



March 2, 2017

BY OVERNIGHT MAIL AND E-MAIL

NHPUC 3MAR'17AM10:40

Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429

RE: Docket No. DG 14-222 Northern Utilities, Inc., Annual Report of Gas Meter Testing Costs for 2016

Dear Director Howland:

In accordance with condition six of the New Hampshire Public Utilities Commission's April 1, 2015 Secretarial Letter in docket DG 14-222, regarding Northern Utilities, Inc.'s Request for Waiver of Puc 505.07(a), enclosed please find:

- 1) Meter testing program cost analysis of Northern-NH Division's annual outsourced gas meter testing program costs.
- 2) Copy of a "Utility and Industries" quote for cost of service.
- 3) Cost benefit analysis of Unitil's three gas divisions to outsource the meter testing program.

These materials provide an updated cost estimate for bringing the meter testing and servicing operations "in-house."

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Gary Epler".

Gary Epler
Attorney for Northern Utilities, Inc.

Enclosures

cc: Randall Knepper, P.E., Director, Safety Division

Gary Epler
Chief Regulatory Counsel
epeler@unitil.com

6 Liberty Lane West
Hampton, NH 03842

T 603.773.6440 F 603.773.6640 www.unitil.com

**Unitil - Northern
Gas Meter Testing Cost Analysis 2016**

Cost Analysis

The 2016 cost for Northern to outsource the testing of the 1119 meters associated with its NH customers was \$32,483.01, or an average of \$29.03 per meter.

The total cost for the 3362 meters associated with Unitil’s three gas companies was \$64,371.37, or an average of \$19.15 per meter.

It is estimated that in order to bring the meter testing and servicing operation back in-house, Unitil would need to hire two full-time employees and the annual cost with benefits would be:

| | |
|-----------------------------------|-----------|
| 2 Full Time Employees w/ Benefits | \$171,267 |
| Utility Expenses | \$3,500 |
| Tool Replacements | \$1,000 |
| Total | \$175,767 |

The estimated annual cost of \$175,767 for two employees, utilities, and tools would result in the cost per meter test for the 3362 meters tested in 2016 to be \$52.28 per meter.

Additional consideration should be taken for the start-up costs that would be incurred and depreciated over time to facilitate a meter testing laboratory are as follows:

| Start-up Costs | Location | |
|--------------------|-----------|-------------|
| | Fitchburg | Portsmouth |
| Facility Estimate | \$411,348 | \$1,003,669 |
| Equipment Estimate | \$257,661 | \$257,661 |
| Total | \$669,009 | \$1,261,329 |

Conclusion

Due to the estimated annual operating costs of \$175,767 exceeding the most recent annual expenditures of \$64,371.37 paid to vendors for performing testing, it is not economical at this time for Unitil to pursue establishing a gas meter testing facility.

NU-NH 2016 Meter Test Cost Summary

| Description of Test/Repair | Size of Meter | Cost per Test | Quantity | Test Cost |
|--|--------------------|---------------|-------------------|---------------------|
| Class A Repair | Domestic | \$ 22.25 | 43 | \$ 956.75 |
| Class A Repair | Class 400 | \$ 22.12 | 3 | \$ 66.36 |
| Class A Repair | Class 700 | \$ 58.79 | 0 | \$ - |
| Class A Repair | Class 800/1000 | \$ 62.25 | 2 | \$ 124.50 |
| Class A Repair | Rotary (all sizes) | \$ 72.00 | 0 | \$ - |
| | | | | |
| Intest/Condemn; or Class B & C Test only | Domestic | \$ 9.81 | 654 | \$ 6,415.74 |
| Intest/Condemn; or Class B & C Test only | Class 400 | \$ 9.81 | 56 | \$ 549.36 |
| Intest/Condemn; or Class B & C Test only | Class 700 - 1000 | \$ 57.46 | 97 | \$ 5,573.62 |
| Intest/Condemn; or Class B & C Test only | Class 1400 | \$ 64.99 | 0 | \$ - |
| Intest/Condemn; or Class B & C Test only | Class 2300 | \$ 70.32 | 1 | \$ 70.32 |
| Intest/Condemn; or Class B & C Test only | Class 5000 | \$ 76.99 | 0 | \$ - |
| Intest/Condemn; or Class B & C Test only | Rotary 1.5M - 7M | \$ 69.86 | 252 | \$ 17,604.72 |
| Intest/Condemn; or Class B & C Test only | Rotary 11M | \$ 72.53 | 6 | \$ 435.18 |
| Intest/Condemn; or Class B & C Test only | Rotary 16M | \$ 75.19 | 5 | \$ 375.95 |
| Intest/Condemn; or Class B & C Test only | Rotary 23M | \$ 80.53 | 0 | \$ - |
| | | | 1119 | \$ 32,172.50 |
| | | | Shipping Expenses | |
| | | | | \$ 310.51 |
| | | | Total | \$ 32,483.01 |

| Shipping Breakdown | | |
|-----------------------|---------------|------------------|
| Diaphragm 0 - 500 CFH | 67.6% | \$ 209.78 |
| Diaphragm > 500 CFH | 8.9% | \$ 27.75 |
| Rotary | 23.5% | \$ 72.98 |
| | 100.0% | \$ 310.51 |

| PUC Meter Group Classification | # of Meters | Total Expense | Cost per Meter |
|--------------------------------|-------------|---------------------|-----------------|
| Diaphragm 0 - 500 CFH | 756 | \$ 8,197.99 | \$ 10.84 |
| Diaphragm > 500 CFH | 100 | \$ 5,796.19 | \$ 57.96 |
| Rotary | 263 | \$ 18,488.83 | \$ 70.30 |
| | | | |
| Average Cost Per Meter | 1119 | \$ 32,483.01 | \$ 29.03 |

Unitil 2016 Meter Test Cost Summary

| Description of Test/Repair | Size of Meter | Cost per Test | Quantity | Test Cost |
|--|--------------------|---------------|---------------------|--------------|
| Class A Repair | Domestic | \$ 22.25 | 205 | \$ 4,561.25 |
| Class A Repair | Class 400 | \$ 22.12 | 6 | \$ 132.72 |
| Class A Repair | Class 700 | \$ 58.79 | 0 | \$ - |
| Class A Repair | Class 800/1000 | \$ 62.25 | 2 | \$ 124.50 |
| Class A Repair | Rotary (all sizes) | \$ 72.00 | 0 | \$ - |
| | | | | |
| Intest/Condemn; or Class B & C Test only | Domestic | \$ 9.81 | 2525 | \$ 24,770.25 |
| Intest/Condemn; or Class B & C Test only | Class 400 | \$ 9.81 | 140 | \$ 1,373.40 |
| Intest/Condemn; or Class B & C Test only | Class 700 - 1000 | \$ 57.46 | 137 | \$ 7,872.02 |
| Intest/Condemn; or Class B & C Test only | Class 1400 | \$ 64.99 | 0 | \$ - |
| Intest/Condemn; or Class B & C Test only | Class 2300 | \$ 70.32 | 1 | \$ 70.32 |
| Intest/Condemn; or Class B & C Test only | Class 5000 | \$ 76.99 | 0 | \$ - |
| Intest/Condemn; or Class B & C Test only | Rotary 1.5M - 7M | \$ 69.86 | 333 | \$ 23,263.38 |
| Intest/Condemn; or Class B & C Test only | Rotary 11M | \$ 72.53 | 7 | \$ 507.71 |
| Intest/Condemn; or Class B & C Test only | Rotary 16M | \$ 75.19 | 6 | \$ 451.14 |
| Intest/Condemn; or Class B & C Test only | Rotary 23M | \$ 80.53 | 0 | \$ - |
| | | | 3362 | \$ 63,126.69 |
| | | | Shipping Expenses | |
| | | | \$ 1,244.68 | |
| | | | Total | |
| | | | \$ 64,371.37 | |

Shipping Breakdown

| | | |
|-----------------------|-------|--------------------|
| Diaphragm 0 - 500 CFH | 85.5% | \$ 1,064.75 |
| Diaphragm > 500 CFH | 4.2% | \$ 51.83 |
| Rotary | 10.3% | \$ 128.10 |
| | | \$ 1,244.68 |

| PUC Meter Group Classification | # of Meters | Total Expense | Cost per Meter |
|--------------------------------|-------------|---------------------|-----------------|
| Diaphragm 0 - 500 CFH | 2876 | \$ 31,902.37 | \$ 11.09 |
| Diaphragm > 500 CFH | 140 | \$ 8,118.67 | \$ 57.99 |
| Rotary | 346 | \$ 24,350.33 | \$ 70.38 |
| | | | |
| Average Cost Per Meter | 3362 | \$ 64,371.37 | \$ 19.15 |

Utilities and Industries

1995 Industrial Blvd

Reynoldsville, PA 15851

Phone: (814) 653-8269 Fax: (814) 653-4127

QUOTATION

Quote Number: 1645

Quote Date: 01/20/16

Page: 1

This quote is valid for 15 days from the date it is received. If 15 days have passed it will be necessary to contact the company representative who sent you the quote to verify the pricing is still valid.

B FITCHBURG GAS AND ELECTRIC
I LIGHT COMPANY
L 285 JOHN FITCH HIGHWAY
L FITCHBURG, MA 01420-8207

S FITCHBURG GAS AND ELECTRIC
H LIGHT COMPANY
I 285 JOHN FITCH HIGHWAY
P FITCHBURG, MA 01420-8207
ATTN: MIKE

Entered By: RF
Location: DEFAULT
Account Cd: UNITIL F
Salesperson: 0

RFQ Number:
Ship Via: UI TRUCK
Taxable: N
Pmt Terms: NET 15

| Line | Order Qty | Part# / Description | DISC | Price | UM | Extended Price | Est Ship |
|------|-----------|--|------|-----------|----|----------------|----------|
| | 1 | CLASS J REP DOM UNITIL INTEST/CONDEMN DOM | 0.00 | \$9.8100 | EA | \$9.81 | 04/30/15 |
| | 1 | CLASS J REP 400 UNITIL INTEST/CONDEMN 400'S | 0.00 | \$9.8100 | EA | \$9.81 | 04/30/15 |
| | 1 | CLASS J REP LC UNITIL INTEST/CON LC 700-1000 | 0.00 | \$57.4600 | EA | \$57.46 | 04/30/15 |
| | 1 | CLASS J REP LC UNITIL INTEST/CON LC AL1400 | 0.00 | \$64.9900 | EA | \$64.99 | 04/30/15 |
| | 1 | CLASS J REP LC UNITIL INTEST/CON LC AL2300 | 0.00 | \$70.3200 | EA | \$70.32 | 04/30/15 |
| | 1 | CLASS J REP LC UNITIL INTEST/CON LC AL5000 | 0.00 | \$76.9900 | EA | \$76.99 | 04/30/15 |
| | 1 | CLASS J REP ROT UNITIL INTEST/CON ROT 1.5M-7M | 0.00 | \$69.8600 | EA | \$69.86 | 04/30/15 |
| | 1 | CLASS J REP ROT UNITIL INTEST/CON ROT 11M | 0.00 | \$72.5300 | EA | \$72.53 | 04/30/15 |
| | 1 | CLASS J REP ROT UNITIL INTEST/CON ROT 16M | 0.00 | \$75.1900 | EA | \$75.19 | 04/30/15 |
| | 1 | CLASS J REP ROT UNITIL INTEST/CON ROT 23M | 0.00 | \$80.5300 | EA | \$80.53 | 04/30/15 |
| | 1 | INTEST DOM SPECIAL TEST DOMESTIC METER | 0.00 | \$28.0000 | EA | \$28.00 | 01/07/15 |
| | 1 | LC INTEST SPECIAL TEST LARGE CAPACITY | 0.00 | \$52.6700 | EA | \$52.67 | 01/07/15 |
| | 1 | ROTARY INTEST SPECIAL TEST ROTARY METER | 0.00 | \$47.0000 | EA | \$47.00 | 01/07/15 |
| | 1 | REPAIR CLASS A AMERICAN/ROCKWELL DOM METERS | 0.00 | \$22.5000 | EA | \$22.50 | 01/07/15 |

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B FITCHBURG GAS AND ELECTRIC
I LIGHT COMPANY
L 285 JOHN FITCH HIGHWAY
L FITCHBURG, MA 01420-8207

S FITCHBURG GAS AND ELECTRIC
H LIGHT COMPANY
I 285 JOHN FITCH HIGHWAY
P FITCHBURG, MA 01420-8207
ATTN: MIKE

Entered By: RF
Location: DEFAULT
Account Cd: UNITIL F
Salesperson: 0

RFQ Number:
Ship Via: UI TRUCK
Taxable: N
Pmt Terms: NET 15

| Line | Order Qty | Part# / Description | DISC | Price | UM | Extended Price | Est Ship |
|------|-----------|--|------|------------|----|----------------|----------|
| | 1 | REPAIR CLASS B AMERICAN/ROCKWELL DOM METER | 0.00 | \$34.9000 | EA | \$34.90 | 01/07/15 |
| | 1 | REPAIR CLASS C AMERICAN/ROCKWELL DOM METER | 0.00 | \$40.1100 | EA | \$40.11 | 01/07/15 |
| | 0 | EXTRA PARTS DOM DOMESTIC EXTRTA PARTS | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |
| | 1 | REPAIR CLASS A 400 CLASS METERS | 0.00 | \$22.1200 | EA | \$22.12 | 01/07/15 |
| | 1 | REPAIR CLASS B 400 CLASS METERS | 0.00 | \$35.8300 | EA | \$35.83 | 01/07/15 |
| | 1 | REPAIR CLASS C 400 CLASS METERS | 0.00 | \$41.6700 | EA | \$41.67 | 01/07/15 |
| | 0 | EXTRA PARTS DOM EXTRA PARTS 400 CLASS METERS | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |
| | 1 | CLASS A REPAIR 700 CLASS LARGE CAPACITY METER | 0.00 | \$78.3400 | EA | \$78.34 | 01/07/15 |
| | 1 | CLASS B REPAIR 700 CLASS LARGE CAPACITY METER | 0.00 | \$155.4900 | EA | \$155.49 | 01/07/15 |
| | 1 | CLASS C REPAIR 700 CLASS LARGE CAPACITY METER | 0.00 | \$182.5900 | EA | \$182.59 | 01/07/15 |
| | 1 | CLASS A REPAIR AL800/1000 LC METER | 0.00 | \$75.6700 | EA | \$75.67 | 01/07/15 |
| | 1 | CLASS B REPAIR AL800/1000 LC METER | 0.00 | \$154.2600 | EA | \$154.26 | 01/07/15 |
| | 1 | CLASS C REPAIR AL800/1000 LC METER | 0.00 | \$189.7200 | EA | \$189.72 | 01/07/15 |
| | 0 | EXTRA PARTS LC LARGE CAPACITY EXTRA PARTS | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |

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S FITCHBURG GAS AND ELECTRIC
H LIGHT COMPANY
I 285 JOHN FITCH HIGHWAY
P FITCHBURG, MA 01420-8207
ATTN: MIKE

Entered By: RF
Location: DEFAULT
Account Cd: UNITIL F
Salesperson: 0

RFQ Number:
Ship Via: UI TRUCK
Taxable: N
Pmt Terms: NET 15

| Line | Order Qty | Part# / Description | DISC | Price | UM | Extended Price | Est Ship |
|------|-----------|---|------|------------|----|----------------|----------|
| | 1 | ROTARY REPAIR A INTEST,CLEAN,PAINT ALL SIZES | 0.00 | \$72.0000 | EA | \$72.00 | 01/07/15 |
| | 1 | ROTARY REPAIR B 1.5M ROTARY METER | 0.00 | \$268.9800 | EA | \$268.98 | 01/07/15 |
| | 1 | ROTARY REPAIR B 3M -5M ROTARY METER | 0.00 | \$268.9800 | EA | \$268.98 | 01/07/15 |
| | 1 | ROTARY REPAIR B 7M ROTARY METER | 0.00 | \$239.1400 | EA | \$239.14 | 01/07/15 |
| | 1 | ROTARY REPAIR B 11M ROTARY METER | 0.00 | \$239.1400 | EA | \$239.14 | 01/07/15 |
| | 1 | ROTARY REPAIR B 16M ROTARY METER | 0.00 | \$268.9800 | EA | \$268.98 | 01/07/15 |
| | 1 | ROTARY REPAIR B 23M ROTARY METER | 0.00 | \$327.9600 | EA | \$327.96 | 01/07/15 |
| | 0 | EXTRA PARTS ROT ROTARY METER EXTRA PARTS | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |
| | 1 | DDM INSTALL BADGES | 0.00 | \$2.8900 | EA | \$2.89 | 01/07/15 |
| | 1 | DDM INSTALL BADGER UNITS | 0.00 | \$5.1000 | EA | \$5.10 | 01/07/15 |
| | 1 | DDM INSTALL ERTS | 0.00 | \$5.1000 | EA | \$5.10 | 01/07/15 |
| | 0 | DELVCHG-PU UNITIL PICKUP CHARGES | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |

Utilities and Industries
 1995 Industrial Blvd
 Reynoldsville, PA 15851
 Phone: (814) 653-8269 Fax: (814) 653-4127

QUOTATION

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S FITCHBURG GAS AND ELECTRIC
H LIGHT COMPANY
I 285 JOHN FITCH HIGHWAY
P FITCHBURG, MA 01420-8207
 ATTN: MIKE

Entered By: RF
 Location: DEFAULT
 Account Cd: UNITIL F
 Salesperson: 0

RFQ Number:
 Ship Via: UI TRUCK
 Taxable: N
 Pmt Terms: NET 15

| Line | Order Qty | Part# / Description | DISC | Price | UM | Extended Price | Est Ship |
|------|-----------|---------------------|------|-------|----|----------------|----------|
|------|-----------|---------------------|------|-------|----|----------------|----------|

| | | | | | | | |
|--|---|--|------|----------|----|--------|----------|
| | 0 | DELVCHG-DEL UNITIL DELIVERY CHARGES | 0.00 | \$0.0000 | EA | \$0.00 | 04/30/15 |
|--|---|--|------|----------|----|--------|----------|

THIS QUOTE IS 2016 PRICING FOR ALL DIVISIONS OF UNITIL.
 PRICING STAYED THE SAME AS 2015.

Serving the Natural Gas
 Industry With: Meters, Drips,
 Correctors, Recorders, Filters
 Prefabs, Separators, Testing,
 Repairs, H2S Treatment Units

| | |
|------------|--------------------------|
| Subtotal: | <u>\$3,446.63</u> |
| Sales Tax: | \$0.00 |
| Freight: | \$0.00 |
| Total: | <u><u>\$3,446.63</u></u> |