to the NWT Public Utilities Act, please find attached the 2016 Annual Report of Finances and Operations for Northland Utilities (NWT) Limited ("Northland"). This report is consistent with the format and content for a Report of Finance Operations as approved by the Board in Decision 13-2014 regarding the Standardized System of Accounts and General Rate Application Minimum Filing Requirements for Electric Utilities operating in the Northwest Territories.

Further to the Board's direction #10 in Decision 1-2016, Northland Utilities (NWT) has included the requested information regarding its net metered customers as part of this Annual Report.

A copy of Northland's 2016 audited financial statements is also included.

Please contact the undersigned at (780) 420-5432 if you have any questions or concerns.

Yours truly,

***Original signed by***

Corinne Severson  
Director, Regulatory

Enclosure

cc: D. Tenney, Vice President, Northern Development  
R. Stanley, Manager, Northland Utilities (NWT) Limited

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Total Tariff Sales and Revenue**

Line No.	Description	2015 Actual	2016 Actual
1	<b>Residential</b>		
2	Customers (average during year)	2,061	2,058
3	Sales in MWh	11,686	11,725
4	MWh sales per customer	5.7	5.7
5	Revenue (\$000s)	5,724	5,642
6	Cents per KWh	48.98	48.12
7	<b>Commercial</b>		
8	Customers (average during year)	616	625
9	Sales in MWh	20,966	20,845
10	MWh sales per customer	34.1	33.4
11	Revenue (\$000s)	5,851	5,693
12	Cents per KWh	27.90	27.31
13	<b>Street lights</b>		
14	Sales in MWh	619	590
15	Revenue (\$000s)	358	355
16	Cents per KWh	57.72	60.18
17	<b>Space lights</b>		
18	Sales in MWh	180	179
19	Revenue (\$000s)	70	69
20	Cents per KWh	38.97	38.43
21	<b>Total Company</b>		
22	Customers	2,676	2,683
23	Sales in MWh	33,452	33,339
24	Revenue (\$000s)	12,003	11,759
25	Cents per KWh	35.88	35.27
26	Retail Revenues	12,003	11,759
27	Rate Increase from Existing Rates		
28	Adjustment to Placeholder ROE and Capital Structure		
29		<b>12,003</b>	<b>11,759</b>

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Revenue Requirement and ROE Reconciliation**  
**(\$000s)**

Line No.	Description	2015 <sup>(1)</sup> Actual	2016 Actual
1	<b>Revenues</b>		
2	Retail revenues	12,003	11,759
3	Other revenue	239	253
4	<b>Total Revenues</b>	<u>12,242</u>	<u>12,012</u>
5			
6	<b>Costs</b>		
7	Purchase power	3,270	3,417
8	Diesel fuel	1,422	1,183
9	Operations and maintenance	3,989	3,862
10	Franchise taxes	317	332
11	Property taxes	47	47
12	Depreciation	1,378	1,448
13	Amortization of contributions	(113)	(113)
14	Amortization of deferred costs/credits	320	320
15	Income taxes	230	147
16	Sub total	<u>10,862</u>	<u>10,642</u>
17			
18	Less:		
19	Long-term debt interest	576	573
20	Interest on deposits	3	3
21	Sub total	<u>579</u>	<u>576</u>
22			
23	Regulatory Earnings	801	794
24			
25	<b>Revenue Requirement</b>	<u><u>12,242</u></u>	<u><u>12,012</u></u>
26			
27			
28	<b>Common Equity Rate Base</b>	<b>7,427</b>	<b>7,465</b>
29			
30	<b>Return on Common Equity</b>	<b>10.78%</b>	<b>10.63%</b>

(1) In the 2015 Annual Filing (filed April 29, 2016) some amounts were incorrectly reflected as capital expenditures but should have been in working capital. The error has been corrected in this filing, resulting in marginally different results for 2015 than what was previously filed.

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Total Operations and Maintenance Expenses**  
**(\$000s)**

Line No.	Description	2015 Actual	2016		
			Actual	Variance	
1	Generation	905	1,053	(148)	L.18
2	Transmission	102	62	40	
3	Distribution	823	798	25	
4	General	67	52	15	
5	Public Information	128	81	47	
6	Billing & Customer Accounting	390	387	3	
7	Corporate	1,591	1,439	153	L.20
8		<u>4,006</u>	<u>3,871</u>	134	
9	<u>Less:</u>				
10	Donations in account 70150/72100	(16)	(10)	(6)	
11		<u>3,989</u>	<u>3,862</u>	128	
12					
13	Adjustment/Disallowance etc	<u>-</u>	<u>-</u>	<u>-</u>	
14					
15	Total Operations and Maintenance Expenses	<u><b>3,989</b></u>	<u><b>3,862</b></u>	<u><b>128</b></u>	
16					
17	<b><u>Variance &gt; \$50:</u></b>				
18	Generation - Costs are higher mainly due to more top end maintenance required than prior year.				
19					
20	Corporate - Costs are lower mainly due to vacant head office positions.				

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Plant Amortization Expense**  
**(\$000s)**

<b>Line No.</b>	<b>Description</b>	<b>2015 Actual</b>	<b>2016 Actual</b>
1	General Provision	1,429	1,498
2	Amortization of Differences	(27)	(27)
3	Vehicle Depreciation Capitalized	(24)	(24)
4	Total Depreciation Expense	<b><u>1,378</u></b>	<b><u>1,448</u></b>

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Return on Rate Base**  
**(\$000s)**

Line No.	Description	Mid-Year Balance	Ratio	Mid-Year Rate Base	Mid-Year Cost Rate	Return
1	<b><u>2015 Actual</u></b>					
2	Long Term Debt	9,525	56.05%	9,727	5.93%	576
3	Common Stock	7,272	42.79%	7,427	10.78%	801
4	Customer Deposits	197	1.16%	201	1.50%	3
5	No Cost Capital	-	0.00%	-	0.00%	-
6	Total	<u>16,995</u>	<u>100%</u>	<u>17,355</u>	<u>7.95%</u>	<u>1,380</u>
7	<b><u>2016 Actual</u></b>					
8	Long Term Debt	9,925	56.11%	9,802	5.84%	573
9	Common Stock	7,559	42.73%	7,465	10.63%	794
10	Customer Deposits	206	1.16%	203	1.50%	3
11	No Cost Capital	-	0.00%	-	0.00%	-
12	Total	<u>17,689</u>	<u>100%</u>	<u>17,470</u>	<u>7.84%</u>	<u>1,370</u>

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Mid-Year Capitalization Continuity**  
**(\$000s)**

Line No.		<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Actual</u>
1	Common Equity		
2	Opening Balance	7,071	7,473
3	Shares Issue	-	-
4	Net Income	802	790
5	Less: Dividends	(400)	(620)
6	Adjustment to Placeholder ROE and Capital Structure	-	-
7	Closing Balance	<u>7,473</u>	<u>7,644</u>
8	Mid-Year Balance	<b><u>7,272</u></b>	<b><u>7,559</u></b>
9			
10	Debt- Long Term		
11	Opening Balance	9,125	9,925
12	Issue	800	-
13	Repayment	-	-
14	Adjustment to Placeholder ROE and Capital Structure	-	-
15	Closing Balance	<u>9,925</u>	<u>9,925</u>
16	Mid-Year Balance	<b><u>9,525</u></b>	<b><u>9,925</u></b>
17			
18	Customers Deposit		
19	Opening Balance	200	194
20	Additions	42	74
21	Payments	(47)	(51)
22	Closing Balance	<u>194</u>	<u>217</u>
23	Mid-Year Balance	<b><u>197</u></b>	<b><u>206</u></b>
24			
25	No Cost Capital		
26	Mid Year balance	-	-
27			
28	Total Mid-Year Capitalization	<b><u><u>16,995</u></u></b>	<b><u><u>17,689</u></u></b>

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Income Tax Expense**  
**(\$000s)**

Line No.	Description	2015 Actual	2016 Actual
1	Utility Earnings Before Tax	1,032	944
2	Add : AFUDC	23	26
3	Adjustment to Placeholder ROE and Capital Structure	-	-
4		<u>1,054</u>	<u>970</u>
5	<b>Add:</b>		
6	Depreciation	1,378	1,448
7	Amortization of Contributions	(113)	(113)
8	Non-allowable Expenses	7	5
9	Plant Maintenance Reserve Amortization	58	58
10	Rate Case Write-off	226	226
11	Injuries & Damages Write-off	35	35
12	Charges to Deferred Pension	152	141
13	Sub-total	<u>1,743</u>	<u>1,800</u>
14			
15	<b>Deduct:</b>		
16	CCA	1,094	1,030
17	Plant Maintenance Reserve Charges	29	8
18	Rate Case Expenditure	187	159
19	Reserves for Injuries & Damages	-	-
20	Pension Payments	200	191
21	Post Retirement Benefits Payment	-	-
22	Dismantling Costs	59	25
23	AFUDC	23	26
24	Study Costs	-	-
25	Rainbow	59	107
26	ES&G	274	345
27	Stock Handling	3	1
28	Sub-total	<u>1,927</u>	<u>1,891</u>
29	Taxable Income	869	879
30	Tax Rate	<u>26.50%</u>	<u>26.50%</u>
31	Current Income Tax	230	233
32	Book to Filing Adjustments	-	(86)
33	Total Income Tax Expense	<u><u>230</u></u>	<u><u>147</u></u>



**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**Rate Base Calculation**  
**(\$000s)**

Line No.	Description	2015 Actual	2016 Actual
1	<b>Property, Plant and Equipment</b>		
2	Year End Balance	36,722	37,855
3	Deduct:		
4	Accumulated Depreciation	17,926	18,903
5	Construction-in-Progress	450	541
6	Total Deductions	18,375	19,444
7	<b>Net plant in Service</b>		
8	Current year-end balance	18,347	18,411
9	Previous year-end balance	18,556	18,347
10	Total	36,903	36,758
11	Mid-year balance	18,451	18,379
12	Mid-year rate deferred charges/credits	27	(61)
13	Working capital	1,035	1,234
14	<b>Gross Rate Base</b>	19,513	19,552
15	Deduct:		
16	<b>Contributions for extensions</b>		
17	Current year-end balance	2,106	2,059
18	Previous year-end balance	2,210	2,106
19	Total	4,316	4,165
20	Mid-year balance	2,158	2,082
21	<b>Net Rate Base</b>	<b>17,355</b>	<b>17,470</b>

**Northland Utilities (NWT) Limited**  
**Annual Filing for the Year Ended December 31, 2016**  
**CWIP Continuity**  
**(\$000s)**

Line No.	Description	2015 <sup>(1)</sup>			2016			
		Opening Balance	Capital Expend	Actual Capital Adds	Closing Balance	Capital Expend	Actual Capital Adds	Closing Balance
1	<b>New Extension</b>							
2	BWO O/H Services	-	43	(43)	-	23	(23)	-
3	BWO U/G Services	-	11	(11)	-	2	(2)	-
4	NFTI Site	-	32	(32)	-	-	-	-
5	Two Seasons Adventures	-	(28)	28	-	-	-	-
6	Cariboo 3 Phase	-	18	(18)	-	-	-	-
7	Lot 1054 Tap	-	-	-	-	13	(13)	-
8	Other Projects Less Than \$5,000	-	1	(1)	-	(53)	53	-
9	<b>New Extension Total</b>	-	<b>77</b>	<b>(77)</b>	-	<b>(15)</b>	<b>15</b>	-
10	<b>Generation</b>							
11	CUL-290 Replacement	141	65	(206)	-	-	-	-
12	Trout Lake Relocation Study	22	-	-	22	-	-	22
13	Wekweeit Relocation Study	22	-	-	22	-	-	22
14	CUL-452 Replacement	-	317	(317)	-	9	(9)	-
15	ION Meter Replacements	-	53	(1)	52	3	(55)	-
16	CUL-506 Replacement	-	29	(29)	-	-	-	-
17	Hay River D.C Upgrade 2015	-	20	-	20	1	(21)	-
18	CUL-200 Generator Inspection	-	20	(20)	-	-	-	-
19	CUL-200 Power Pack Replacement	-	17	(17)	-	-	-	-
20	CUL-200 Water Pump	-	16	(16)	-	-	-	-
21	Replace CUL-324 Coolant Piping	-	14	(14)	-	(1)	1	-
22	CUL-506 Generator	-	11	(11)	-	-	-	-
23	Refurbish Fort Providence Breaker	-	11	-	11	-	(11)	-
24	Dory Point Generator	-	7	(7)	-	-	-	-
25	CUL-460 Replacement	-	-	-	-	77	(77)	-
26	Hay River Heat Exchangers	-	-	-	-	19	(19)	-
27	EMD Batteries 2016	-	-	-	-	13	(13)	-
28	Hay River Plant Heating Upgrade	-	-	-	-	9	(9)	-
29	NWT Renewable Integration Study	-	-	-	-	6	-	6
30	Hay River Switch Gear Batteries	-	-	-	-	5	(5)	-
31	Other Projects Less Than \$5,000	6	(3)	(3)	-	13	(11)	2
32	<b>Generation Total</b>	<b>191</b>	<b>577</b>	<b>(641)</b>	<b>127</b>	<b>154</b>	<b>(229)</b>	<b>52</b>
33	<b>Transmission</b>							
34	6L10 Pole Testing	-	54	(52)	2	-	(2)	-
35	6L10 Pole Changes	-	55	(55)	-	-	-	-
36	Pine Point Oil Reclamation	-	-	-	-	80	(80)	-
37	701T Leak Repairs	-	-	-	-	43	(43)	-
38	<b>Transmission Total</b>	-	<b>109</b>	<b>(107)</b>	<b>2</b>	<b>123</b>	<b>(125)</b>	<b>-</b>

Line No.	Description	2015 <sup>(1)</sup>			2016			
		Opening Balance	Actual		Capital Expend	Actual		
			Capital Expend	Capital Adds		Capital Adds	Closing Balance	
39	<b>Distribution</b>							
40	McBryan Drive Upgrade	-	201	2	203	510	(713)	-
41	Kakisa Pole Changes	-	41	(41)	-	10	(10)	-
42	Hay River Pole Changes	-	27	(27)	-	33	(33)	-
43	Open Wire Replacement	-	23	-	23	(1)	(22)	-
44	Porcelain Switch Replacements	-	17	(17)	-	12	(12)	-
45	Big River Service Upgrade	-	16	(16)	-	-	-	-
46	Gang Switch S9573	-	14	(14)	-	-	-	-
47	Upgrade Switch Cube	-	11	(11)	-	-	-	-
48	Kakisa Transformer Upgrade	-	10	(10)	-	-	-	-
49	Oil Filled Equipment Test	-	-	-	-	73	(73)	-
50	Distribution Pole Test and Treat	-	-	-	-	35	(35)	-
51	Dory Point Road Crossing	-	-	-	-	26	(26)	-
52	Ground Rod Inspection	-	-	-	-	15	(15)	-
53	KFN Complex Upgrade	-	-	-	-	13	(13)	-
54	Dory Point Spare Transformer	-	-	-	-	9	(9)	-
55	Wekweeti Guys Upgrade	-	-	-	-	6	(6)	-
56	Other Projects Less Than \$5,000	19	(48)	42	13	28	(35)	6
57	<b>Distribution Total</b>	<b>19</b>	<b>312</b>	<b>(92)</b>	<b>239</b>	<b>769</b>	<b>(1,002)</b>	<b>6</b>
58	<b>Street &amp; Sentinel Lights</b>							
59	BWO Street Lights	-	5	(5)	-	-	-	-
60	BWO Sentinel Lights	-	8	(8)	-	12	(12)	-
61	Trout Lake LED Lighting	30	16	-	46	(6)	(40)	-
62	<b>Street &amp; Sentinel Lights Total</b>	<b>30</b>	<b>29</b>	<b>(13)</b>	<b>46</b>	<b>6</b>	<b>(52)</b>	<b>-</b>
63	<b>General Property and Equipment</b>							
64	BWO GP&E	-	15	(15)	-	28	(28)	-
65	Unit 510 Replacement	-	51	(51)	-	-	-	-
66	Hay River Plant Office Replacement	20	16	-	36	447	-	483
67	Purchase Sea Can 2016	-	-	-	-	5	(5)	-
68	Other Projects Less Than \$5,000	-	4	(4)	-	-	-	-
69	<b>Total General Property and Equipment</b>	<b>20</b>	<b>86</b>	<b>(70)</b>	<b>36</b>	<b>480</b>	<b>(33)</b>	<b>483</b>
70	<b>Meters</b>							
71	NWT Capital Meters	-	96	(96)	-	58	(58)	-
72	<b>Meters Total</b>	<b>-</b>	<b>96</b>	<b>(96)</b>	<b>-</b>	<b>58</b>	<b>(58)</b>	<b>-</b>
73	<b>Grand Total</b>	<b>260</b>	<b>1,286</b>	<b>(1,096)</b>	<b>450</b>	<b>1,575</b>	<b>(1,484)</b>	<b>541</b>

Notes

(1) In the 2015 Annual Filing (filed April 29, 2016) some amounts were incorrectly reflected as capital expenditures but should have been in working capital. The error has been corrected in this filing, resulting in marginally different results for 2015 than what was previously filed.

**NORTHLAND UTILITIES (NWT) LIMITED**  
**Annual Filing for the Year Ended December 31, 2016**  
**Reconciliation of Utility Return to Adjusted Net Earnings**  
**(\$000s)**

<b>Line No.</b>	<b>Description</b>	<b>2015</b>	<b>2016</b>
1	Regulatory Earnings	1,380	1,370
2			
3	Add Non Utility Income:		
4	Allowance for Funds Used During Construction	23	26
5	Other Interest	1	6
6		<u>23</u>	<u>32</u>
7			
8	Sub-Total	1,403	1,401
9	Less Non Utility Expenses:		
10	Interest to Parent	562	580
11	Short Term Interest to Parent	18	-
12	Non Utility O&M	16	24
13	OPEB Regulatory Assets Written Off	10	10
14		<u>606</u>	<u>614</u>
15	Sub-Total	797	787
16	Add Income Tax Adjustment:		
17	Tax on Net Non Utility Income	5	2
18	Adjustment to 2014 Placeholder ROE and Capital Structure	<u>-</u>	<u>-</u>
19	Adjusted Earnings Attributable to Class A and Class B Share Owners	<u><b>802</b></u>	<u><b>789</b></u>

**Northland (NWT) Utilities Limited**  
**2016 Annual Report on Net Metering Customers**

Customer #	Customer Class	Type of Customer	Location	Size of Installation (kW)	Date Installed	Net Energy Export / Import (kWh)	Customer's on-site use (kWh)	Total on-site Generation (kWh)	Supply Rate (¢/kWh)	Loss of Revenue
A	B	C	D	E	F	G	H	I	J	K
1	General Service	Commercial	Fort Providence/Thermal	10 kW	2016-07-29	1,320	2,847	4,167	36.94	\$ 1,539
2	Residential	Individual	Hay River/Hydro	5 kW	2016-07-13	800	1,492	2,292	20.94	\$ 480
3	Residential	Individual	Hay River/Hydro	5 kW	2016-07-13	265	2,027	2,292	20.94	\$ 480
4	Residential	Individual	Hay River/Hydro	5 kW	2016-01-25	1,478	3,105	4,583	Jan - Jun: 17.32 Jul - Dec: 20.94	\$ 884
				<b>25 kW</b>		<b>3,863</b>	<b>9,470</b>	<b>13,333</b>		<b>\$ 3,383</b>

Earnings:	\$793,691
1% of Earnings:	\$7,937
Because \$3,383 is lower than 1% of earnings, collection of amount will be delayed until a later date.	

Col A: Customer Identification #-no requirement to disclose confidential information

Col B: The rate class to which the customer belongs

Col C: Whether the customer is an individual, community organization, commercial entity etc

Col D: Name of Community/Zone

Col E: Number of kW installed

Col F: Commissioning date

Col G: Net energy = Import Energy Minus Export Energy

Col H: Estimated or metered on-site consumption by customer

Col I: Estimate 1,000 kWh/kW \* Size of Installation (pro-rated for number of months installed) <sup>1,2</sup>

Col J: Northland Utilities (NWT) Supply Component Charge for applicable rate: Jan-Jun 2016: 29.78¢/kWh, Jul-Dec 2016: 36.94¢/kWh

Col K: Loss of Revenue: Total on-site Generation \* Supply Rate

<sup>1</sup> [Govt of Canada Photovoltaic Potential \(PV kWh/kW\) South-Facing, tilt=latitude +15degrees annual](#)

<sup>2</sup> [NRCan Photovoltaic Systems: A Buyer's Guide. \(http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/PhotovoltaicSystemsBuyerGuide.pdf\)](http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/PhotovoltaicSystemsBuyerGuide.pdf)