

### **Overview of Electric Rates**

Docket No. 4545

Presentation at Rhode Island Public Utilities Commission Open Meeting January 22, 2015

### **Topics of Review**

- Distribution Rate Basics
- Overall Revenue and Typical Bill Components
- Distribution
- Residential Assistance
- Renewable Energy Programs
- Least Cost Procurement Programs
- Distribution Rate Structure



### **Distribution Rate Basics**

### Rate Classes

Rate Class	Description	Types of Customers
A-16	Basic Residential	Individual homes, apartments/condos, farms, churches
A-60	Low Income Residential	Residential customers receiving eligible means- tested benefits
C-06	Small C&I	Convenience stores, gas stations, sandwich shops, stores in strip malls
G-02	General Service (demand greater than 10 kW)	Office buildings, drug stores (CVS), restaurants
G-32	Large C&I (Mandatory for demand greater than 200 kW)	Large grocery stores, schools, hospitals, manufacturers, office complexes
G-62	Optional Large C&I (optional for demand greater than 5 MW)	Large manufacturers, universities, naval facilities
B-32, B-62	Large Back-up Service (greater than 25 kW)	Customers with non-renewable on-site generation
S-05, S-06, S-10, S-14	Outdoor Lighting	Municipalities, area lighting
X-01/M-01	Electric Propulsion/Station Power Trains/merchant generators	

#### **Rate Class Statistics**

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Rate Class	Number of Customers	Class Annual Usage (MWh)	Average Usage (kWh)	Average Usage (kW)
	As of 12/2014	12-months ending 12/2014	12-months ending 12/2014	12-months ending 12/2014
A-16	391,164	2,778,154	500	n/a
A-60	43,853	294,403	500	n/a
C-06	48,611	587,992	1,000	n/a
G-02	8,438	1,301,859	13,000	35
G-32	1,082	2,023,800	160,000	450
G-62	12	456,879	3,200,000	7,250
B-32/B-62	5	80,585	1,343,100	1,755
S-05, S-06, S-10, S-14	2,874	64,033	S-10 (285) S-14 (12,140)	n/a
X-01, M-01	3	23,867 (X-01)	1,988,930 (X-01)	n/a

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### **Current Base Distribution Charges**

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	A-16 (1)	C-06	G-02	G-32	G-62
Customer Charge	\$5.00	\$10.00	\$135.00	\$825.00	\$17,000.00
% of Distribution Rev Req	18%	25%	35%	30%	40%
Base Dist. Demand Charge			\$4.85 (2)	\$3.70 (3)	\$2.99
% of Distribution Rev Req			50%	40%	60%
Base Dist. kWh Charge	\$0.03664	\$0.03253	\$0.00468	\$0.00551	\$0.00000
% of Distribution Rev Req	82%	75%	15%	30%	0%

(1) Rate A-60: no customer charge; kWh charge: \$0.02317 representing 50% discount from A-16 rates

(2) In excess of 10 kW

(3) In excess of 200 kW



### **Overall Revenue and Typical Bill Components**

### **Annual Revenue**

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	Annual Revenue (millions)	Percent of Total	Cross- Reference
Delivery Servi	ce Charges		
Distribution (Base, ISR, RDM)	\$261.5	26.1%	Slide 12
Renewable Energy Distribution (Net Metering/Long-Term Contracting)	\$0.7	0.1%	Slide 24
Energy Efficiency	\$73.3	7.3%	Slide 30
Renewable Fund (1)	\$2.3	0.2%	Slide 24
LIHEAP Enhancement	\$4.5	0.4%	Slide 22
Transmission	\$154.4	15.4%	n/a
Transition (Stranded Gen Cost Recovery)	\$8.0	0.8%	n/a
Supply Cl	harges		
Standard Offer Service	\$469.4	46.9%	n/a
Renewable Energy Standard	\$25.9	2.6%	Slide 24
Total Delivery and Supply	\$1,000.0	100%	

(1) Included in Energy Efficiency Charge on customer bills.

### Annual Revenue – Rate Class

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(Revenue in millions)	A-16	A-60	C-06	G-02	G-32	G-62	S	X-01
		Delivery	y Service C	harges				
Distribution (Base, ISR, RDM)	\$131.6	\$7.3	\$26.6	\$38.9	\$37.7	\$6.1	\$12.8	\$0.6
Renewable Energy Distribution (Net Metering/LTC)	\$0.3	\$0.03	\$0.05	\$0.1	\$0.2	\$0.04	\$0.0	\$0.0
Energy Efficiency (EE, SRP)	\$26.9	\$2.9	\$5.6	\$12.0	\$19.3	\$5.7	\$0.6	\$0.2
Renewable Fund (1)	\$0.8	\$0.1	\$0.2	\$0.4	\$0.6	\$0.2	\$0.0	\$0.0
LIHEAP Enhancement	\$3.5	\$0.4	\$0.4	\$0.1	\$0.01	\$0.0	\$0.03	\$0
Transmission	\$64.6	\$7.1	\$11.8	\$23.6	\$35.6	\$9.8	\$1.1	\$0.8
Transition (Stranded Gen Cost Recovery)	\$3.0	\$0.3	\$0.6	\$1.3	\$2.1	\$0.6	\$0.1	\$0.0
	Supply Charges							
Standard Offer Service	\$234.9	\$25.5	\$36.3	\$81.9	\$67.2	\$19.0	\$4.6	\$0
Renewable Energy Standard	\$13.6	\$1.5	\$1.8	\$4.0	\$3.8	\$1.1	\$0.2	\$0
Total Delivery and Supply	\$479.3	\$45.2	\$83.4	\$162.3	\$166.5	\$42.5	\$19.4	\$1.6

(1) Included in Energy Efficiency Program Charge on customer bills.

### **Typical Monthly Bill**

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	Residential A-16 (500 kWh)	Small C&I C-06 (1,000 kWh)	Large C&I G-32 (160,000 kWh, 450kW)
Delivery S	ervice Charges		
Distribution (Base, ISR, RDM)	\$25.10	\$46.13	\$2,864.48
Renewable Energy Distribution (Net Metering/LTC)	(\$0.13)	(\$0.25)	(\$40.00)
Energy Efficiency (EE, SRP, Renewables Fund)	\$5.12	\$10.24	\$1,638.33
LIHEAP Enhancement	\$0.76	\$0.76	\$0.76
Transmission	\$11.57	\$20.86	\$2,883.75
Transition (Stranded Gen Cost Recovery)	\$0.50	\$1.00	\$160.00
Total Delivery Service Charges	\$42.92	\$78.74	\$7,507.32
Supp	ly Charges		
Standard Offer Service	\$53.38	\$121.45	\$29,351.67
Renewable Energy Standard	\$2.50	\$5.00	\$800.00
Total Supply Charges	\$55.88	\$126.45	\$30,151.67
Total Delivery and Supply	\$98.80	\$205.19	\$37,658.99

\*\* Each charge include Gross Earnings Tax

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### Distribution

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#### Large C&I Small C&I **G-32** (160,000 Residential **C-06** Annual Revenue A-16 (1,000)kWh, 450 (millions) (500 kWh) kWh) kW) Distribution Per month Per month Per month \$251.2 \$24.29 \$2,741.25 **Base Distribution Charges** \$44.31 **ISR** Charges \$10.5 \$ 0.82 \$1.83 \$124.90 Pension Charges \$0.0 \$ 0.00 \$ 0.00 \$ 0.00 **Revenue Decoupling** (\$0.1) (\$0.01) (\$0.01) (\$1.67) Adjustment **Total Distribution Charges** \$261.5 \$25.10 \$46.13 \$2,864.48

\*\* Each charge includes Gross Earnings Tax

**Distribution** 

### **Distribution: Base Distribution Rates**

Base Distribution Rates				
Purpose Means by which the Company recovers the cost of providing distribut service to its customers, including a return on capital investment.				
Frequency/Timing of Filing	A general rate case is filed periodically, typically when the Company is not earning its allowed return on equity.			
Recovery Effective	New base distribution rates are effective following a suspension period, following either a litigated proceeding or settlement, and PUC approval. New rates are effective at the beginning of a "rate year." They remain in effect until the results of a subsequent rate case become effective.			
Current Revenue Recovery	\$251.2 million (approved in RIPUC Docket No. 4323, filed April 2012, effective February 1, 2013)			
Types of Costs Recovered	Return of and return on distribution system capital investment, operation and maintenance (O&M) expense, administrative expense (salaries, employee benefits, insurance, office expense), customer service, billing, property taxes, federal income tax, bad debt			
Weighted Average Cost of Capital	7.17% (as approved in RIPUC Docket No. 4323, filed April 2012)			

### **Distribution: ISR Plan**

Infrastructure, Safety and Reliability (ISR) Plan			
Purpose	To facilitate and encourage investment in the Company's infrastructure to improve safety and reliability of the distribution system by providing timely recovery of incremental annual capital investment and spending on inspection, maintenance and vegetation management activities.		
Brief Description of Mechanism ISR Plan provides for prospective recovery of forecasted investment a full reconciliation to actual investment after the fiscal year (FY), we difference recovered through revenue from billings to all customers CapEx Factors. Includes O&M for vegetation management and Inspection and Maintenance program, recovered on a prospective with actual costs reconciled against revenue from billings to all customers via O&M Factors.			
Reconciliation Period	Annual: April 1 – March 31		
Frequency/Timing of Filing	FY Plan file annually by December 31; Reconciliation file annually by August 1		
Recovery Effective	April 1 (FY Plan); October 1 (Reconciliation Factors)		
Statute/Rule/Tariff	RIGL Ch. 39-1-27.7.1 RIPUC No. 2118, Infrastructure, Safety and Reliability Provision		
Current Revenue Recovery	\$12.3 million (annual)		
Prior Period Over/Under\$1.7 million (over collection) (Docket No. 4382, August 1, 2014, Attachment SMM-1)			

### **Distribution: CIACs**

	Contributions in Aid of Construction (CIACs)				
Purpose	To ensure that costs incurred by the Company to provide new or upgraded services that are in excess of the incremental revenue estimated to be generated by the customer are recovered from the customer receiving the service.				
Brief Description	Customer contribution is determined in accordance with the Company's line extension and construction advance policies. Customer contribution is recorded on Company's books and is treated as a reduction to rate base. New residential customers and residential developments CIACs are based on a charge-per-foot for their individual line extension that is in excess of an average line extension. C&I CIACs are based on a revenue-justification formula that includes estimated costs and new base rate revenue.				
Tariffs	<ul> <li>Policy 1 (Line Extension Policy for Individual Residential Customers)</li> <li>Policy 2 (Line Extension Policy for Residential Developments)</li> <li>Policy 3 (Line Extension and Construction Advance Policy for Commercial, Industrial and Existing Residential Customers)</li> <li>Terms and Conditions for Distribution Service, RIPUC No. 2130</li> </ul>				
Interaction with other Mechanisms	ISR Plan, Standards for Connecting Distributed Generation (Interconnection Tariff), RIPUC 2078				

### **Distribution: Pension/PBOP**

Pension/Post-Employment Benefits Other than Pension (PBOP) Recovery				
Purpose	Pension and PBOP costs are volatile, being dependent upon many factors outside of the Company's control. Pension/PBOP reconciling mechanisms have been allowed by regulators in recognition that the utilities are limited as to how much they can control these costs, and the volatile nature of the costs can have a detrimental impact to their individual financial position.			
Brief Description	Provides for the recovery of pension and PBOP expense recorded by the Company's statement pursuant to SFAS 87 and SFAS 106. Annual expense is compared to allowance in base rates and under or over recovery is recovered from or credited to all customers over a 12-month period. The Company also pays a carrying charge on any under-funding of the plans.			
Reconciliation Period	Annual: April 1 – March 31			
Frequency/Timing of Filing	Annually but no stated date. At least 30 days prior to the requested effective date of rate; target August 1.			
Recovery Effective	October 1			
Statute/Rule/Tariff	RIPUC No. 2119, Pension Adjustment Mechanism			
Current Revenue Recovery	\$13.7 million in base rates			
Prior Period Over/Under Recovery	\$0 million (Docket No. 4518, August 6, 2014, Schedule WRR-1)			

Revenue Decoupling Mechanism (RDM)				
Purpose	Eliminates the disincentive for the Company to aggressively promote energy efficiency (EE) programs that are designed to reduce electricity use. Without RDM, EE reduces electric use and, ultimately, revenue that is needed to support electric operations. RDM reconciles a set level of distribution revenue to actual billed revenue, essentially "decoupling" use from revenue. RDM does not guarantee return.			
Brief Description	The target revenue (i.e., allowed revenue requirement from most recent rate case) is compared to revenue from customer billing of base distribution rates and associated factors/credits, under or over billing recovered from or credited to all customers over a 12-month period.			
Reconciliation Period	Annually: April 1 – March 31			
Frequency/Timing of Filing	Annually by May 15			
Recovery Effective	July 1			
Statute/Rule/Tariff	RIGL Ch. 39-1-27.7.1 RIPUC No. 2073, Revenue Decoupling Mechanism Adjustment Provision			
Current Revenue Recovery	\$251.2 million (target revenue)			
Prior Period Over/Under Recovery	\$0.1 million (over recovery) (Docket No. 4505, May 15, 2014)			

Service Quality Plan			
Purpose	Service Quality Plans have been implemented over the past couple of decades as a way to ensure that utilities are investing in and maintaining their infrastructure and level of customer service that provide acceptable levels of service. Plans generally are structured as (1) penalty-only plans, (2) penalty and incentive plans, and (3) penalty and offset plans.		
Brief Description of Mechanism	The Company's electric Service Quality Plan requires the Company to meet established performance metrics related to reliability and customer service. Penalties apply for performance that does not meet the thresholds for each category and offsets can be earned for categories in which performance exceeds the threshold. Net Service Quality penalties, if any, are credited to customers in a manner approved by PUC.		
Reconciliation Period	n/a		
Frequency/Timing of Filing	Report filed annually; not all performance years result in the implementation of a credit factor		
Refund Effective	July 1 (2012 SQ Plan penalty refunded via RDM)		
Statute/Rule/Tariff	Service Quality Plan, RIPUC Docket No. 3628		
Current Refund	\$16,000 (refunded through RDM, per approval in Docket No.4505)		

### Distribution: Excess Earnings Sharing

Excess Earnings Sharing			
Purpose	Provides for the sharing of earnings above a stipulated level (typically, a utility's allowed Return On Equity (ROE)) that returns to customers the benefit of lower costs as a result of a utility's continuous improvement efforts.		
Brief Description of Mechanism	Excess of Earned ROE above Allowed ROE is deferred according to a specific formula.		
Reconciliation Period	Annual earnings for the 12 months ending December.		
Frequency/Timing of Filing	Annually by May 1		
Recovery Effective	n/a		
Statute/Rule/Tariff	RIPUC Docket No. 4323, Amended Settlement Agreement		



### **Residential Assistance**

### **Residential Assistance**

Discounted Base Rates			
Purpose	To provide bill assistance in the form of reduced base distribution charges to customers who meet the eligibility criteria of the tariff.		
Brief Description of Mechanism	Rate A-60 distribution charges are designed to produce a 50% discount from regular residential rates. The subsidy is recovered from all other customers through each class's base distribution charges.		
Reconciliation Period	n/a		
Frequency/Timing of Filing	n/a – determined as part of a general rate case		
Recovery Effective	n/a		
Statute/Rule/Tariff	RIPUC No. 2101		
Current Revenue Recovery	\$6.4 million (annual)		
Prior Period Over/Under Recovery	n/a		
	LIHEAP Enhancement		
Purpose	Statutory program that provides additional assistance to recipients of federal LIHEAP grants. Funded by electric and gas customers up to \$7.5 million per year.		
Brief Description of Mechanism	Revenue billed to all customers through LIHEAP Enhancement Charge is intended to offset LIHEAP Enhancement credits given to eligible customers. Credit and revenue are tracked throughout the year and reported to the PUC. Surcharge to recover cost recommended by OER/DHS each year by October 15 and approved by PUC. DHS sets grant level.		
Reconciliation Period	Annual: October 1 – September 30		
Frequency/Timing of Filing	Reconciliation reports filed twice per year (May and September)		
Recovery Effective	January 1		
Statute/Rule/Tariff	RIGL Ch. 39-1-27.12 RIPUC No. 2143, LIHEAP Enhancement Plan Provision		
Current Revenue Recovery	\$4.5 million (annual – electric only)		
Prior Period Over/Under Recovery	\$5.1 million (combined gas/electric balance in LIHEAP Enhancement Fund as of September 30, 2014 as reported in the Company's October 29, 2014 reconciliation filing in Docket No. 4290)		

### Low Income Subsidy and Recovery

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	A-16	A-60	C-06	G-02	G-32	G-62	S
		Discoun	ted Distribu	tion Rates			
Base Rate Subsidy (millions) (1)		(\$6.4)					
Class contribution to subsidy (millions)	\$3.4		\$0.6	\$0.9	\$0.9	\$0.2	\$0.4
		LIHE	EAP Enhanc	ement			
LIHEAP Enhancement Credits (millions)		(\$1.7)					
LIHEAP Enhancement Billings (millions)	\$3.52	\$0.38	\$0.45	\$0.08	\$0.01	\$0.00	\$0.03
Total (millions)	\$6.92	(\$7.72)	\$1.05	\$.98	\$0.99	\$0.20	\$0.43

(1) Docket No. 4323



### Renewable Energy Programs

### **Renewable Energy Programs**

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	Annual Revenue (millions)	Residential A-16 (500 kWh)	Small C&I C-06 (1,000 kWh)	Large C&I G-32 (160,000 kWh, 450 kW)
Rene	ewable Energy Pro	ograms		
		Per Month	Per Month	Per Month
Long-term Contracting Recovery Factor	\$0.7	(\$0.13)	(\$0.25)	(\$40.00)
Net Metering Charges	\$0.0	\$0.00	\$0.00	\$0.00
Renewables Fund Charges (1)	\$2.3	\$0.16	\$0.31	\$50.00
Renewable Energy Standard Charge (2)	\$25.9	\$2.50	\$5.00	\$800.00
Renewable Energy Growth Program (pending)	n/a	n/a	n/a	n/a
Total Renewable Energy Charges	\$28.9	\$2.53	\$5.06	\$810.00

\*\* Each charge includes Gross Earnings Tax

- (1) Included with Energy Efficiency Program Charge on bill
- (2) Applicable to Standard Offer Service customers only

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### Renewable Energy: Renewable Energy Standard (RES)

Renewable Energy Standard				
Purpose	To facilitate the development of new renewable resources to supply electricity to RI, the RES requires companies providing electric supply to acquire a portion of their load from renewable energy resources. This requirement is met through the purchase of Renewable Energy Certificates (RECs) and making Alternate Compliance Payments (ACPs) if insufficient quantity of RECs is purchased. These purchases provide financial support to renewable generation in ISO-NE and adjacent control areas.			
Brief Description of Mechanism	The RES Charge is assessed only to customers receiving Standard Offer Service (SOS). The Company estimates the cost to comply with the RES and reconciles to actual costs incurred. The reconciliation compares payments for purchasing RECs and for making ACPs to revenue billed from customers via the RES Charge. The under or over recovery is recovered from or credited to SOS customers through the RES Charge over a 12- month period.			
Reconciliation Period	Annual: January 1 – December 31			
Frequency/Timing of Filing	Annually by February 28			
Recovery Effective	April 1			
Statute/Rule/Tariff	RIGL Ch. 39-26-1 RIPUC No. 2113, Standard Offer Adjustment Provision RIPUC Rules and Regulations Governing the Implementation of a Renewable Energy Standard			
Current Revenue Recovery	\$23.2 million (annual)			
Prior Period Over/Under Recovery	\$2.7 million (under recovery) (Docket No. 4393-RES Filing, February 2014, Attachment 1, page 2)			

### Renewable Energy: Renewables Fund

Renewables Fund Charge			
Purpose	The Renewable Fund funds a program administered by the Commerce Rhode Island (COMM RI) for the purposes of developing, promoting, and supporting renewable energy.		
Brief Description of Mechanism	The Renewables Fund charge of \$0.00030 per kWh is assessed to all customers and the amount billed to customers is remitted monthly to COMM RI.		
Reconciliation Period	n/a		
Frequency/Timing of Filing	n/a		
Recovery Effective	ongoing		
Statute/Rule/Tariff	RIGL Ch. 39-2-1.2		
Annual Billing	\$2.3 million		
Prior Period Over/Under Recovery	n/a		

### Renewable Energy: LTC Recovery Factor

Long Te	erm Contracting (LTC) for Renewable Energy Resources
Purpose	To facilitate the procurement and financing of renewable energy for Rhode Island (RI)customers, RI law requires the Company to execute commercially reasonable long-term contracts of newly developed renewable energy resources at fixed prices, both regionally under the LTC Standard Program and in RI through the Distribution Generation Standard Contract Program.
Brief Description of Mechanism	The LTC Recovery Factor is set every six months. The factor is designed to recover the forecast amount of above-market cost of payments expected to be made under long-term contracts for newly developed renewable energy resources plus specified administrative costs during the applicable period. On an annual basis, actual above-market costs plus recoverable administrative costs are compared to billings to customers through the LTC Recovery Factor and the under- or over-collection is collected from or refunded to all customers over 12-month period. Both programs offered final solicitations in 2014.
Reconciliation Period	Annual: January 1 – December 31
Frequency/Timing of Filing	Forecasted Rates: May 15, November 15; Reconciliation factor: Annually by February 28
Recovery Effective	Forecasted Rates: January 1, July 1; Reconciliation factor: April 1
Statute/Rule/Tariff	RIGL Ch. 39-26.1 RIPUC No. 2125, Long-Term Contracting for Renewable Energy Recovery Provision
Current Revenue Recovery	(\$1.8) million (credit) (annual)
Prior Period Over/Under	\$2.5 million (under collection) (Docket No. 4485, February 2014, Schedule
Recovery	JAL-17)

### Renewable Energy: Net Metering

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Net Metering		
Purpose	To encourage the development of customer-sited renewable generation, the Company provides renewable generation credits to eligible renewable distributed generation and payments for energy purchased from Qualifying Facilities.	
Brief Description of Mechanism	Renewable generation credits paid to customers and payments to QFs, less proceeds from the sale of the energy to ISO-NE, are compared to revenue from billings to all customers pursuant to the Net Metering Charge and the under or over recovery is recovered from or credited to all customers over a 12-month period.	
Reconciliation Period	Annual: January 1 – December 31	
Frequency/Timing of Filing	Annually by February 28	
Recovery Effective	April 1	
Statute/Rule/Tariff	RIGL Ch. 39-26.4 RIPUC No. 2099, Net Metering Provision	
Current Revenue Recovery	\$0 (annual amount)	
Prior Period Over/Under Recovery	\$0.05 million (under collection) (Docket No. 4485, February 2014, Schedule JAL-15)	

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### Renewable Energy: Renewable Energy Growth Program

Renewable Energy (RE) Growth Program		
Purpose	The RE Growth Statute was enacted to:(1) facilitate the development of renewable distributed generation systems; (2) reduce carbon emissions and environmental impacts; (3) diversify generation resources; (4) promote economic development; (5) enhance the resiliency and reliability of the distribution system; and (6) reduce distribution system costs.	
Brief Description of Mechanism	Company will conduct periodic solicitations to enroll eligible renewable generation into this tariff-based program. Participants will be paid Performance Based Incentives for a period of up to 20 years per the applicable tariff. The costs associated with the payments expected to be made pursuant to the tariffs plus specified administrative costs during the applicable period less proceeds from the sale of market products will be recovered through the RE Growth Factor and will be reconciled to actual cost on an annual basis. The under- or over-recovery is collected from or refunded to all customers over 12-month period.	
Reconciliation Period	Annual: April 1 – March 31	
Frequency/Timing of Filing	Within three months of end of Program Year	
Recovery Effective	TBD (July 1, 2015 proposed for initial Re Growth Factor)	
Statute/Rule/Tariff	RIGL Ch. 39-26.6 RIPUC No. 2153, Renewable Energy Growth Program Cost Recovery Provision. (pending approval)	
Current Revenue	n/a	
Prior Period Over/Under	n/a	



### Least Cost Procurement Programs

### Least Cost Procurement Programs

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	Annual Revenue (millions)	Residential A-16 (500 kWh)	Small C&I C-06 (1,000 kWh)	Large C&I G-32 (160,000 kWh, 450 kW)
Least Cost Procurement Programs				
		Per Month	Per Month	Per Month
Energy Efficiency Program Charge	\$72.8	\$4.94	\$9.86	\$1,576.66
System Reliability Plan Charge	\$0.5	\$0.02	\$0.07	\$11.67
Total Energy Efficiency Charges	\$73.3	\$4.96	\$9.93	\$1,588.33

\*\* Each charge includes Gross Earnings Tax

### Least Cost Procurement: Energy Efficiency

Energy Efficiency Program		
Purpose	A portfolio of programs available to customers in which, based on eligibility, their participation provides the education and tools to manage and reduce their electric use.	
Brief Description of Mechanism	Annual Energy Efficiency Plan submitted for PUC approval. Rate is based on initial budgets (with later reconciliation) of EE program costs not funded by external sources (statutory Systems Benefits Charge, Forward Capacity Market revenue). Actual program year spending from prior year is compared to revenue from billing to all retail delivery service customers for the same period and over or under recovery is used to increase or reduce following year's program expense.	
Reconciliation Period	Annual: January 1 – December 31	
Frequency/Timing of Filing	Annually by November 1	
Recovery Effective	January 1	
Statute/Rule/Tariff	RIGL Ch. 39-1-27.7 RIPUC No. 2114, Energy Efficiency Program Provision	
Current Revenue Recovery	\$79.2 million (annual amount) (Actual Budget for 2015: \$86.6)	
Prior Period Over Recovery	\$6.4 million (over recovery) (Docket No. 4527, November 1, 2014, Attachment 5, page 1)	

### Least Cost Procurement: System Reliability Plan

	System Reliability Plan (SRP)			
Purpose	The SRP is part of the Three Year Energy Efficiency Procurement Plan. Its purpose is to evaluate the costs and benefits of traditional and NWA solutions to distribution system constraints.			
Brief Description of Mechanism	The Company is conducting a Load Curtailment Pilot (Pilot), which began in 2012, to test the use of targeted energy efficiency and load curtailment by customers, or demand response, as a means to manage local distribution capacity requirements during peak periods. Cost associated with the Pilot are recovered with the Energy Efficiency Program Charge.			
Reconciliation Period	Annual: January 1 – December 31			
Frequency/Timing of Filing	Annually by November 1			
Recovery Effective	January 1			
Statute/Rule/Tariff	RIGL Ch. 39-1-27.7 RIPUC No. 2114, Energy Efficiency Program Provision			
Current Revenue Recovery	\$0.5 million (annual)			
Prior Period Over/Under Recovery	n/a			





### **Distribution Rate Structure**

### **Description of Unit Charges**

Customer Charges	Generally, fixed monthly charge designed to collect costs related to being a customer; for example, metering, billing, and customer service.
Demand (per kW) Charges	Demand (per kW) Charges are designed to collect fixed costs (i.e., costs that do not vary with throughput) associated with the distribution and/or transmission systems, such as transformers, conductor, poles, towers, and substations.
Variable (per kWh) Charges	Variable Charges (per kWh) are designed to collect costs that vary with throughput. Generally, these are costs that can be avoided by reducing kWh deliveries, for example, Standard Offer Service costs increase or decrease directly with kWh deliveries.

### Residential and Small C&I Rate Structure

- Rate structure of residential (A-16) and small C&I (C-06) rates
  - Customer Charge (fixed monthly charge)
  - Volumetric (per kWh) charge
- Minimum Charge:
  - Customer Charge
  - Charge for additional transformer capacity (C-06), if necessary
- Low-income residential rate (A-60)
  - No customer charge
  - Distribution kWh designed to provide 50% discount from Rate A-16 charges
- Metering via standard watt-hour metering containing Encoded Radio Transmitters (ERTs) capable of being read with drive-by technology.

#### General Service (Medium and Large C&I) Rates Rate Structure

- Rate structure of General Service rates
  - Customer Charge (fixed monthly charge)
  - Demand (per kW) Charge
    - Minimum demand (10 kW)
    - Ratchet provision (75% of highest previous 11 months)
    - G-32/G-62 demand determined during Peak hours
  - Volumetric (per kWh) charge (G-02, G-32)
  - Discounts available for delivery and metering at high voltage levels.
- Metering
  - Metering capable of recording both kW and kWh.
  - Large customers (B/G-32, B/G-62) have interval data recorders that record usage in 15-minute intervals.

#### **Back-up Service Rates**

- Customers with on-site generation require the utility to stand ready to serve its load during a generator outage.
- The impact of a generator outage is greater at the distribution level than at the generator level.
  - Distribution does not have the capacity available for flexibility unless the customer provides the utility control over access to the grid.
- There is a cost of owning and maintaining facilities to serve a customer is essentially the same whether the customer self-generates or not.
  - Facilities are a form of insurance to the customer with generation and to all customers on the distribution system so that reliability is not impacted
- Back-up Service Rates are designed to ensure that all customers make an equitable contribution to the fixed distribution system costs.
- Net metering customers are exempted from Back-up Service Rates per statute. (RIGL Ch. 39-26.4-3(b))

### **Back-up Service Rates for Non-Renewable Generation**

- Back-up Service Rates B-32/B-62
  - Mandatory for customers with non-renewable generation greater than 25 kW.
  - Back-up Service Demand Charge set at 10% of full requirements distribution demand charge.
    - 10% coincidence factor reflecting likelihood that customer outage will coincide with distribution company system peak only about 10% of the time.
- Combined Heat and Power (CHP) Provision Rates G-02/G-32/G-62
  - Applicable to customers who have received Energy Efficiency (EE) incentives through the EE CHP Program.
  - Customer not eligible for Back-up Rates.
  - Customer will receive delivery service on the appropriate general service rate, subject to the CHP Provision.
  - Includes minimum demand charge.

### **Goals Met by Programs**

## nationalgrid

Program Goals	Rate Mechanism
Safety	Base Rates, ISR Plan
Reliability and Service Quality	Base Rates, ISR Plan, Service Quality Plan
Reduce/Minimize Costs to Customers through reduced consumption/peak demand	Energy Efficiency, SRP, Renewables, ISR Plan
Maintain Rate Fairness	Base Rates, CIACs, Back-up Rates
Increase Fuel Diversity	Renewables
Reduce GHG Emissions	Renewables, Energy Efficiency/SRP
Provide Payment Assistance to Customers	Discounted Base Rates LIHEAP Enhancement Plan

Goals listed are illustrative and not meant as exclusive or exhaustive.