

December 4, 2012

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: Docket No. 4342**  
**Responses to Record Requests**

Dear Ms. Massaro:

Attached are ten (10) copies of National Grid's<sup>1</sup> responses to Record Requests that were issued at the Commission's Technical Session on October 15, 2012 in the above-captioned proceeding.

Thank you for your attention to this transmittal. If you have any questions regarding this filing, please feel free to contact me at (401) 784-7288.

Respectfully submitted,



Jennifer Brooks Hutchinson

Enclosures

cc: Dockets 4342 Service List  
Steve Scialabba  
Leo Wold, Esq.

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (hereinafter referred to as "National Grid" or the "Company").

Record Request #1

Request:

How do the radio frequency (“RF”) levels of Smartgrid/Advanced Metering Infrastructure (“AMI”) meters with continual two-way communication compare to the RF levels of Automated Meter Reading (“AMR”) meters with one way communication?

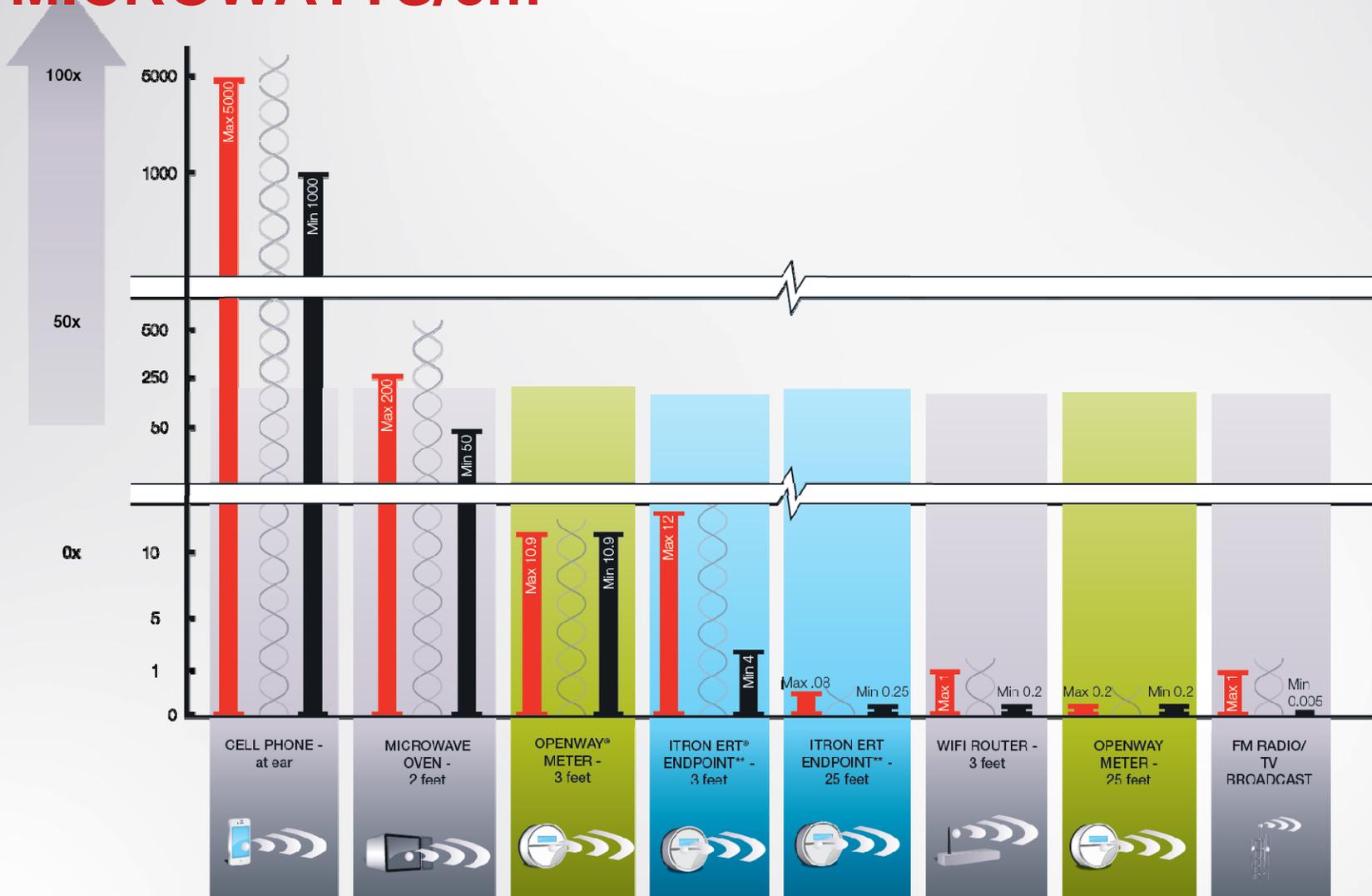
Response:

The chart in Attachment RR-1-1 provides the measured radio frequency (“RF”) levels for both AMR and AMI meters. Along with these measurements, this chart provides comparisons with microwave ovens, cell phones, wifi routers and TV/radio. (Please note the increased scales of 50 times and 100 times to reflect the much higher output of consumer electronics next to the very low output of AMI and AMR meters.) The AMR meter is referred to as the "Itron ERT endpoint" on the chart, and the AMI meter is referred to as the "Openway Meter" on the chart. RF levels drop with greater distance from the source. Thus, the chart provides the distances at which the measurements are taken. For each type of meter, the distances are 3 feet and 25 feet from the source. The greater distance results in much lower RF levels. The AMR and AMI meters emit a similar level of RF at the maximum communication output. The latest AMR meters are configured to be used in a future AMI state. Thus, RF output over the course of a month is similar for the newest AMR and AMI meters. Older AMR meters would be awakened by the drive-by van and only communicate when awakened. Thus, older AMR meters have less total RF frequency output in a month than the newest AMR meters and AMI meters.

Attachment RR-1-2 is a fact sheet provided by ITRON, which utilities can use in discussions with customers regarding their meters and radio frequency emissions. The fact sheet explains the small level of output from the meters, the reasons for the low level of output, and how it compares with the maximum limits allowed by the Federal Communications Commission.

Prepared by or under the supervision of: Peter Zschokke

# COMPARISON OF ITRON RF LEVELS IN MICROWATTS/cm<sup>2</sup>



\* Source: CCST and Itron calculations

\*\* Itron 100 Series endpoints communication module when in mobile (min) or fixed network (max) mode



#### About Radio Frequency

Wireless Radio Frequency (RF) plays a critical role in the communications systems that we all depend on every day, such as police and fire radio systems and pagers, radio and television broadcasts and cellular telephones. Many of the conveniences we've grown accustomed to in our homes and workplaces, such as cordless phones and wireless internet (WiFi), also depend on radio frequency communications. Your electricity meter communicates the same way, eliminating the need for our meter readers to access your home or property.



The meter installed at your house today has been stringently evaluated and meets all Industry Canada (IC), Federal Communication Commission (FCC) in the United States, and Institute of Electrical and Electronic Engineers (IEEE) safety standards. This meter has been consistently evaluated for three key factors – the frequency of transmission, the power output and the distance from the signal – to ensure its products are safe:

- *Limited time on the air:* These meters transmit for very short intervals spread throughout the day and thus have a very short duty cycle. This results in RF emission levels that are a tiny fraction of the exposure limits specified by regulatory agencies, such as Industry Canada and the FCC.
- *Low power:* The radios in the meters are extremely low power; less than one watt. These low levels of RF exposure are insignificant, generating far less RF energy than a cellular network.
- *Limited proximity to humans:* Radio frequency intensity diminishes rapidly with distance. Meters are typically installed outside the home; compared to a cell phone, which is held directly to the side of the head. The exterior walls of your home dramatically reduce the signal strength to miniscule levels inside the home.

#### (Utility)'s System

(Utility)'s residential electricity meters transmit their signals and data for an average total of 2.5 minutes per day. The RF energy levels from these transmissions constitute less than 1/100 of 1 percent (or 0.0086%) of the exposure limits set by Industry Canada and the FCC.

#### Health Impacts

According to several reputable organizations, including the Electric Power Research Institute and Utilities Telecom Council, there is no demonstrated cause and effect relationship between low levels of radio frequency exposure and adverse human health effects

katchewan  
ard Street  
/7 Canada  
s.721.2412

Utility Name  
Address Line 1  
Address Line 2  
Phone

replace with  
logo

Record Request #2

Request:

How many of the customers who returned their electric meters to the Company are also gas customers?

Response:

There have been two customers who have returned their electric meters to the Company during 2012. Both customers are electric only customers. Also, there was one customer who requested and was provided a non-AMR meter in or around June 2011. That customer is both an electric and gas customer.

Prepared by or under the supervision of: Jeanne Lloyd

Record Request #3

Request:

Please provide further analysis of the pricing at the other utilities contained in the Company's October 15, 2012 presentation, such that an apples-to-apples comparison can be made with the fees proposed by the Company in this proceeding.

Response:

The Company has further analyzed the opt-out fees, which are either effective or have been proposed at six utilities (including those utilities contained in the Company's October 15, 2012 presentation): Central Maine Power (CMP), Cleveland Utilities, Pacific Gas & Electric (PG&E), Avista, Portland General Electric (PGE), and DTE Energy. Please see the additional detail provided in Attachment RR-3.

Avista's \$221.61 upfront fee includes the cost of re-installing the communicative (ERT) gas meter and customer service system costs. These are not part of the Company's calculation. If these costs were removed from Avista's calculation, the remaining \$75 cost would represent only labor and transportation to remove the ERT meter and replace it with a non-ERT meter. This can be compared to the Company's proposed initial fee for a gas non-AMR meter. Avista's \$50.88 monthly fee includes only labor and transportation and can be compared to Company's monthly fee.

PGE's electric upfront fee includes a net incremental meter cost and billing representative cost, which are not part of the Company's initial fee calculation. Once subtracted, the PGE upfront fee would be approximately \$51, which includes only field labor and transportation, and can be compared to the Company's proposed initial fee. PGE's \$51 monthly fee includes only field labor and transportation costs, and can be compared to the Company's proposed monthly fee.

DTE Energy's proposed initial fee includes billing system modification costs. It also includes the cost to "disable and enable" an electric AMI meter. DTE's filings are unclear on whether "disable and enable" means the fee covers the future re-enabling of the AMI meter. To the extent that half of this cost is comparable to replacing an AMR meter with a non-AMR meter, then the other half can be subtracted along with billing system modification costs. The resulting \$32.50 can be compared with the Company's proposed initial electric fee. Likewise, DTE's proposed monthly fee would be \$12 if billing consultant fees and avoided cost credits (not part of the Company's calculation) were subtracted, and can be compared with the Company's proposed monthly fee.

Record Request #3, page 2

PG&E's approved fees are those proposed by the utility, minus the costs disallowed by the regulator. Minus the cost of a physical meter and IT related costs, PG&E's filed cost estimate for an analog meter is about \$123, and comparable to the Company's proposed initial fee (labor and transportation only). However, the approved fee is only \$75 and an itemized list of the allowed costs could not be obtained. On the other hand, comparison with PG&E's approved monthly fee of \$10 is comparable to that of the Company's proposed monthly fee because it is close to PG&E's cost estimate of \$10.69, which includes less than 50 cents of costs outside of labor and travel.

CMP's approved electric fees are those proposed by the utility minus those costs disallowed by the regulator. However, an itemized list of the allowed costs was not retrievable from the regulator's website. CMP's \$12 monthly fee (for bimonthly reads) is close to its filed \$15 monthly cost estimate – comprised almost entirely of labor and vehicle costs. Doubling the \$12 fee to \$24 (to reflect the cost per meter read) provides a reasonable comparison with the Company's proposed fee. On the other hand it is difficult to compare the approved initial fee to that proposed by the Company. Of CMP's \$309 cost estimate, only \$40 was approved and it is unclear which costs were allowed.

Based on newspaper articles, which quote Tom Wheeler, CEO, the monthly fee at Cleveland Utilities is intended to cover meter reading costs, and would therefore be comparable to the Company's proposed monthly electric fees. It is unclear why no upfront fee was approved.

Prepared by or under the supervision of: Michael Coles

**Avista (Oregon)**

Docket: no docket/case created

Tariff Effective 9/1/2012 (Rule No. 20: Miscellaneous Charges; Rule No. 17: Measurement of Service)

Service	Option	Initial Fee	Monthly Fee	Fee Development
G	Rule 17, Part F: Removal and Replacement of Digital/Smart/Communicative Metering (initial fee also includes future replacement of the communicative meter)	\$221.61	\$ 50.88	<ul style="list-style-type: none"> <li>• Avista filed an Advice Filing No. 12-04-G on July 17, 2012</li> <li>• Proposed Fees were approved on August 14, 2012</li> <li>• Fee development is outlined below, under Additional Details.</li> </ul>

**Additional Details (copied from Avista's July 17, 2012 filing)**

Workpaper for Rule 17 & 20 - Adv 12-04-G

**Up Front Costs**

	Cost	Notes
Cost of ERT (Reinstall after customer leaves)	\$ 52.64	Average ERT Cost, 10% materials loadings
Removal Labor Cost of ERT	\$ 50.07	\$38 per hour, plus 88.25% Loadings, at 0.5 hours travel and 0.2 hours job site
Installation Labor Cost of ERT	\$ 50.07	\$38 per hour, plus 88.25% Loadings, at 0.5 hours travel and 0.2 hours job site
Transportation to Remove ERT	\$ 25.00	\$1.25 per mile, average 20 Miles roundtrip
Transportation to Install ERT	\$ 25.00	\$1.25 per mile, average 20 Miles roundtrip
Customer Service System Setup Removal of ERT	\$ 9.41	\$20 per hour, plus 88.25% loadings, at 15 minutes
Customer Service System Setup Installation of ERT	\$ 9.41	\$20 per hour, plus 88.25% loadings, at 15 minutes
<b>Total Upfront Costs for Opt Out</b>	<b>\$ 221.61</b>	

**Monthly Meter Reading Charge**

Labor Cost	\$ 25.88	\$25 per hour, plus 88.25% Loadings, at 0.5 hours travel and 0.05 hours reading
Transportation	\$ 25.00	\$1.25 per mile, average 20 Miles roundtrip
<b>Monthly Meter Reading Cost</b>	<b>\$ 50.88</b>	

**Portland General Electric**

Docket: no docket/case created  
Tariff Effective 8/10/2012 (Schedule 300: Miscellaneous Charges)

Service	Option	Initial Fee	Monthly Fee	Fee Development
E	Non-network Residential Meter Rates (Rule M)	\$254.00	\$ 51.00	<ul style="list-style-type: none"> <li>• PGE filed an advice filing No. 11-15 on June 30, 2011 to request tariff language and fees to allow residential "non-network" metering as an alternative to AMI. Cost estimates were provided in the filing (<a href="#">see Additional Details, below</a>)</li> <li>• PGE made another filing on July 21, 2011 to update the proposed tariff language regarding the up-front nature of the Initial Fee and responsibilities regarding the cost of relocation a network meter whose signal is blocked.</li> <li>• Proposed rates were approved on July 26, 2011, to take effect August 10th.</li> </ul>

**Additional Details (from PGE's June 30, 2011 filing)**

**Estimated Installation Costs for Non-network Meter With Interval Data**

**Install and Replacement of Meter**

**Meter Cost**

Net Incremental Meter Cost 202.10

**Labor**

Average FCR wage	30.16	
Hours per meter exchange	0.17	
Average travel time/hours	0.50	20.11

Average Coordinator Support wage @ 80%	\$21.72	
Hours per meter exchange	0.02	0.36

Average Billing Rep wage	\$22.94	
Hours per exception (exceptions created 30% of time with MX)	0.03	0.57

Labor Loadings	75.85%	15.96
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**Vehicles**

Average round-trip mileage per meter exchange	30	
Mileage rate	0.51	15.30

**Total Install Cost** \$ **254.40**

**Estimated Monthly Cost for Meter Read of Non-network Meter With Interval Data \***

**Monthly Cost**

**Labor**

Average FCR wage	30.16	
Hours per meter read	0.17	
Average travel time/hours	0.50	20.11

Average Coordinator Support wage @ 80%	\$21.72	
Hours per meter read	0.02	0.36

Labor Loadings	75.85%	15.53
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**Vehicles**

Average round-trip mileage per meter read	30	
Mileage rate	0.51	15.30

**Total monthly cost per manual read interval data** **\$ 51.29**

Note:  
\* Meter reads with or without interval data are approximately equal in time (i.e., on average 10 minutes).

**DTE Energy (Detroit Edison Company)**

Case: U-17053  
Tariff Effective: N/A (Proposed on July 31, 2012; Case ongoing)

Service	Option	Initial Fee	Monthly Fee	Fee Development
E	Non-transmitting AMI meter	\$87.00	\$ 15.00	<ul style="list-style-type: none"> <li>• Costs developed using the assumption of 4,000 opt out customers</li> <li><u>Initial Fee</u></li> <li>Time &amp; Expense to disable &amp; enable AMI Meter Transmitter \$ 61.00</li> <li>Training for Field Personnel \$ 2.00</li> <li>Billing System Modifications \$ 24.00</li> <li><b>Total Initial Fee \$ 87.00</b></li> <li><u>Monthly Fee (Operational Costs)</u></li> <li>Meter Reading Costs \$ 8.00</li> <li>One Supervisor - Meter Reading \$ 2.00</li> <li>Two Billing Consultants \$ 3.60</li> <li>One Route Coordinator \$ 2.00</li> <li>Meter Reading Costs Included in Current Rates \$ (0.45)</li> <li>AMI Costs Included in Current Rates \$ (0.15)</li> <li><b>Total Monthly Fee \$ 15.00</b></li> </ul>

**Additional Details**

During the installation of approximately 800,000 AMI meter and modules through mid-July 2012, DTE had received approximately 1,100 concerns regarding the AMI Meters, related mostly to health or privacy.

Further detail behind the above calculations (from the July 31, 2012 filing) was provided by DTE in the September 10, 2012 filed testimony and exhibits of Robert E. Sitkauskas of Detroit Edison, in the same proceeding. A cross-examination is scheduled for January 2013 at the Michigan PSC.

Pacific Gas & Electric				
PUC Decision 12-02-014 Tariffs Effective 2/16/2012 (Electric Schedule E-SOP, and Gas Schedule G-SOP)				
Service	Option	Initial Fee	Monthly Fee	Fee Development
E &/or G	Standard opt out fees	\$75.00	\$ 10.00	<ul style="list-style-type: none"> <li>PG&amp;E's initial opt-out proposal included cost estimate for a "radio off" option, its favored option. It later provided additional cost estimates for three other opt-out options in its 10/28/2011 Response to an ALJ ruling (Attachment A)</li> </ul>
E &/or G	Customers who take service under California Alternate Rates for Energy (CARE), or Family Electric Rate Assistance (FERA)	\$10.00	\$ 5.00	<ul style="list-style-type: none"> <li>PUC ordered the analog meter option</li> <li>PG&amp;E's cost estimates for analog option* <ul style="list-style-type: none"> <li>Meter Change: \$179 (1.5 hrs @ \$85.33 fully loaded hourly rate + \$51.24 for meter)</li> <li>Meter Read: \$10.69 (0.15 hours @ \$72.33 fully loaded hourly rate)</li> <li>Other Costs: \$58M over 148,500 assumed opt-out customers (Network, IT, Call Center, Billing, Communication, Administrative, etc.)</li> </ul> </li> <li>PG&amp;E's proposed non-CARE/FERA fees: \$270 Initial, \$16 monthly, and \$130 exit fee</li> <li>PUC removed costs related to SmartMeter infrastructure project as a whole, arguing those costs be recovered from all customers (but the Decision did not itemize the specific costs that were removed)</li> <li>Approved fees are "interim" only, and will be reviewed in the "second phase" of the PUC's proceeding on the matter.</li> <li>Opt-out costs and revenues to be tracked in "two-way electric and gas Modified SmartMeter Memorandum Accounts"</li> </ul>
Additional Details				

\* For PG&E's calculations, see Attachment A, sections 1A, 1B, and 1C, of PG&E's October 28, 2011 Response to the ALJ's October 12, 2011 Ruling.

The second phase of the PUC proceeding will consider allocation of costs between opt-out customers and all other customers, the appropriateness of an exit fee (currently disallowed), the appropriateness of approved interim fees, and issues associated with providing a community opt-out option.

Central Maine Power				
Docket/Case: 2010-345, et al (2010-389, 2010-398, 2010-400, 2011-085)				
Tariff Effective July 15, 2011				
Service	Option	Initial Fee	Monthly Fee	Fee Development
E	Option (a): Electromechanical Meter	\$40.00	\$ 12.00	
E	Option (b): Standard wireless smart meter with the internal network interface card operating in receive-only mode	\$20.00	\$ 10.50	<ul style="list-style-type: none"> <li>The 4/21/2011 "bench analysis" by the Advisory Staff to the PUC began with the cost estimates in CMP's Response to ODR-02-08, filed 3/10/2011: <ul style="list-style-type: none"> <li>Electro-mechanical meter: \$309 one-time; \$15/month</li> <li>Interval meter (NIC powered down): \$376 one-time; \$15/month</li> <li>Assumed opt-out participation: 9000 meters (1.5% of all meters)</li> </ul> </li> </ul>
E	"Residential Electricity Lifeline Program" customers above 100% of Federal Poverty Guidelines	75% of Initial Fee	75% of Monthly Fee	<ul style="list-style-type: none"> <li>Staff then eliminated various costs it deemed unsubstantiated, not incremental to CMI's AMI program, or unduly speculative to arrive at the fees ordered by the PUC in "Order Part II", issued 6/22/2011.</li> <li>Costs known to be disallowed in opt-out fees: meter design and firmware development for the transmitter-off option; opt-out communication plan costs.</li> </ul>
E	"Residential Electricity Lifeline Program" customers at or below 100% of Federal Poverty Guidelines	50% of Initial Fee	50% of Monthly Fee	<ul style="list-style-type: none"> <li>Deferral and reconciliation mechanism will account for over/under collection of costs due solely to difference between 9,000 and the actual number of opt-out participant meters.</li> </ul>
Additional Details				

If a customer has multiple meters that are not standard wireless smart meters and the energy usage registered on those meters is added together and combined into one bill, with one customer charge, the customer will pay a single Initial Charge and Recurring Monthly Charge. For all other multiple meter situations, the customer will pay an Initial Charge and Recurring Monthly Charge for each meter that is not a standard wireless smart meter.

A customer choosing to convert to a standard wireless smart meter from an electro-mechanical meter or from a wireless smart meter with the internal network interface card operating in receive-only mode will not be charged for the conversion. The customer remains responsible for any unpaid opt-out charges incurred by said customer prior to conversion to a standard wireless smart meter.

PUC waived its rules (Chapter 815, section 8(L)), so that CMP could implement bimonthly reads.

"Order Part II" did not identify all of the unallowed costs in detail. Attachment 1 of the bench analysis, which does provide details, is not retrievable from the PUC filing database.

**Cleveland Utilities**

Municipal Utility  
Tariff Effective July 1, 2012

Service	Option	Initial Fee	Monthly Fee	Fee Development
E	Opt out of AMI meter, and keep non-communicating non-AMI meter	none	\$ 10.00	<ul style="list-style-type: none"> <li>• Cleveland Utilities CEO Tom Wheeler stated the fee will help cover the cost of sending out a utility worker to manually log a home's electricity usage</li> <li>• Wheeler also stated the fee may go up or down in the future depending on the actual expenses incurred: "There are other accounting costs that will be involved [in] handling these opt-outs separate for the AMI meters we will have installed. Until we actually implement the rate, it is difficult to project with any accuracy what the entire expense will total."</li> <li>• More detailed information regarding how the fee was calculated could not be obtained.</li> </ul>

**Additional Details**

Newspaper articles:

- [http://www.clevelandbanner.com/view/full\\_story/19918671/article-CU-board-approves-AMR-opt-out-rate?instance=homefirstleft](http://www.clevelandbanner.com/view/full_story/19918671/article-CU-board-approves-AMR-opt-out-rate?instance=homefirstleft)
- <http://www.timesfreepress.com/news/2012/aug/25/utility-offers-opt-out-plan-for-smart/>

The fees were approved by members of the Cleveland Board of Public Utilities, after approval by the Tennessee Valley Authority's retail regulatory affairs department.

Record Request #4

Request:

Please calculate the meter change cost and meter reading cost in the Company's October 15, 2012 presentation using straight time as opposed to overtime.

Response:

Please see Attachment RR-4-1 for meter reading and meter change cost calculations based on straight time. Page 2 of Attachment RR-4-1 also includes a prorated gas and electric meter reading cost based on the ratio of gas and electric installed residential meters.

In response to questions and concerns raised by the Commission and the Division at the October 15, 2012 Technical Session, the Company would not object to opt out fees that are based upon a straight time calculation, as opposed to overtime as originally proposed. In addition, the Company would not object to utilizing a single, uniform meter reading fee that is equally applicable to a gas opt out customer, an electric opt out customer, or a combined gas and electric opt out customer, based on an average cost using a ratio of gas and electric meters currently in service (See Page 2 of Attachment RR-4-1 for this calculation). The Company would continue to maintain separate gas and electric meter change fees, however, because even in the absence of the limits imposed by separate labor contracts, significantly more wrench time would still be required to remove and replace two meters as compared to a single meter. Therefore, it remains fair and appropriate to apply separate meter change fees to gas and electric customers. Moreover, the difference in wrench time between a gas meter change and an electric meter change is significant enough such that a weighted average fee would result in an undue subsidy of gas opt out customers by electric opt out customers.

Accordingly, based on the cost calculations presented in Attachment RR-4-1, the Company would propose a revised gas meter change fee of \$74.00, and a revised electric meter change fee of \$27.00 (rounded to the nearest dollar in both instances). In addition, the Company would propose a single, uniform meter reading fee of \$13.00 (average cost rounded to the nearest dollar) to apply to gas opt out customers, electric opt out customers, or a combined gas and electric opt out customer. Revised redlined electric tariff sheets are provided in Attachment RR-4-2 to this response. Revised redlined gas tariff sheets are provided in Attachment RR-4-3 to this response.

Prepared by or under the supervision of: Michael Coles

**Narragansett Electric Company**

**METER CHANGE COST CALCULATIONS USING STRAIGHT TIME HOURLY RATE**

Job	Unable to Complete (UTC) Rate (a)	Labor Times (minutes)						Average Straight Time Hourly Rate (h)	Loadings (i)	Straight Time Cost Per Job (j)
		Travel (b)	Unanswered Meter Access Requests (c)	Wrench Time (d)	Total Time (access gained) (e)	Total Time (access blocked) (f)	Average Job Time (g)			
GAS - Meter Change	0%	10	10	40	50	20	50.00	\$ 31.90	180%	\$ 74.43
ELECTRIC - Meter Change	0%	9	6	13	22	15	22.00	\$ 31.27	134%	\$ 26.83

**METER READ COST CALCULATIONS USING STRAIGHT TIME HOURLY RATE**

Job	Unable to Complete (UTC) Rate (a)	Labor Times (minutes)						Average Straight Time Hourly Rate (h)	Loadings (i)	Straight Time Cost Per Job (j)
		Travel (b)	Unanswered Meter Access Requests (c)	Wrench Time (d)	Total Time (access gained) (e)	Total Time (access blocked) (f)	Average Job Time (g)			
GAS - Manual Meter Read	19%	10	10	10	20	20	23.80	\$ 31.98	23%	\$ 15.60
ELECTRIC - Manual Meter Read	16%	9	6	8	17	15	19.40	\$ 29.92	27%	\$ 12.29

- (a) For manual meter readings, percentage is from Resource Planning. For meter changes, a rate of zero is assumed.
- (b) Based on twelve month rolling average of actual job times through February 2012, per Resource Planning.
- (c) Based on twelve month rolling average of actual job times through February 2012, per Resource Planning.
- (d) Based on twelve month rolling average of actual job times through February 2012, per Resource Planning. Wrench time includes time spent on task and successfully requesting meter access.
- (e) Equal to (b) + (d)
- (f) Equal to (b) + (c)
- (g) Equal to (a)(e + f) + (1 - a)(e).
- (h) Based on average salary of all qualified wage rates.
- (i) Based on twelve month rolling average of actuals through February 2012 (capex % for meter changes, opex % for meter reads)
- (j) Equal to (g)/60 times (h) times (1 + i)

**Narragansett Electric Company**

**METER READ COST CALCULATIONS USING STRAIGHT TIME HOURLY RATE**

Job	Unable to Complete (UTC) Rate (a)	Labor Times (minutes)						Average Straight Time Hourly Rate (h)	Loadings (i)	Straight Time Cost Per Job (j)
		Travel (b)	Unanswered Meter Access Requests (c)	Wrench Time (d)	Total Time (access gained) (e)	Total Time (access blocked) (f)	Average Job Time (g)			
GAS - Manual Meter Read	19%	10	10	10	20	20	23.80	\$ 31.98	23%	\$ 15.60
ELECTRIC - Manual Meter Read	16%	9	6	8	17	15	19.40	\$ 29.92	27%	\$ 12.29

- (a) For manual meter readings, percentage is from Resource Planning. For meter changes, a rate of zero is assumed.
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- (d) Based on twelve month rolling average of actual job times through February 2012, per Resource Planning. Wrench time includes time spent on task and successfully requesting meter access.
- (e) Equal to (b) + (d)
- (f) Equal to (b) + (c)
- (g) Equal to (a)(e + f) + (1 - a)(e).
- (h) Based on average salary of all qualified wage rates.
- (i) Based on twelve month rolling average of actuals through February 2012 (capex % for meter changes, opex % for meter reads)
- (j) Equal to (g)/60 times (h) times (1 + i)

As of July 19, 2012:

Installed residential gas meters	240,214	35%
Installed residential electric meters	442,415	65%
Total	682,629	100%

**Prorated Gas & Electric Meter Reading Cost: \$ 13.45**  
Prorated based on ratio of gas and electric meters

R.I.P.U.C. No. ~~2124~~ Deleted: 2072

Sheet 1

Canceling R.I.P.U.C. No. ~~2072~~ Deleted: 2040

## THE NARRAGANSETT ELECTRIC COMPANY

### TERMS AND CONDITIONS FOR DISTRIBUTION SERVICE

The following Terms and Conditions where not inconsistent with the rates are a part of all rates. The provisions of these Terms and Conditions apply to all persons, partnerships, corporations or others (the Customer) who obtain local distribution service from The Narragansett Electric Company (the Company) and to companies that are nonregulated power producers, as defined in Rhode Island General Laws. All policies, standards, specifications, and documents referred to herein have been filed with the Rhode Island Public Utilities Commission (Commission) and Division, and such documents and any revisions have been filed at least 30 days before becoming effective. Compliance by the Customer and nonregulated power producer is a condition precedent to the initial and continuing delivery of electricity by the Company.

#### Service Connection

1. The Company shall furnish on request detailed information on the method and manner of making service connections. Such detailed information may include a copy of the Company's Specifications for Electrical Installations booklet, as may be amended from time to time, a description of the service available, connections necessary between the Company's facilities and the Customer's premises, location and access of service connection facilities and metering equipment, and Customer and Company responsibilities for installation of facilities.

The Customer shall wire to the point designated by the Company, at which point the Company will connect its facilities. In addition, the Customer's facilities shall comply with any reasonable construction and equipment standards required by the Company for safe, reliable, and cost efficient service. For a service meeting Company requirements (which requirements are set forth on the Company's website at [www.nationalgridus.connects](http://www.nationalgridus.connects)), the Company may also permit this connection to be made by a licensed electrician in good standing with the authority having jurisdiction, as required by applicable law, and who is registered with the Company, provided, however, that the Company gives no warranty to the Customer, express or implied, as to the knowledge, training, reliability, honesty, fitness, or performance of any electrician registered with the Company for this purpose, and the Company shall not be liable for any damages or injuries caused by any electrician who may be used for such purpose.

#### Application for Service

2. Application for new service or alteration to an existing service should be made as far in advance as possible to assure time for engineering, ordering of material, and construction. Upon the Company's reasonable request, the Customer shall provide to the Company all data and plans reasonably needed to process this application.

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### Line Extensions [Overhead (OH) & Underground (UG)]

3. The Company shall construct or install overhead or underground distribution facilities or other equipment determined by the Company to be appropriate under the following policies: Line Extension Policy for Residential Developments, Line Extension Policy for Individual Residential Customers, and Line Extension and Construction Advance Policy for Commercial, Industrial and Existing Residential Customers. Whenever it is necessary to provide service and a Customer requests the Company to extend or install poles, distribution lines or other service equipment to the Customer's home, premises or facility in order to supply service, the Company will furnish the necessary poles, wires, or equipment in accordance with the Company's "Line Extension and Construction Advance Policies" on file with the Commission. Except as provided in the "Policies", all such equipment, poles, and wires shall remain the property of the Company and be maintained by it in accordance with the "Policies". To the extent that any Company property needs to be located on private property, the Company will require the Customer to furnish a permanent easement.

### Attachments

4. Any individual or organization who requests an attachment to distribution facilities, utility poles, or along any span between such poles, shall comply with the Company's specifications and policies governing the type of construction, metering, attachment fees, easements, permissions and electrical inspections required.

### Outside Basic Local Distribution Services

5. Customers requesting the Company to arrange for Customer facility outages or additional maintenance or construction not normally part of basic local distribution service will be notified in a reasonable timely manner by the Company that the customer shall be required to pay these the Company's costs of reasonably meeting the request.

### Acquisition of Necessary Permits

6. The Company shall make, or cause to be made, application for any necessary street permits, and shall not be required to supply service until a reasonable time after such permits are granted. The Customer shall obtain or cause to be obtained all permits or certificates, except street permits, necessary to give the Company or its agents' access to the Customer's equipment and to enable its conductors to be connected with the Customer's equipment.

### Service to "Out-Building"

7. The Company shall not be required to install service or meter for a garage, barn or other out-building, so located that it may be supplied with electricity through a service and meter in the main building.

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### Customer Furnished Equipment

8. The Customer shall furnish and install upon its premises such service conductors, service equipment, including circuit breaker if used, and meter mounting device as shall conform with specifications issued from time to time by the Company, and the Company will seal such service equipment and meter mounting device, and adjust, set and seal such circuit breaker, and such seals shall not be broken and such adjustments or settings shall not be changed or in any way interfered with by the Customer.

The Customer shall furnish and maintain, at no cost to the Company, the necessary space, housing, fencing, and foundations for all equipment that is installed on its premises in order to supply the Customer with local distribution service, whether such equipment is furnished by the Customer or the Company. Such space, housing, fencing, and foundations shall be in conformity with the Company's specifications and subject to its approval.

### Up-Keep of Customer Equipment

9. The Customer's wiring, piping, apparatus and equipment shall, at all times, conform to the requirements of any legally constituted authorities and to those of the Company, and the Customer shall keep such wiring, piping, apparatus and equipment in proper repair.

### Installation of Meters

10. Meters of either the indoor or outdoor type shall be installed by the Company at locations to be designated by the Company. The Company may at any time change any meter installed by it. The Company may also change the location of any meter or change from an indoor type to an outdoor type, provided that the cost of the change shall be borne by the Company except when such change is pursuant to the provisions of Paragraph 11. Upon the reading of the Company's meter all bills shall be computed. If more than one meter is installed, unless it is installed at the Company's option, the monthly charge for local distribution service delivered through each meter shall be computed separately under the applicable rates.

Unless otherwise determined by the Company, all residential premises shall be equipped with a meter that employs Automatic Meter Reading ("AMR") technology utilizing radio frequency transmitters to allow the Company to obtain meter readings remotely. However, residential customers may choose to "opt-out" by having their AMR meter replaced with a non-AMR meter.

Customers who choose to opt-out will be charged an initial fee of \$27.00 for the removal of the existing AMR electric meter and the installation of the non-AMR electric meter. Customers who choose to opt-out will also be charged a monthly meter reading fee of \$13.00 for the non-AMR electric meter. The meter reading fee is applicable to customers who receive gas and electric service, or receive electric-only service, from the Company. The Company, at its option, may choose to read the non-AMR meter less frequently than once per month. In that case, or if the Company is unable for any reason to read the meter on the regularly scheduled monthly read date, the Company shall make a reasonable estimate of the consumption of electricity during

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those months when the meter is not read, based on available data, and such estimated bills shall be payable as rendered. A customer will not be assessed the initial or monthly fee until after the Company has installed the non-AMR electric meter.

Any opt-out customer who subsequently wishes to have an AMR electric meter re-installed will be charged a "re-installation fee" of \$27.00. The re-installation fee will be charged for the removal of the non-AMR meter and the installation of the AMR meter. Any customer electing re-installation will no longer be assessed the special monthly meter reading fee after the AMR meter has been re-installed.

#### Unauthorized and Unmetered Use

11. Whenever the Company determines that an unauthorized and unmetered use of electricity is being made on the premises of a Customer and is causing a loss of revenue to the Company, the Company may, at the Customer's expense, make such changes in the location of its meters, appliance and equipment on said premises as will, in the opinion of the Company, prevent such unauthorized and unmetered use from being made.

#### Definition of Month

12. Whenever reference is made to "month" in connection with electricity delivered or payments to be made, it shall mean the period between two successive regular monthly meter readings or estimated meter readings, the second of which occurs in the month to which reference is made. If the Company is unable to read the meter when scheduled, the necessary billing determinants may be estimated. Bills may be rendered on such estimated basis and will be payable as so rendered.

#### Payment Due Date -- Interest Charge

13. All bills shall be due and payable upon receipt. Bills rendered to customers, other than individually metered residential customers, on which payment has not been received by the "Avoid Interest Date" as shown on the bill, shall bear interest, at the rate of 1¼% per month on any unpaid balance, including any outstanding interest charges, from the date of receipt until the date of payment. The "Avoid Interest Date" corresponds to the next normal bill preparation date. Bills disputed in good faith by a Customer will not be subject to the late payment charge until after the dispute is resolved.

Customer payment responsibilities with their nonregulated power producer will be governed by the particular Customer/nonregulated power producer contract. Payments made through the Company for electricity purchased from a nonregulated power supplier will be applied first to any Narragansett charges or arrearages.

#### Returned Check Fee

14. A \$15.00 Fee shall be charged to the Customer for each check presented to the Company

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that is not honored by the financial institution. This fee shall be applicable only where the check has been dishonored after being deposited for a second time.

#### Seasonal Customers

15. Seasonal Customers are those using local distribution services between June 1st and September 30th only, or those using local distribution services principally between June 1st and September 30th and incidentally or intermittently during the rest of the year.

#### Deposit and Security

16. The Company may require a cash deposit or other collateral satisfactory to it as security for prompt payment of the Customer's indebtedness to the Company. The rate of interest shall be adjusted on March 1st annually. The interest rate in effect in any year shall be based on the average rate over the prior calendar year for 10-year constant maturity Treasury Bonds as reported by the Federal Reserve Board.

#### Payments for Line Extensions

17. The Company may require a Customer to pay for all or a portion of the cost of extending or installing poles, distribution lines, or equipment to the Customer's home, premises or facility, consistent with the terms of the Company's "Line Extension and Construction Advance Policies" on file with the Commission.

#### Lighting Service Charge

18. The Company may assess a Lighting Service Charge of \$130.00 for Company services rendered in response to a Customer request in support of Customer equipment where the condition, service or connection is unrelated to the performance of facilities owned by the Company. A Lighting Service Charge per each occurrence will be assessed to the Customer on their subsequent bill.

#### Determining Customer's Demand

19. The demand is the maximum rate of taking electricity. Under ordinary load conditions it will be based upon one or more fifteen-minute peaks as herein defined. A fifteen-minute peak is the average rate of delivery of electricity during any fifteen-minute period as determined by any suitable instrument chosen by the Company. In the case of extremely fluctuating load, however, where the demand based on the average over fifteen minutes does not fairly represent the maximum demand imposed by the Customer, the demand will be based upon the instantaneous peak or the peak for a shorter period than fifteen minutes. Such measurements will be made by any suitable instrument chosen by the Company. The demand which is billed to the Customer is determined according to the terms of the appropriate tariffs approved by the PUC from time to time.

#### Customer Changing Rates

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20. The Customer may change from the rate under which he is purchasing electricity to any other rate applicable to a class of service which he is receiving. Any change, however, shall not be retroactive, nor reduce, eliminate or modify any contract period, provision or guarantee made in respect to any line extension or other special condition. Nor shall such change cause such service to be billed at any rate for a period less than that specified in such rate except during the first year of electric service to any Customer. A Customer having changed from one rate to another may not again change within twelve months or within any longer contract period specified in the rate under which he is receiving electric service.

#### Discontinuance of Service

21. Subject to the Rules and Regulations of the Commission, the Company shall have the right to discontinue its service upon due notice and to remove its property from the premises in case the Customer fails to pay any bill due the Company for such service, or fails to perform any of its obligations to the Company. For restoration of service after such discontinuance, a reconnection charge of \$38.00 will be made.

#### Right of Access

22. The Company shall have the right of access to the Customer's premises at all reasonable times for the purpose of examining or removing the Company's meters, and other appliances and equipment. During emergency conditions, the Company shall have the right of access to the Customer's premises at all hours of the day to make conditions safe and/or to restore service.

#### Safeguarding Company Equipment

23. The Customer shall not permit access for any purpose whatsoever, except by authorized employees of the Company, to the meter or other appliances and equipment of the Company, or interfere with the same, and shall provide for their safe keeping. In case of loss or damage of the Company's property, the Customer shall pay to the Company the value of such property or the cost of making good the same.

#### Temporary Service

24. A temporary connection is local distribution service which does not continue for a sufficient period to yield the Company adequate revenue at its regular local distribution service rates to justify the expenditures necessary to provide such a connection. The Company may require a Customer requesting a temporary connection to pay the full amount of the estimated cost of installing and removing the requested connection, less estimated salvage value, in advance of the installation of the connection by the Company. In addition, the customer shall pay the applicable regular local distribution service and, if applicable, basic or standard offer service rates.

#### Limitation of Liability for Service Problems

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25. The Company shall not be liable for any damage to equipment or facilities using electricity which damage is a result of Service Problems, or any economic losses which are a consequence of Service Problems. For purposes of this paragraph, the term "Service Problems" means any service interruption, power outage, voltage or amperage, fluctuations, discontinuance of service, reversal of its service, or irregular service caused by accident, labor difficulties, condition of fuel supply or equipment, federal or state agency order, failure to receive any electricity for which the Company has contracted, or any other causes beyond the Company's immediate control.

However, if the Company is unable for any reason to supply electricity for a continuous period of two days or more, then upon the request of the Customer, the Demand Charge, if any, shall be suspended for the duration of such inability.

The Company shall not be liable for damage to the person or property of the Customer or any other persons resulting from the use of electricity or the presence of the Company's appliances and equipment on the Customer's premises.

#### Limitation on Use of Electricity - Auxiliary & Temporary Local Distribution Service

26. Local distribution service supplied by the Company shall not be used to supplement or relay, or as standby or back up to any other electrical source or service except under the provisions of the Back-Up Service Rate, unless the Customer shall makes such guarantees with respect to the payment for such local distribution service as shall be just and reasonable in each case. Where such local distribution service is supplied, the Customer shall not operate its generation in parallel with the Company's system without the consent of the Company, and then only under such conditions as the Company may specify from time to time.

#### Company Right to Place Facilities on Customer Property

27. The Company has the right to place on a Customer's property facilities to provide and meter electric service to the Customer.

#### Company Right to Request a Guarantee

28. Whenever the estimated expenditures for the services or equipment necessary to deliver electricity to a Customer's premises shall be of such an amount that the income to be derived there at the applicable rates will, in the opinion of the Company, be insufficient to warrant such expenditures, the Company may require a Customer to guarantee a minimum annual payment or commitment for a term of years, or to pay the whole or a part of the cost of such equipment.

#### Fluctuating Load & Harmonic Distortion

29. In certain instances, extreme fluctuating loads or harmonic distortions which are created by a Customer's machinery or equipment may impair service to other Customers. If the fluctuating load or harmonic distortion causes a deterioration of the Company's service to other customers, the Company shall specify a service arrangement that avoids the deterioration and the Customer

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owning or operating the equipment that causes the fluctuation or distortion shall pay the cost to implement the new service arrangement together with applicable taxes.

#### Customer Tax Liability

30. The Company shall collect taxes imposed by governmental authorities on services provided or products sold by the Company. It shall be the Customer's responsibility to identify and request any exemption from the collection of the tax by filing appropriate documentation with the Company.

#### Customer/Supplier Relationship

31. For electricity supplied by nonregulated power producers, the Company is a local distribution service provider of electricity supplied by others. When such electricity is supplied and delivered to the Company's local distribution supply point, the Company then performs a delivery service for the electricity. Ownership of such electricity lies with either the non-regulated power producer or Customer, as per the specific agreement between the Customer and the nonregulated power producer. In no case shall the Company be liable for loss of electricity.

#### Billing Termination ("Soft-Off")

32. The Company and the Rhode Island Division of Public Utilities and Carriers (the "Division") have agreed to participate in a one-year pilot program (the "Pilot") with respect to the Company's "Soft-Off" termination policy pursuant to a Settlement Agreement between the Company and the Division, as approved by the Rhode Island Public Utilities Commission on May 4, 2012. During the Pilot, where a customer has requested termination of service and an estimated or actual final meter reading is recorded, and the account is not subject to a shut-off order or request, the Company may choose to utilize a "Soft-Off" termination, defined as the termination of an account by the Company for billing purposes where there is no new customer of record and the actual flow of electricity to the premises is not disconnected.

In the event of a termination of an account for which there is no unbilled consumption, a landlord may initiate an application for service in the landlord's name at that premises by either oral or written request in accordance with Section 2 of this tariff; provided however, that in the event of a termination of an account for which there is any unbilled consumption, a landlord may initiate an application for service in the landlord's name only upon providing the Company with a signed authorization. In addition, where the landlord has previously provided the Company a signed agreement, the Company may record the landlord as the customer of record for that account without further authorization.

When metered consumption at a premises where a Soft Off termination has been implemented exceeds 100 kilowatt-hours in a month, the Company will send notification to the premises indicating that service shall be terminated pursuant to the Commission and Division's rules and regulations governing the termination of service if an account is not established. When metered consumption at the location exceeds an aggregate of 250 kilowatt-hours, service to the location

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will be terminated; provided however that where such a termination would affect the statutory and/or termination rights of other electric customers at that location, service will be terminated at the Soft Off premises as soon as the Company is able to accomplish the termination so as not to conflict with the rights provided under the Commission and Division's rules and regulations governing the termination of service for the other customers.

Customer Notice and Right to Appeal

33. Where practicable, the Company will give the Customer reasonable notice of actions taken pursuant to these Terms & Conditions. The Customer shall have the right to appeal, pursuant to the Division's Rules of Practice and Procedure, all action taken by the Company hereunder.

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## **GENERAL TERMS AND CONDITIONS**

- 1.0 APPLICABILITY:** The following terms and conditions shall apply to and be a part of each Rate Classification now or hereafter in effect except as they may be expressly modified or superseded by Rhode Island Public Utilities Commission order.
- 2.0 RATES AND TARIFFS:** The Company furnishes natural gas service under rates and/or special contracts ("Schedule of Rates") promulgated in accordance with the provisions of the Rhode Island General Laws and the regulations of the Rhode Island Public Utilities Commission ("RIPUC") and the Rhode Island Division of Public Utilities and Carriers ("RIDPUC"), all as may be in effect from time to time. Such Schedule of Rates, which includes these Terms and Conditions, is available for public inspection during normal business hours at the administrative offices of the Company and at the offices of the RIPUC and the RIDPUC or on the Company's website.

The Schedule of Rates may be revised, amended, supplemented or supplanted in whole or in part from time to time according to the procedures provided in the General Laws and the RIPUC regulations. When effective, all such revisions, amendments, supplements or replacements will appropriately supersede the present Schedule of Rates. In case of conflict between these Terms and Conditions and any orders or regulations of the RIPUC or the RIDPUC, said orders or regulations shall govern.

The provisions of these Terms and Conditions apply on a non-discriminatory and non-preferential basis to all persons, partnerships, corporations or others (hereinafter "customers" or the "customer") who obtain natural gas distribution service from the Company pursuant to the Schedule of Rates.

No representative of the Company has the authority to modify orally any provision or rate contained in the Schedule of Rates or to bind the Company to any promise or representation contrary thereto. Any such modification to the Schedule of Rates or these Terms and Conditions shall be in writing, duly executed by an authorized officer of the Company and made

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### **GENERAL TERMS AND CONDITIONS**

in accordance with the provisions of the General Laws and pursuant to regulations of the RIPUC and RIDPUC.

The Company will advise all new residential customers as to the least expensive rate available for the service based on the information in our records. Non-residential customers will be advised of the applicable rate based on a review of the available information in our existing records or as a result of a field inspection by the Company when the customer provides information which is inconsistent with Company records. The customer is responsible for accurately describing its gas burning equipment and updating the Company as changes occur.

A customer is entitled to change its customer account from one rate classification to another upon written application to the Company; provided, however that the customer account's use complies with the conditions specified in the requested rate classification. Once an election to change rate classifications has been made by the customer, the customer account must remain on that rate for a period of not less than twelve months. In cases where the customer requests a rate reclassification, no rebate will be granted for service rendered during the period the customer account was served under the previous rate classification, except in instances where the previous rate classification was due to an error by the Company.

### **3.0 OBTAINING SERVICE FROM THE COMPANY:**

The Company shall furnish service to applicants under the filed rates and in accordance with these Terms and Conditions and the rules and regulations of the RIPUC and RIDPUC. The furnishing of service and acceptance by the customer constitutes a contract under these provisions. The Company may require at least one person on behalf of all parties who will receive service to sign an application or contract. Application for gas service within the territory served by the Company will be received through any duly authorized representative of the Company.

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### GENERAL TERMS AND CONDITIONS

The Company shall undertake to furnish service to the customer for use only for his/her own purposes and only on the premises occupied through ownership or lease by the customer, except as provided below. In cases where the customer is a condominium association or the owner or manager of a commercial or residential rental property with over six (6) units, the customer may allocate the Company charges for gas service to other gas users on the premises through any reasonable means, including properly installed submetering. In such situations where the customer is allocating the Company charges for service to others, the burden is on the customer, when requested by the Company, to demonstrate that the allocated charges are no greater than the customer's bill from the Company. When allocating such charges, the customer may separately include reasonable administrative fees. Natural gas sold by the Company to authorized natural gas vehicle filling stations may be remetered or submetered by the customer for resale to another or others.

On an annual basis the Company may notify all customers that if they are the owners of property and their tenants move out, the owner must provide written notification in advance that he/she wants gas left on at that premises in his/her name. If the Company does not receive advance written notice, the service may be terminated, and the Company will not be liable for any damages to the premises resulting from the termination of gas service.

#### **3.1 BILLING TERMINATION ("Soft-Off")**

The Company and the Rhode Island Division of Public Utilities and Carriers (the "Division") have agreed to participate in a one-year pilot program (the "Pilot") with respect to the Company's "Soft-Off" termination policy, pursuant to a Settlement Agreement between the Company and the Division, as approved by the Rhode Island Public Utilities Commission on May 4, 2012. During the Pilot, where a customer has requested termination of service and an

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estimated or actual final meter reading is recorded, and the account is not subject to a shut-off order or request, the Company may choose to utilize a “Soft-Off” termination.

In the event of a termination of an account for which there is no unbilled consumption, a landlord may initiate an application for service in the landlord’s name at that premises by either oral or written request in accordance with Section 1, Schedule A, Paragraph 3.0 of this tariff; provided however, that in the event of a termination of an account for which there is any unbilled consumption, a landlord may initiate an application for service in the landlord’s name only upon providing the Company with a signed authorization. In addition, where the landlord has previously provided the Company a signed agreement, the Company may record the landlord as the customer of record for that account without further authorization.

When gas consumption at a premises where a Soft Off termination has been implemented exceeds 13ccf in a month the Company will send a notification to the premises indicating that service will be terminated pursuant to the Commission’s and Division’s rules and regulations governing the termination of service if an account is not established.

Once metered gas consumption at that premises exceeds an aggregate of 35 ccf or the account is still in a “Soft-Off” status for a consecutive period of 90 days, whichever occurs first, the Company will commence a termination action for the account, provided however that where such a termination action would affect the statutory and/or termination rights of other gas customers at that location, service will be terminated at the Soft Off premises as soon as the Company is able to accomplish the termination so as not to conflict with the rights provided under the Commission and Division’s rules and regulations governing the termination of service for the other customers.

**4.0 SECURITY DEPOSITS:** Security deposits, letters of credit or bonds may be required and taken in accordance with rules and procedures

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promulgated by the Rhode Island Public Utilities Commission or other body having authority to regulate the Company. The Company reserves the right to refuse service to an applicant who has not paid a deposit as required by the Company. The rate of interest paid on deposits shall be adjusted annually on March 1st. The interest rate in effect in any year shall be based on the average rate over the prior calendar year for 10-year constant maturity Treasury Bonds as reported by the Federal Reserve Board.

**5.0 SERVICE SUPPLIED:** The Company shall take reasonable care in providing regular and uninterrupted service to its firm customers, but whenever the Company deems that the situation warrants any interruption or limitation in the service to be rendered, such interruption or limitation shall not constitute a breach of the contract, and shall not render the Company liable for any damages suffered thereby by any person, or excuse the customer from further fulfillment of the contract.

The Company may refuse to supply service to loads of unusual characteristics which, in its sole judgment, might adversely affect the quality of service supplied to other customers, the public safety or the safety of the Company's personnel. In lieu of such refusal, the Company may require a customer to install any necessary regulating and protective equipment in accordance with the requirements and specifications of the Company.

Whenever the estimated expenditures necessary to supply gas to a customer(s) or to resume service to a customer following relocation of Company equipment for reasons other than the needs of the Company shall be of such an amount that the income to be derived from gas service at the applicable rates will, in the opinion of the Company, be insufficient to warrant such expenditure, the Company will require the customer(s) to pay a Contribution in Aid of Construction ("CIAC") for meter relocation or for main and service extension. The level of the CIAC will be based on an economic analysis looking at appropriate impacts associated with the capital expenditures.

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A detailed written cost estimate will be provided to the customer upon request.

The Company shall make application in a reasonable time for any necessary locations or other street permits required by public bodies for its pipes, mains and other apparatus, and shall not be required to supply service until a reasonable time after such approvals are obtained. The applicant for service shall obtain all other permits, certificates, licenses, easements and the like necessary to give the Company access to the applicant's equipment and to enable its pipes to be connected thereto.

The customer shall notify the Company in writing before making any significant change in the customer's gas equipment which would affect the capacity or other characteristics of the Company's facilities required to serve the customer. The customer shall be liable for any damage to the Company's property caused by customer's additional or changed installation if made without prior notification to the Company.

All piping, equipment and apparatus on the premises of the customer, excepting meters, underground service pipe, and governors, shall be furnished and put in place by the customer, and shall conform to the requirements and regulations of the Company, and the Company shall not be required to supply gas unless such piping, equipment and apparatus at all times conform to the requirements and regulations of the State, City, and Town ordinances and laws and policies of the Company. The Company shall be under no obligation to make any inspection to ascertain whether the foregoing condition has been conformed with and shall be under no liability for any damages occasioned by any defect in such piping, equipment or apparatus or other property on the premises.

If temporary service is rendered, the customer shall pay the cost of service under the rate plus the cost of installing and removing all equipment and connections.

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## GENERAL TERMS AND CONDITIONS

### **6.0 INSTALLATION OF METERS:**

The Company will furnish, install, connect and maintain such meter(s) as are necessary for metering gas service for Company billing purposes.

All gas service to be provided under a single service classification to a customer in a building will be rendered through a single meter except in the instances described in (1) and (2) below:

(1) The Company may elect to install more than one meter for gas service provided under a single service classification:

- i. when the use of more than one meter is necessary to provide safe gas service;
- ii. when the use of more than one meter is required by a municipal ordinance;
- iii. when one meter cannot correctly measure the total gas service rendered;
- iv. when the characteristics of gas service of the customer are such that at the time the service line was installed there was no single meter commercially available to measure the gas service correctly;
- v. when more than one meter is required in order to render proper and reliable gas service without interruption;
- vi. in other comparable circumstances where service cannot practically be rendered through a single meter.

Pursuant to (i) through (vi), when more than one meter is installed to measure the gas service of a single customer at a premises or building under a single service classification under the above listed circumstances, the registrations of the meters will be combined under one customer account

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and the bill computed as if all service had been rendered through a single meter.

(2) At the customer's written request and at the customer's expense, the Company will install more than one meter for a building or premises under a single service classification, in which case the quantity of gas supplied through each meter will be measured separately and the bills for each computed separately under the appropriate service classification(s).

Gas service provided for use by emergency back-up natural gas generators of more than 12 kw shall be separately metered and billed.

#### **7.0 BILLING AND READING OF METERS:**

Bills are calculated and rendered on the basis of a customer account which shall have a unique identification number established for the billing of service provided through an individual meter, except for multiple metered customer accounts established pursuant to section (1) of Item 6.0 above, or aggregation pools established pursuant to the Company's Transportation Terms and Conditions in Section 6, Schedule C of the tariff. A single customer may have more than one customer account.

All bills are due within 25 days from the date of the bill. A late payment charge shall accrue on non-residential bills after 25 days in accordance with regulations of the RIPUC and RIDPUC.

Whenever a check or draft presented for payment of service is not accepted by the institution on which it is written, a returned check charge of \$15 applies, per check or draft written. Such returned check charge shall be waived for customers eligible for low-income assistance programs.

The customer shall be responsible for all charges for distribution and gas service furnished by the Company under

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the applicable rates as filed from time to time with the RIPUC, from the time service is commenced until it is terminated.

Annually in August the Company will review the gas consumption of each non-residential firm customer account for the just ended September through August period to determine if any customer account qualifies for a different rate class. If any such customer account does qualify for a different rate class based on this billing information, then commencing with the September billing month that customer account will be billed under that new rate class.

Properly authorized representatives of the Company shall have the right to access the customer's premises at all reasonable times and intervals for the purpose of reading, installing, examining, repairing, replacing or removing the Company's meters, meter reading devices, pipes and other gas equipment and appliances, in accordance with the General Laws, public regulations and Company policy in effect from time to time. The customer shall be responsible for providing accessibility to the above metering and equipment belonging to the Company.

Readings taken by an automated meter reading device will be considered actual readings for billing purposes.

The Company shall maintain the accuracy of all metering equipment installed pursuant hereto by regular testing and calibration in comparison to recognized standards and in accordance with RIPUC and RIDPUC regulations. A meter shall be deemed to be registering correctly if it appears from examination or test that it does not vary more than two percent (2%) from the standard approved by the RIDPUC.

In the event that the Company obtains inaccurate meter readings for any reason or in case any meter shall for any reason fail to register the full amount of gas supplied or the maximum demand of any customer account for any period of time, the amount of the bill of such customer account shall be estimated by the Company from available data. Such

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estimated bills shall be payable as rendered unless a customer disputes such estimate in accordance with procedures established by the RIDPUC.

The Company will notify the customer whenever it obtains information indicating that gas is being diverted from the customer's service or that the meter has been tampered with. The customer will be held responsible to the Company for any leakage or other use of gas which may occur beyond the point of the meter installation.

Unless otherwise determined by the Company, all residential premises shall be equipped with a meter that employs Automatic Meter Reading ("AMR") technology utilizing radio frequency transmitters to allow the Company to obtain meter readings remotely. However, residential customers may choose to "opt-out" by having their AMR meter replaced with a non-AMR meter.

Customers who choose to opt-out will be charged an initial fee of \$74.00 for the removal of the existing AMR gas meter and the installation of the non-AMR gas meter.

Customers who choose to opt-out will also be charged a monthly meter reading fee of \$13.00 for the non-AMR gas meter. The meter reading fee is applicable to customers who receive gas and electric service, or receive gas-only service, from the Company. The Company, at its option, may choose to read the non-AMR meter less frequently than once per month. In that case, or if the Company is unable for any reason to read the meter on the regularly scheduled monthly read date, the Company shall make a reasonable estimate of the consumption of electricity during those months when the meter is not read, based on available data, and such estimated bills shall be payable as rendered.

A customer will not be assessed the initial or monthly fee until after the Company has installed the non-AMR gas meter.

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Any opt-out customer who subsequently wishes to have an AMR gas meter re-installed will be charged a "re-installation fee" of \$74.00. The re-installation fee will be charged for the removal of the non-AMR gas meter and the installation of the AMR gas meter.

Any customer electing re-installation will no longer be assessed the special monthly gas meter reading fee after the AMR meter has been re-installed.

#### **8.0 DISCONTINUANCE OF SERVICE:**

Subject to the applicable regulations of the RIPUC and RIDPUC, the Company shall have the right to discontinue gas service to the customer and to remove or disconnect its meters and piping for nonpayment of bills for gas service. The customer shall be responsible for paying the cost of reconnecting gas service if the service is disconnected for nonpayment of bills or a \$25 account restoration charge in the case of a turn-on after a shut-off for nonpayment of bills. Such account restoration charge shall be waived for customers eligible for low-income assistance programs.

The Company reserves the right to disconnect its service at any time without notice or to refuse to connect its service if to its knowledge and in its judgment the customer's installation has become or is unsafe, defective or in violation of the Company's policies or any ordinances, laws, codes or regulations.

In the event that any action by the customer or others shall cause a condition in the premises occupied by any customer whereby life or property is endangered, the Company may discontinue service to said premises regardless of the number of occupants or tenants of said premises.

Whenever the Company shall have proof that any customer is diverting and/or stealing service, the Company may discontinue its service to such customer and remove the meter.

#### **9.0 COMPANY**

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### INSTALLATION AND PROPERTY:

All meters, services and other gas equipment owned by the Company shall be and will remain the property of the Company and no one other than an employee or authorized agent of the Company shall be permitted to remove, operate, or maintain, such property. The customer shall be responsible for all damage to, or loss of, such property unless occasioned by circumstances beyond the customer's control. Such property shall be installed at points most convenient for the Company's access and service and in conformance with public regulations in force from time to time. The costs of relocating such property shall be borne by the customer when done at the customer's request, or for his convenience, or if necessary to remedy any violation of public law or regulation caused by the customer.

The Company shall provide and maintain the necessary housing, fencing, barriers and foundations for the protection of the equipment to be installed upon the customer's premises. Such space, housing, fencing, barriers and foundations shall be in conformity with applicable laws and regulations and subject to the Company's specifications and approval.

### 10.0 SUPPLY OF GAS:

The Company shall make every reasonable effort to maintain an uninterrupted supply of gas for all firm customers, but it shall not be liable for loss or damage caused by reason of any interruption or reduction of the supply, or by reason of any abnormal pressure or quality of the gas, whether as a result of accident, labor difficulties, condition of fuel supply, the actions of any public authority, failure to receive any gas for which in any manner it has contracted, the implementation in accordance with good utility practice of an emergency load reduction program by the Company or one with whom it has contracted for a supply of gas, or inability for any other reason beyond the Company's control to maintain normal pressure or quality, or uninterrupted and continuous service.

Whenever the integrity of the Company's system or the supply of gas is believed to be threatened by conditions on its system or upon the systems with which it is directly or indirectly

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interconnected, the Company may, in its sole judgment, curtail or interrupt gas service or reduce pressure and such action shall not be construed to constitute a default nor shall the Company be liable therefore in any respect. The Company will use reasonable efforts under the circumstances to overcome the cause of such curtailment, interruption or reduction and to resume full performance.

The Company shall be excused from performing under the Schedule of Rates and shall not be liable in damages or otherwise if and to the extent that it shall be unable to do so or prevented from doing so by statute or regulation or by action of any court or public authority having or purporting to have jurisdiction in the premises; or by loss, diminution or impairment of gas supply from its suppliers or the systems of others with which it is interconnected; or by reason of storm, flood, fire, earthquake, explosion, civil disturbance, labor dispute, act of God or public enemy, failure of any supplier to perform, restraint by any court or regulatory agency, or any other intervening cause, whether or not similar thereto; the Company shall use reasonable efforts under the circumstances to overcome such cause and to resume full performance.

The foregoing shall not alter the Company's liability under applicable legal standards for damages in the case of its negligent or intentionally wrongful conduct with respect to any act or failure to act by the Company.

**11.0 COMPANY LIABILITY:** The Company shall not be liable for any loss or damage resulting from the use of gas or the presence of the Company's appliances and equipment on the customer's premises unless such loss or damage results directly and solely from the Company's negligence.

The Company shall not, in any event except that of its own negligent acts or omissions, be liable to any party for any direct, consequential, indirect or special damages, whether arising in tort, contract or otherwise, by reason of any services performed, or undertaken to be performed, or actions taken by the Company, or its agents or employees, under the Schedule

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of Rates or in accordance with or required by law, including, without limitation, termination of the customer's service.

The customer assumes full responsibility for the proper use of gas furnished by the Company and for the condition, suitability and safety of any and all equipment on the customer's premises, or owned or controlled by the customer which is not the Company's property. The customer shall indemnify and save harmless the Company from and against any and all claims, expenses, legal fees, losses, suits, awards or judgments for injuries to or deaths of persons or damage of any kind, whether to property or otherwise, arising directly or indirectly by reason of (1) the routine presence in or use of gas from pipes owned or controlled by the customer; or (2) the failure of the customer to perform any of his or her duties and obligations as set forth in the Schedule of Rates where such failure creates safety hazards; or (3) the customer's improper use of gas or gas appliances. Except as otherwise provided by law, the Company shall be liable for damages claimed to have resulted from the Company's conduct of its business only when the Company, its employees or agents have acted in a negligent, or intentionally wrongful manner.

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