

**Northern Utilities, Inc. 2024 Annual Meter Testing Report  
(Calendar Year 2023)**

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1. Please provide a written narrative summarizing overall meter testing program results with observations related to year over year average cost per meter test variances by class.

**Response:** The year over year average cost per meter variance by class for years 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023 are illustrated below. The data shows that the average cost per meter test did not vary significantly year-over-year. The cost per test has direct correlation to the quantity of meters that are shipped per shipment.

**Class A – Small Diaphragm 0 – 500 CFH Meters**

Test Year	Meter Tests	Total Expense	Cost per Meter
2023	2922	\$47,624.45	\$16.30
2022	1776	\$27,365.88	\$15.41
2021	3455	\$47,121.72	\$13.64
2020	2129	\$26,546.95	\$12.47
2019	2980	\$34,372.12	\$11.53
2018	2506	\$30,244.65	\$12.07
2017	2348	\$28,435.84	\$12.11
2016	2876	\$31,902.37	\$11.09
2015	2993	\$35,767.69	\$11.95
<b>Average</b>	<b>2665</b>	<b>\$34,375.74</b>	<b>\$12.95</b>

**Class B – Large Diaphragm > 500 CFH Meters**

Test Year	Meter Tests	Total Expense	Cost per Meter
2023	184	\$13,288.71	\$72.22
2022	286	\$19,557.36	\$68.38
2021	240	\$15,737.36	\$65.57
2020	166	\$10,380.84	\$62.54
2019	150	\$8,881.72	\$59.21
2018	144	\$8,531.27	\$59.24
2017	146	\$8,752.44	\$59.95
2016	140	\$8,118.67	\$57.99
2015	158	\$9,174.01	\$58.06
<b>Average</b>	<b>179</b>	<b>\$11,380.27</b>	<b>\$62.57</b>

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**Class C Rotary Meters**

<b>Test Year</b>	<b>Meter Tests</b>	<b>Total Expense</b>	<b>Cost per Meter</b>
<b>2023</b>	187	\$15,169.44	\$81.12
<b>2022</b>	262	\$20,492.72	\$78.22
<b>2021</b>	253	\$18,776.85	\$74.22
<b>2020</b>	130	\$9,694.86	\$74.58
<b>2019</b>	210	\$15,093.63	\$71.87
<b>2018</b>	268	\$19,207.64	\$71.67
<b>2017</b>	339	\$24,473.67	\$72.19
<b>2016</b>	346	\$24,350.33	\$70.38
<b>2015</b>	328	\$21,119.23	\$70.63
<b>Average</b>	<b>258</b>	<b>\$18,708.71</b>	<b>\$73.87</b>

2. Please provide a reconciliation of actual outsourced gas meter testing program costs to identified costs in its third-party vendor's purchase order agreement(s).

**Response:** Please see Attachment 1 - Gas Testing Invoice Reconciliation 2023.

3. Please provide a cost benefit analysis that compares sufficiently detailed actual costs of outsourcing meter testing for each of Unutil's three gas divisions to updated cost estimates to bring the meter testing and servicing operation in-house.

**Response:** Please see Attachment 2 Unutil - Gas Testing Facility Cost Analysis 2023.

4. For any group of meters that have been flagged with accuracy rates of 87% or less, please provide an updated status of what steps have been taken by Northern or its meter testing program vendor, to determine the defect responsible.

**Response:** Annual tests did not flag any groups of meters as having accuracy rates of 87% or less.