



Rockland Electric Company

Rockland Electric Company  
4 Irving Place  
New York NY 10003-0987  
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March 1, 2019

RECEIVED  
CASE MANAGEMENT  
7:00 3/1/19  
MAR 01 2019

RECEIVED  
MAIL ROOM

Honorable Aida Camacho-Welch  
State of New Jersey  
Board of Public Utilities  
44 South Clinton Avenue,  
3rd Floor, Suite 314  
PO Box 350  
Trenton, New Jersey 08625-0350

BOARD OF PUBLIC UTILITIES  
TRENTON, NJ

MAR 01 2019

BOARD OF PUBLIC UTILITIES  
TRENTON, NJ

Re: In The Matter of the Provision of Basic Generation  
Service (BGS) For The Period Beginning June 1, 2019  
BPU Docket No. ER18040356.

Dear Secretary Camacho-Welch:

Rockland Electric Company (the "Company" or "RECO") hereby submits for filing with the Board of Public Utilities (the "Board") ten copies of the following tariff leaves setting forth revisions to its Schedule for Electric Service B.P.U. No. 3 – ELECTRICITY ("Tariff").

13th Revised Leaf No. 50  
13th Revised Leaf No. 52

These leaves are issued March 1, 2019 to become effective June 1, 2019. These leaves are issued in compliance with the Board's Decision and Order dated February 7, 2019, in the above-referenced docket.

The purpose of this filing is to implement the various rate changes, effective June 1, 2019, resulting from the February 2019 Basic Generation Service ("BGS") Auction approved by the Board in its Decision and Order referenced above and the results of the bi-lateral contract for the Company's Central and Western Divisions served through the New York Independent System Operation. The winning auction prices from the statewide BGS Auction are combined with the winning price resulting from the RECO Central and Western Division procurement prices to arrive at the rates customers will pay for BGS Service effective June 1, 2019. A description of these changes was set forth in the RECO's Company Specific addendum in the compliance filing filed on November 30, 2018 in the above referenced docket.

Also enclosed is an extra copy of this letter. Please date and time stamp it and return it in the envelope provided. Questions regarding this filing can be directed to Cheryl Ruggiero at (212) 460-3189.

Very truly yours,

*William A. Atzl, Jr.*

William A. Atzl, Jr.  
Director – Rate Engineering

*CMS*  
*Energy*  
*S. Peterson, Energy*  
*Legal*  
*DAG*  
*A. Moreau, DAG*  
*P. van Brunt, DAG*

## Attachment A

**GENERAL INFORMATION**

**No. 31 BASIC GENERATION SERVICE ("BGS")**

- (1) Basic Generation Service – Residential Small Commercial Pricing (BGS-RSCP)  
Applicable to Service Classification Nos. 1, 2, 3, 4, 5 and 6

Applicable to Service Classification Nos. 1, 2 (Non-Demand Billed), 3, 4, 5, and 6  
Charges per kilowatthour:

<u>Service Classification</u>	<u>Summer Months*</u>	<u>Other Months</u>
1 – First 600 kWh	6.474¢	8.382¢
1 – Over 600 kWh	9.835¢	8.382¢
2 - (Non-Demand Billed) – All kWh	7.398¢	6.425¢
3 – Peak	12.362¢	9.788¢
3 – Off-Peak	4.989¢	5.033¢
4 – All kWh	5.113¢	5.019¢
5 – First 600 kWh	6.793¢	6.821¢
5 – Over 600 kWh	9.165¢	6.821¢
6 – All kWh	5.105¢	4.985¢

Applicable to Service Classification No. 2 Demand Billed customers who do not take BGS-CIEP service in accordance with General Information Section No. 31(2):

	<u>Summer Months*</u>	<u>Other Months</u>
Demand Charges		
First 5 kW (\$/kW)	1.81	1.48
Over 5 kW (\$/kW)	6.27	5.23
Usage Charges		
All kWh (¢/kWh)	5.651¢	5.210¢

The above Basic Generation Service Charges reflect costs for Energy, Generation Capacity, and Ancillary Services (including ISO Administrative Charges).

\*Definition of Summer Billing Months - June through September

(Continued)

ISSUED: March 1, 2019

EFFECTIVE: June 1, 2019

ISSUED BY: Robert Sanchez, President  
Mahwah, New Jersey 07430

Filed pursuant to the Order of the Board of Public  
Utilities, State of New Jersey, dated February 7,  
2019 in Docket No. ER18040356.

**GENERAL INFORMATION**

**No. 31 BASIC GENERATION SERVICE ("BGS") (Continued)**

(2) Basic Generation Service – Commercial and Industrial Energy Pricing (BGS-CIEP)

This service is applicable to all Service Classification No. 7 customers, and Service Classification No. 2 customers who maintain a billing demand of 500 kW or greater during any two months of a calendar year, taking BGS from the Company. Service Classification No. 2 metered customers who do not meet the above criteria may elect to take BGS-CIEP service on a voluntary basis. See General Information Section No. 31(1).

BGS Energy Charges:

Charges per kilowatthour:

BGS Energy Charges are hourly and are provided at the real time PJM Load Weighted Average Residual Metered Load Aggregate Locational Marginal Prices for the Rockland Electric Transmission Zone, plus Ancillary Services (including PJM Administrative Charges) at the rate of \$0.00640 per kilowatthour, adjusted for losses and applicable taxes.

BGS Capacity Charges:

Charges per kilowatt of Capacity Obligation as determined in accordance with General Information Section No. 31(C):

Charge applicable in Summer\* months.....\$ 9.2151  
Charge applicable in other months.....\$ 9.2151

The above charges shall recover each customer's share of the overall summer peak load assigned to the Rockland Electric Transmission Zone by PJM as adjusted by PJM assigned capacity related factors.

In accordance with Rider SUT, the above charges include provision for the New Jersey Sales and Use Tax. When billed to customers exempt from this tax, as set forth in Rider SUT, such charges will be reduced by the relevant amount of such tax included therein.

\* June through September

(Continued)

ISSUED: March 1, 2019

EFFECTIVE: June 1, 2019

ISSUED BY: Robert Sanchez, President  
Mahwah, New Jersey 07430

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## Attachment B & C

## Development of BGS Cost and Bid Factors for Rates Effective June 1, 2019

Based on 2017 Load Profile Information

On-Peak periods defined as the 16 hr PJM Trading period, adj for NERC holidays

Table #1 % Usage During PJM On-Peak Period

	Profile Meter Data <u>SC1</u>	Profile Meter Data <u>SC5</u>	Profile Meter Data <u>SC3</u>	Profile Meter Data <u>SC2 ND</u>	— Other Analysis — <u>SC4</u>	<u>SC6</u>	Profile Meter Data <u>SC2 Dem</u>
January	50.74%	47.37%	47.68%	51.21%	30.41%	30.41%	53.47%
February	50.20%	45.82%	48.45%	52.14%	30.61%	30.61%	53.93%
March	48.78%	44.47%	45.41%	49.42%	29.27%	29.27%	53.20%
April	49.19%	44.00%	47.68%	57.21%	28.14%	28.14%	54.44%
May	53.66%	49.88%	51.35%	61.01%	23.12%	23.12%	56.70%
June	53.74%	52.07%	51.83%	61.20%	20.62%	20.62%	55.68%
July	52.25%	51.03%	50.86%	56.12%	19.69%	19.69%	53.36%
August	57.40%	56.50%	55.93%	62.34%	22.34%	22.34%	58.01%
September	48.66%	47.23%	46.95%	56.21%	25.48%	25.48%	51.95%
October	53.81%	51.53%	52.90%	58.81%	30.52%	30.52%	57.62%
November	49.55%	43.94%	46.03%	51.83%	29.81%	29.81%	54.50%
December	45.43%	39.33%	43.79%	47.26%	27.65%	27.65%	49.36%

Table #2 % Usage During RECO On-Peak Billing Period

On-Peak periods as defined in specified rate schedule

(data rounded to nearest %)	N/A <u>SC1</u>	N/A <u>SC5</u>	<u>SC3</u>	N/A <u>SC2 ND</u>	N/A <u>SC4</u>	N/A <u>SC6</u>	N/A <u>SC2 Dem</u>
January	---	---	34.1%	---	---	---	---
February	---	---	37.3%	---	---	---	---
March	---	---	34.5%	---	---	---	---
April	---	---	34.1%	---	---	---	---
May	---	---	35.3%	---	---	---	---
June	---	---	34.8%	---	---	---	---
July	---	---	37.7%	---	---	---	---
August	---	---	41.2%	---	---	---	---
September	---	---	39.1%	---	---	---	---
October	---	---	40.4%	---	---	---	---
November	---	---	37.5%	---	---	---	---
December	---	---	36.5%	---	---	---	---

**Table #3 Class Usage @ customer**

*Calendar month billed sales forecasted for 2019*

<i>in MWh</i>	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>	<u>Total</u>
January	55,142	1,746	35	2,257	474	496	27,878	88,027
February	47,843	1,418	42	2,610	434	410	28,802	81,557
March	44,336	1,257	23	2,260	408	406	26,922	75,611
April	39,187	1,000	22	1,745	355	424	25,434	68,166
May	41,434	849	16	1,579	330	399	25,414	70,020
June	55,650	938	20	1,462	302	372	26,347	85,089
July	78,263	1,256	25	1,947	319	351	32,193	114,353
August	80,038	1,302	22	1,863	338	345	31,126	115,032
September	66,610	1,110	19	1,731	389	407	30,588	100,852
October	46,358	835	17	1,419	432	481	26,261	75,801
November	42,924	989	21	1,635	470	524	26,857	73,418
December	<u>50,114</u>	<u>1,228</u>	<u>27</u>	<u>2,056</u>	<u>508</u>	<u>540</u>	<u>28,322</u>	<u>82,794</u>
Total	647,896	13,925	288	22,564	4,755	5,152	336,142	1,030,721

**Table #4 Forwards Prices - Energy Only @ bulk system**

*in \$/MWh (See Table 18)*

	<u>On-Peak</u>	<u>Off-Peak</u>
January	51.36	40.23
February	48.78	38.15
March	37.78	29.38
April	32.76	25.06
May	32.41	24.84
June	34.04	21.20
July	38.66	24.17
August	36.04	22.52
September	34.87	21.45
October	31.71	24.48
November	32.02	24.88
December	36.53	28.53

**Table #5 Losses**

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Expansion Factor =	1.08493	1.08493	1.08493	1.08493	1.08115	1.08115	1.08493
Expansion Factor (net Marginal Losses)	1.07456	1.07456	1.07456	1.07456	1.07082	1.07082	1.07456

**Table #6 Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods**  
based on Forwards prices corrected for basis differential & losses  
in \$/MWh

		<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Summer - all hrs	\$	32.23 \$	32.01 \$	31.98 \$	33.03 \$	27.37 \$	27.33 \$	32.37
	PJM on pk \$	39.17 \$	39.14 \$	39.15 \$	39.08 \$	38.69 \$	38.66 \$	39.05
	PJM off pk \$	24.36 \$	24.33 \$	24.35 \$	24.38 \$	24.14 \$	24.11 \$	24.31
Winter - all hrs	\$	37.12 \$	37.82 \$	38.49 \$	38.02 \$	34.84 \$	34.46 \$	37.15
	PJM on pk \$	41.73 \$	43.08 \$	43.53 \$	42.21 \$	41.64 \$	41.21 \$	41.29
	PJM off pk \$	32.50 \$	33.42 \$	33.90 \$	33.29 \$	32.07 \$	31.73 \$	32.26
Annual	\$	35.01 \$	35.90 \$	36.55 \$	36.47 \$	32.72 \$	32.42 \$	35.44
System Total	\$	35.17						

**Table #7 Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods**  
based on Forwards prices corrected for basis differential & losses  
in \$1000

		<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Summer - all hrs	\$	9,043 \$	147 \$	3 \$	231 \$	37 \$	40 \$	3,893
	PJM on pk \$	5,842 \$	93 \$	2 \$	161 \$	12 \$	13 \$	2,569
	PJM off pk \$	3,201 \$	54 \$	1 \$	70 \$	25 \$	28 \$	1,324
Winter - all hrs	\$	13,637 \$	353 \$	8 \$	592 \$	119 \$	127 \$	8,020
	PJM on pk \$	7,683 \$	183 \$	4 \$	348 \$	41 \$	44 \$	4,822
	PJM off pk \$	5,954 \$	170 \$	4 \$	243 \$	78 \$	83 \$	3,198
Annual	\$	22,680 \$	500 \$	11 \$	823 \$	156 \$	167 \$	11,913
System Total	\$	36,249						



**Table #8 Summary of Average BGS Energy Only Unit Costs @ customer - RECO Time Periods**  
based on Forwards prices corrected for basis differential & losses - RECO billing time periods in \$/MWh

		<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Summer - all hrs	\$	32.23	\$ 32.01	\$ 31.98	\$ 33.03	\$ 27.37	\$ 27.33	\$ 32.37
RECO On pk			\$	41.12				
RECO Off pk			\$	26.32				
Winter - all hrs	\$	37.12	\$ 37.82	\$ 38.49	\$ 38.02	\$ 34.84	\$ 34.46	\$ 37.15
RECO On pk			\$	44.64				
RECO Off pk			\$	35.01				
Annual Average	\$	35.01	\$ 35.90	\$ 36.55	\$ 36.47	\$ 32.72	\$ 32.42	\$ 35.44
System Average	\$	35.17						

**Table #9 Generation & Transmission Obligations and Costs and Other Adjustments**  
Obligations - annual average forecasted for 2018; costs are market estimates in MW

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>	<u>Total FP</u>
Gen Obl - MW	352.167	4.317	0.085	5.226	0.0	0.0	100.711	462.506
Trans Obl - MW	262.269	3.376	0.071	4.910	0.0	0.0	91.971	362.597

# of Months and Days used in this analysis

# of summer days =	122	# of summer months =	4
# of winter days =	244	# of winter months =	8
		total # months =	12

Transmission Cost\* \$ 42,548 per MW-yr 116.57

Generation Capacity cost summer \$156.23 \$/MW/day Resulting avg gen cap cost = summer >> \$ 57.02 per kW/yr  
(see Table 19) winter \$138.78 \$/MW/day winter >> \$ 50.65 per kW/yr

Current residential summer BGS charges  
Current Tariff and % of total summer usage

	<u>SC1</u>		<u>SC5</u>	
	Charges	% usage	Chgs (\$/kWh)	Differences
Block 1 (0-600 kWh/month)	6.748 \$/kWh	42.10%	7.031	
Block 2 (>600 kWh/m)	9.620 \$/kWh	57.90%	9.059	2.028
Calculated inversion =	2.872 \$/kWh			

**Table #10 Ancillary Services**  
forecasted overall annual average

\$17.03 /MWh

**Table #11 Summary of Obligation Costs Expressed as \$/MWh @ customer (for non-demand rates only)**

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Transmission Obl - all months \$	17.22 \$	10.32 \$	10.49 \$	9.26 \$	- \$	-
Generation Obl -						
per annual MWh \$	28.77 \$	16.41 \$	15.62 \$	12.26 \$	- \$	-
per summer MWh \$	23.92 \$	17.87 \$	18.84 \$	14.22 \$	- \$	-
per winter MWh \$	32.46 \$	15.68 \$	14.25 \$	11.37 \$	- \$	-

**Table #12 Summary of BGS Unit Costs @ customer**

**NON-DEMAND RATES** (includes energy, G&T obligations, and Ancillary Services - adjusted to billing time periods in \$/MWh)

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Summer - all hrs \$	90.41 \$	77.23 \$	78.33 \$	73.54 \$	44.40 \$	44.36
RECO On pk		\$	117.92			
RECO Off pk		\$	53.84			
Block 1 \$	73.78 \$	69.45				
Block 2 \$	102.50 \$	89.73				
Winter - all hrs \$	103.84 \$	80.85 \$	80.26 \$	75.68 \$	51.87 \$	51.49
RECO On pk		\$	111.65			
RECO Off pk		\$	62.53			
Annual -all hrs \$	98.03 \$	79.66 \$	79.68 \$	75.02 \$	49.75 \$	49.45

**DEMAND RATES** (includes energy and Ancillary Services, G&T obligations charged separately - adjusted to billing time periods in \$/MWh)

	<u>SC2 Dem</u>	<b>PLUS:</b>			
Summer - all hrs \$	49.40	<u>Gen Cost (per kW of Billed Demand/Month)</u>			
			<u>≤ 5 kW</u>	<u>&gt; 5 kW</u>	
Winter - all hrs \$	54.18	summer	\$ 1.546	\$ 5.360	
		winter	\$ 1.502	\$ 5.318	
Annual - all hrs per MWh only \$	52.47	<u>Trans cost</u>			
		all months \$	3.55	per kW of T obl /month	

**Table #12 (Continued)**

<u>Including T&amp;G Obligation \$</u>		<u>Gen Cost (per kW of Billed Demand/Month)</u>			
Summer - all hrs	\$ 79.61				
			<b>≤ 5 kW</b>	<b>&gt; 5 kW</b>	
		summer	\$ 1.546	\$ 5.360	
Winter - all hrs	\$ 85.18	winter	\$ 1.502	\$ 5.318	
Annual - including T&G Obl \$	\$ 79.97				
<b>ALL RATES</b>					
Grand Total Cost in \$1000 =	\$ 93,707				
All-In Average cost @ customer =	\$	90.91	per MWh at customer (per customer metered MWh)		
All-In Average costs @ transmission nodes =	\$	84.61	per MWh at transmission nodes (per metered MWh at transmission node)		

**Table #13 Ratio of BGS Unit Costs @ customer to All-In Average Cost @ transmission nodes**

**NON-DEMAND RATES**

*Includes energy, G&T obligations, and Ancillary Services - adjusted to billing time periods*

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	1.069	0.913		0.869	0.525	0.524
RECO On pk			1.394			
RECO Off pk			0.636			
Constant Blk 1 \$	(16.63) \$	(7.78)				
Constant Blk 2 \$	12.09 \$	12.50				
Winter - all hrs	1.227	0.956		0.895	0.613	0.609
RECO On pk			1.320			
RECO Off pk			0.739			
Annual - all hrs	1.159	0.941	0.942	0.887	0.588	0.584

## DEMAND RATES

	<u>SC2 Dem</u>	<u>SC2 Dem</u>
	<u>Multiplier</u>	<u>Constant</u>
Summer - all hrs	0.941 \$	(30.210)

Winter - all hrs	1.007	\$	(31.002)
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**|PLUS:**

**Gen Cost (per kW of Billed Demand/Month)**

**≤ 5 kW**

**> 5 kW**

summer	\$	1.55	\$	5.36
winter	\$	1.50	\$	5.32

Trans cost

all months	\$	3.546	per kW of T obl /month
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### NON-DEMAND RATES

**SC1**

**SC5**

**SC3**

SC2 ND

**SC4**

**SC6**

Summer - all hrs	\$	73.19	\$	66.91	\$	67.84	\$	64.29	\$	44.40	\$	44.36
RECO On pk					\$	107.43						
RECO Off pk					\$	43.35						
Block 1	\$	56.56	\$	59.14								
Block 2	\$	85.28	\$	79.42								

Winter - all hrs	\$	86.62	\$	70.54	\$	69.77	\$	66.42	\$	51.87	\$	51.49
RECO On pk					\$	101.16						
RECO Off pk					\$	52.04						

Annual -all hrs	\$	80.80	\$	69.34	\$	69.19	\$	65.76	\$	49.75	\$	49.45
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Table #14 (Continued)

**DEMAND RATES**

*Includes energy and Ancillary Services, generation obligation charged separately - adjusted to billing time periods.  
Transmission billed at retail tariff level. In \$/MWh.*

		<u>SC2 Dem</u>		<b>PLUS:</b>					
Summer - all hrs	\$	49.40			<u>Gen Cost (per kW of Billed Demand/Month)</u>				
							<u>&lt; 5 kW</u>	<u>&gt; 5 kW</u>	
Winter - all hrs	\$	54.18			summer	\$	1.546	\$	5.360
					winter	\$	1.502	\$	5.318
Annual - all hrs per MWh only	\$	52.47							
<u>Including Generation Obligation \$</u>									
Summer - all hrs	\$	68.77							
Winter - all hrs	\$	73.10							
Annual - including T&G Obl	\$	71.55							

**ALL RATES**

Grand Total Cost in \$1000 = \$ 79,362

All-In Average cost @ customer = \$

All-In Average costs @ transmission nodes = \$

77.00 per MWh at customer (per customer metered MWh)

71.66 per MWh at transmission node system (per metered MWh at transmission node)

**Table #15** Ratio of BGS Unit Costs Less Transmission @ customer to All-In Average Cost @ transmission nodes**NON-DEMAND RATES***Includes energy, G&T obligations, and Ancillary Services - adjusted to billing time periods*

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	1.021	0.934		0.897	0.620	0.619
RECO On pk			1.499			
RECO Off pk			0.605			
Constant Blk 1 \$	(16.63) \$	(7.78)				
Constant Blk 2 \$	12.09 \$	12.50				
Winter - all hrs	1.209	0.984		0.927	0.724	0.719
RECO On pk			1.412			
RECO Off pk			0.726			
Annual - all hrs	1.128	0.968	0.966	0.918	0.694	0.690

**DEMAND RATES***includes energy and Ancillary Services, G&T obligations charged separately - adjusted to billing time periods*

	<u>SC2 Dem Multiplier</u>	<u>SC2 Dem Constant</u>	<b>PLUS:</b>			
Summer - all hrs	0.960	(19.363)	<u>Gen Cost (per kW of Billed Demand/Month)</u>			
				<u>&lt; 5 kW</u>		<u>&gt; 5 kW</u>
Winter - all hrs	1.020	(18.918)	summer	\$ 1.546	\$	5.360
			winter	\$ 1.502	\$	5.318
Annual - including T&G Obl \$	0.998					

**Table #16 Summary of Total BGS Costs by Season**

		<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Total Costs by Rate - in \$1000								
Summer	\$	25,366	\$ 356	\$ 7	\$ 515	\$ 60	\$ 65	9,165
Winter	\$	38,145	\$ 754	\$ 16	\$ 1,178	\$ 177	\$ 189	17,715
Total	\$	63,510	\$ 1,109	\$ 23	\$ 1,693	\$ 237	\$ 255	26,880
% of Annual Total \$ by Rate								
Summer		40%	32%	29%	30%	25%	26%	34%
Winter		60%	68%	71%	70%	75%	74%	66%
Total Costs - in \$1000								
Summer	\$	35,533						
Winter	\$	58,174						
Total	\$	93,707						
% of Annual Total \$				If total \$ were split on a per MWh basis (on transmission node MWhs):				<u>Ratio to All-In Cost</u>
Summer		38%	\$ 79.62	per MWh @ transmission nodes				Summer 0.9410
Winter		62%	\$ 87.97	per MWh @ transmission nodes				Winter 1.0398

**Table #17 Summary of Total BGS Costs by Season - Less Transmission**

		<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
Total Costs by Rate - in \$1000								
Summer	\$	20,533	\$ 308	\$ 6	\$ 450	\$ 60	\$ 65	7,860
Winter	\$	31,818	\$ 657	\$ 14	\$ 1,034	\$ 177	\$ 189	15,107
Total	\$	52,351	\$ 966	\$ 20	\$ 1,484	\$ 237	\$ 255	22,967
% of Annual Total \$ by Rate								
Summer		39%	32%	29%	30%	25%	26%	34%
Winter		61%	68%	71%	70%	75%	74%	66%
Total Costs - in \$1000								
Summer	\$	29,283						
Winter	\$	48,996						
Total	\$	78,279						
% of Annual Total \$				If total \$ were split on a per MWh basis (on transmission node MWhs):				<u>Ratio to All-In Cost</u>
Summer		37%	\$ 65.62	per MWh @ transmission nodes				Summer 0.9157
Winter		63%	\$ 74.10	per MWh @ transmission nodes				Winter 1.0340

**Table #18 Forward Energy Prices**

PJM Forward Prices - Energy Only @ bulk system in \$/MWh			Zone to Western Hub Basis Differential in \$/MWh			PJM Forward Prices (incl basis differential) in \$/MWh	
	<u>On-Peak</u>	<u>Off/On Peak LMP ratio</u>	<u>Off-Peak</u>	<u>On-Peak</u>	<u>Off-Peak</u>	<u>On-Peak</u>	<u>Off-Peak</u>
January	53.62	0.78	41.78	93%	93%	49.60	38.70
February	50.88	0.78	39.65	93%	93%	47.07	36.73
March	40.38	0.78	31.47	93%	93%	37.35	29.15
April	35.29	0.78	27.50	93%	93%	32.64	25.47
May	35.19	0.78	27.42	93%	93%	32.55	25.40
June	35.76	0.65	23.27	95%	90%	33.98	20.92
July	40.45	0.65	26.33	95%	90%	38.44	23.67
August	37.70	0.65	24.54	95%	90%	35.83	22.06
September	36.58	0.65	23.81	95%	90%	34.76	21.41
October	34.38	0.78	26.79	93%	93%	31.80	24.81
November	34.45	0.78	26.84	93%	93%	31.87	24.86
December	38.00	0.78	29.61	93%	93%	35.15	27.43

**NYISO Forward Prices - Energy Only @ bulk system  
in \$/MWh**

	<u>On-Peak</u>	<u>Off-Peak</u>
January	65.75	52.75
February	62.75	49.75
March	41.25	31.25
April	33.75	21.75
May	31.25	20.25
June	34.50	23.50
July	40.50	28.25
August	37.75	26.25
September	35.75	21.75
October	31.00	21.75
November	33.25	25.00
December	47.75	37.50

**Weighted Average Forward Prices - Energy Only @ bulk  
system (89.1% PJM - 10.9% NYISO)  
in \$/MWh**

	<u>On-Peak</u>	<u>Off-Peak</u>	
January	51.36	40.23	89.1%
February	48.78	38.15	10.9%
March	37.78	29.38	
April	32.76	25.06	
May	32.41	24.84	
June	34.04	21.20	
July	38.66	24.17	
August	36.04	22.52	
September	34.87	21.45	
October	31.71	24.48	
November	32.02	24.88	
December	36.53	28.53	



**Table #19 Generation Capacity Prices (\$/MW/Day)**

	<u>PJM Base Capacity</u>	<u>PJM 89.1%</u>	<u>NYISO 10.9%</u>	<u>Weighted Average</u>
Summer	\$151.64	\$151.64	\$193.67	\$156.23
Winter	\$151.64	\$151.64	33.76	\$138.78

**Table #20 Ancillary Services**

	<u>PJM Ancillary Services</u>	<u>NYISO Ancillary Services</u>	<u>Renewable Power Cost</u>	<u>PJM 89.1%</u>	<u>NYISO 10.9%</u>	<u>Weighted Average</u>
	\$2.00	\$1.89	\$15.04	\$17.04	\$16.93	\$17.03

**Assumptions:**

Gen Cost = \$156.23 per MW-day in summer  
\$138.78 per MW-day in winter  
Trans cost = \$ 42,548 per MW-yr  
Analysis time period = 4 summer months  
8 winter months  
Ancillary Services = \$ 17.03 /MWh  
Energy Costs = Based on Jun 2019 to May 2020 Forwards @ PJM West as of January 02, 2019  
Based on Jan 2020 to Dec 2020 Forwards @ NYISO Zone G and Lower Hudson Valley (LHV) as of January 07, 2019  
Usage patterns = Forecasted 2018 energy use by class, PJM on/off % from 2017 class load profiles,  
RECO billing on/off % from 6/17 to 5/18 actual data  
Obligations = Class totals for 2018  
Losses = Per RECO's Third Party Supplier Agreement adjusted for PJM 500kV losses and inadvertent energy.  
PJM Time Periods = PJM trading time periods - 7 AM to 11 PM weekdays, local time, x NERC  
Holidays - New Year's, Memorial, 4th of July, Labor Day, Thanksgiving & Christmas  
RECO Billing time periods = as per specific rate schedule

**Table A Weighted Average Price Calculation**

Line #	Specific BGS-FP Auction >>	2017 Auction 36 Month	2018 Auction 36 Month	2019 Auction 36 Month	Total	Notes:
1	Tranches	1	2	1	4	From then-current auction
2	Winning Bid Price (\$/kWh)*	8.050	8.594	8.803		(Note: 2019 Auction Price Shown for Illustrative Purposes Only)
3	Transmission (\$/kWh)	1.295	1.295	1.295		Average transmission cost included in bid
4	BGS (\$/kWh)	6.755	7.299	7.508		= (2) - (3)
5	Weighted Avg BGS	1.689	3.649	1.877	7.215	= (1) / Total Tranches * (4)
6	Weighted Avg Trans	0.324	0.648	0.324	1.295	= (1) / Total Tranches * (3)
7	Weighted Avg Total Price (\$/kWh)				<b>8.510</b>	
<u>Seasonal Payment Factors</u>						
8	Summer	1.0000	1.0000	1.0000 **		From then-current Bid Factor Spreadsheet
9	Winter	1.0000	1.0000	1.0000 **		From then-current Bid Factor Spreadsheet
<u>Applicable Customer Usage @ transmission nodes</u> (Eastern Division)						
10	Summer MWh	397,580				From then-current Bid Factor Spreadsheet
11	Winter MWh	<u>589,090</u>				From then-current Bid Factor Spreadsheet
12		986,670				
<u>Total Cost</u>						
13	Summer	8,001,298	17,084,015	8,749,743	33,835,056	= (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000
14	Winter	<u>11,855,438</u>	<u>25,313,200</u>	<u>12,964,400</u>	<u>50,133,038</u>	= (1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,000
15	Total	19,856,736	42,397,215	21,714,143	83,968,094	= (13) + (14)
<u>Average Cost (NJ Statewide Auction)</u>						
16	Summer	8.510 \$/kWh				= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places
17	Winter	8.510 \$/kWh				= sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places
18	Total	<b>8.510 \$/kWh</b>				= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places
<u>Average Cost (Including RECO RFP)</u>						
		BGS Auction	RECO RFP		Total	
19	Tranches	4	0.49		4.49	Includes RECO RFP equivalent tranches
20	Price \$/kWh	8.510	5.681			BGS Auction from (18) Note 5.681¢ for RFP is illustrative (excludes transmission).
21	Transmission	1.295	0.000			
22	BGS	7.215	5.681			= (20) - (21)
23	Weighted Avg BGS	6.427	0.620		7.047	= (19) / Total Tranches * (22)
24	Weighted Avg Trans	1.154	0.000		1.154	= (19) / Total Tranches * (21)
25	Weighted Avg Total Price				<b>8.201</b>	= (23) + (24)

\* Includes Impact of PJM Marginal Losses

\*\* Auction results set to 1.0 to avoid using an atypical result from the current 12-month forward prices.

**Table B** Ratio of BGS Unit Costs Less Transmission @ customer to All-In Average Cost @ transmission nodes  
(from Table 15 of Bid Factor Spreadsheet)

**NON-DEMAND RATES**

*includes energy, G&T obligations, and Ancillary Services - adjusted to billing time periods*

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	1.021	0.934		0.897	0.620	0.619
RECO On pk			1.499			
RECO Off pk			0.605			
Constant Blk 1 \$	(16.63)	(7.78)				
Constant Blk 2 \$	12.09	12.50				
Winter - all hrs	1.209	0.984		0.927	0.724	0.719
RECO On pk			1.412			
RECO Off pk			0.726			
Annual - all hrs	1.128	0.968	0.966	0.918	0.694	0.690

**DEMAND RATES**

*includes energy and Ancillary Services, G&T obligations charged separately - adjusted to billing time periods*

	<u>SC2 Dem Multiplier</u>	<u>SC2 Dem Constant</u>	<b>PLUS:</b>			
Summer - all hrs	0.960	(19.363)	<u>Gen Cost (per kW of Billed Demand/Month)</u>			
			<u>0</u>	<u>&lt; 5 kW</u>	<u>&gt; 5 kW</u>	
Winter - all hrs	1.020	(18.918)	summer \$	- \$	1.546 \$	5.360
			winter \$	- \$	1.502 \$	5.318
Annual - including T&G Obl \$	0.998					

Table C Determination of Preliminary Retail Rates to be Charged to BGS Customers

All-In Average costs @ Trans node =	\$	82.01	/MWh*	* Price from Table A (which does not include transmission for the Central/Western Division). ** RECO average transmission rate of 12.95 minus Central/West transmission contribution to weighted average rate 0.490/4.490 *\$12.95 per MWh). \$1.41			
Less Transmission	\$	(11.54)	/MWh**				
BGS Cost	\$	70.47	/MWh				
<u>Retail BGS Rates (excl SUT) (¢/kWh)</u>							
	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
<u>Summer</u>							
All kWh (¢/kWh)	7.195	6.582		6.321	4.369	4.362	4.829
Peak kWh (¢/kWh)			10.563				
Off-Peak kWh (¢/kWh)			4.263				
Block1	5.532	5.804					
Block2	8.404	7.832					
Demand Charge (\$/kW) 1st 5kW							1.546
Demand Charge (\$/kW)> 5 kW							5.360
<u>Winter</u>							
All kWh (¢/kWh)	8.520	6.934		6.532	5.102	5.067	5.296
Peak kWh (¢/kWh)			9.950				
Off-Peak kWh (¢/kWh)			5.116				
Demand Charge (\$/kW) 1st 5kW							1.502
Demand Charge (\$/kW) > 5 kW							5.318

**Table D Calculation of Rate Adjustment Factors**

		<u>SC1</u>		<u>SC5</u>		<u>SC3</u>		<u>SC2 ND</u>		<u>SC4</u>		<u>SC6</u>		<u>SC2 Dem</u>
Total BGS Revenue (Excl SUT) - in \$1000														
Summer	\$	20,186	\$	303	\$	6	\$	443	\$	59	\$	64	\$	8,136
Winter	\$	31,297	\$	646	\$	14	\$	1,016	\$	174	\$	186	\$	15,518
Total	\$	51,483	\$	949	\$	20	\$	1,459	\$	233	\$	250	\$	23,654
Total														
Summer	\$	29,197												
Winter	\$	48,851												
Total	\$	78,048												

Total Supplier Payments - in \$1000

Eastern Division	Total	Transmission	Net BGS
Summer	\$ 33,835	\$ 4,581	\$ 29,254
Winter	\$ 50,133	\$ 9,163	\$ 40,970
Total	\$ 83,968	\$ 13,744	\$ 70,224

Central/Western Division	Total	Transmission	Net BGS
Summer	\$ 2,793	\$ -	\$ 2,793
Winter	\$ 4,100	\$ -	\$ 4,100
Total	\$ 6,893	\$ -	\$ 6,893

Total RECO FP	Total	Transmission	Net BGS
Summer	\$ 36,628	\$ 4,581	\$ 32,047
Winter	\$ 54,233	\$ 9,163	\$ 45,070
Total	\$ 90,861	\$ 13,744	\$ 77,117

Differences	BGS Revenue	BGS Costs	Difference
Summer	\$ 29,197	\$ 32,047	\$ 2,850
Winter	\$ 48,851	\$ 45,070	\$ (3,781)
Total	\$ 78,048	\$ 77,117	\$ (931)

Rate  
Adjustment  
Factors  
**1.09761**  
**0.9226**

Table E Final Retail BGS Rates (\$/kWh)

Rates Excluding SUT:

	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
<u>Summer</u>							
All kWh (\$/kWh)	7.897	7.224		6.938	4.795	4.788	5.300
Peak kWh (\$/kWh)			11.594				
Off-Peak kWh (\$/kWh)			4.679				
Block1	6.072	6.371					
Block2	9.224	8.596					
Demand Charge (\$/kW) 1st 5kW							1.697
Demand Charge (\$/kW) > 5 kW							5.883
<u>Winter</u>							
All kWh (\$/kWh)	7.861	6.397		6.026	4.707	4.675	4.886
Peak kWh (\$/kWh)			9.180				
Off-Peak kWh (\$/kWh)			4.720				
Demand Charge (\$/kW) 1st 5kW							1.386
Demand Charge (\$/kW) > 5 kW							4.906

Rates Including SUT:

	SUT @		6.625%				
	<u>SC1</u>	<u>SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	<u>SC2 Dem</u>
<u>Summer</u>							
All kWh (\$/kWh)				7.398	5.113	5.105	5.651
Peak kWh (\$/kWh)			12.362				
Off-Peak kWh (\$/kWh)			4.989				
Block1	6.474	6.793					
Block2	9.835	9.165					
Demand Charge (\$/kW) 1st 5kW							1.8100
Demand Charge (\$/kW) > 5 kW							6.2700
<u>Winter</u>							
All kWh (\$/kWh)	8.382	6.821		6.425	5.019	4.985	5.210
Peak kWh (\$/kWh)			9.788				
Off-Peak kWh (\$/kWh)			5.033				
Demand Charge (\$/kW) 1st 5kW							1.4800
Demand Charge (\$/kW) > 5 kW							5.2300

Table F Spreadsheet Error Checking

Total BGS Revenue (Excl SUT) - in \$1000

		<u>SC1</u>		<u>SC5</u>		<u>SC3</u>		<u>SC2 ND</u>		<u>SC4</u>		<u>SC6</u>		<u>SC2 Dem</u>
Summer	\$	22,156	\$	333	\$	6	\$	486	\$	65	\$	71	\$	8,929
Winter	\$	28,876	\$	596	\$	13	\$	938	\$	160	\$	172	\$	14,316
Total	\$	51,032	\$	929	\$	19	\$	1,424	\$	225	\$	243	\$	23,245
Total														
Summer	\$	32,046												
Winter	\$	45,071												
Total	\$	77,117												

Supplier Payments - in \$1000

Eastern Division

		<u>Total</u>	<u>Transmission</u>	<u>Net BGS</u>
Summer	\$	33,835	\$ 4,581	\$ 29,254
Winter	\$	50,133	\$ 9,163	\$ 40,970
Total	\$	83,968	\$ 13,744	\$ 70,224

Central/Western Division

		<u>Total</u>	<u>Transmission</u>	<u>Net BGS</u>
Summer	\$	2,793	\$ -	\$ 2,793
Winter	\$	4,100	\$ -	\$ 4,100
Total	\$	6,893	\$ -	\$ 6,893

Total RECO FP

		<u>Total</u>	<u>Transmission</u>	<u>Net BGS</u>
Summer	\$	36,628	\$ 4,581	\$ 32,047
Winter	\$	54,233	\$ 9,163	\$ 45,070
Total	\$	90,861	\$ 13,744	\$ 77,117

Differences

		<u>BGS</u>	<u>BGS</u>	<u>Difference</u>
		<u>Revenue</u>	<u>Costs</u>	
Summer	\$	32,046	\$ 32,047	\$ 1
Winter	\$	45,071	\$ 45,070	\$ (1)
Total	\$	77,117	\$ 77,117	\$ 0