

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 12 ELECTRIC - PART III

XX Rev. Sheet No. 35
Superseding XX Rev. Sheet No. 35

Rider BGS-RSCP
Basic Generation Service – Residential Small Commercial Pricing
 (Applicable to Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED)

Effective June 1, 2015, Rider BGS-FP (Basic Generation Service – Fixed Pricing) is renamed Rider BGS-RSCP to comply with the BPU Order dated November 24, 2014 (Docket No. ER14040370).

AVAILABILITY: Rider BGS-RSCP is available to and provides Basic Generation Service (default service) charges applicable to all KWH usage for Full Service Customers taking service at secondary voltages under Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED, except for GS and GST customers that have a peak load share of 500 KW or greater as of November 1, 2018. Rider BGS-RSCP-eligible GS and GST customers may elect to take default service under Rider BGS-CIEP no later than the second business day in January of each year. Such election will be effective June 1 of that year and Rider BGS-CIEP will remain the customer's default service for the entire 12-month period from June 1 through May 31 of the following year. BGS-RSCP-eligible customers who have elected to take default service under BGS-CIEP may return to BGS-RSCP by notifying the Company no later than the second business day in January of each year. Such notification to return to BGS-RSCP will become effective June 1 of that year.

RATE PER BILLING MONTH: (For service rendered effective June 1, 2019 through May 31, 2020)
1) BGS Energy Charge per KWH: (All charges include Sales and Use Tax as provided in Rider SUT.)

<u>Service Classification</u>	<u>June through September</u>	<u>October through May</u>
RS - first 600 KWH	\$x.xxxxxx	
- all KWH over 600	\$x.xxxxxx	
- all KWH		\$x.xxxxxx
(Excludes off-peak and controlled water heating special provisions)		
RT - all on-peak KWH	\$x.xxxxxx	\$x.xxxxxx
- all off-peak KWH	\$x.xxxxxx	\$x.xxxxxx
RGT - all on-peak KWH	\$x.xxxxxx	
- all off-peak KWH	\$x.xxxxxx	
- all KWH		\$x.xxxxxx
RS and GS Water Heating – all KWH	\$x.xxxxxx	\$x.xxxxxx
(For separately metered off-peak and controlled water heating usage under applicable special provisions)		
GS - all KWH	\$x.xxxxxx	\$x.xxxxxx
(Excludes off-peak and controlled water heating special provisions)		
GST - all on-peak KWH	\$x.xxxxxx	\$x.xxxxxx
- all off-peak KWH	\$x.xxxxxx	\$x.xxxxxx
OL, SVL, MVL, ISL, LED - all KWH	\$x.xxxxxx	\$x.xxxxxx

BGS Energy Charges above reflect costs for energy, generation capacity, ancillary services and related cost.

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JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 12 ELECTRIC - PART III

XX Rev. Sheet No. 36
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Rider BGS-RSCP
Basic Generation Service – Residential Small Commercial Pricing
(Applicable to Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED)

2) BGS Transmission Charge per KWH: As provided in the respective tariff for Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED. Effective September 1, 2017, a RMR (BL England) surcharge of **\$0.000131** per KWH (includes Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage. Effective January 1, 2018, a RMR (Yorktown) surcharge of **\$0.000011** per kWh (includes Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage.

Effective **December 1, 2018**, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage, except lighting under Service Classifications OL, SVL, MVL, ISL and LED:

PSEG-TEC surcharge of **\$0.002472** per KWH
VEPCO-TEC surcharge of **\$0.000167** per KWH
PATH-TEC surcharge of **(\$0.000082)** per KWH
TRAILCO-TEC surcharge of **\$0.000211** per KWH
Delmarva-TEC surcharge of **\$0.000001** per KWH
ACE-TEC surcharge of **\$0.000097** per KWH
PEPCO-TEC surcharge of **\$0.000014** per KWH
PPL-TEC surcharge of **\$0.000808** per KWH
AEP-East-TEC surcharge of **\$0.000071** per KWH
BG&E-TEC surcharge of **\$0.000016** per KWH
MAIT-TEC surcharge of **\$0.000032** per KWH
PECO-TEC surcharge of **\$0.000064** per KWH
EL05-121-TEC surcharge of **\$0.005884** per KWH

3) BGS Reconciliation Charge per KWH: \$x.xxxxxx (includes Sales and Use Tax as provided in Rider SUT)

The above BGS Reconciliation Charge recovers the difference between the payments to BGS suppliers and the revenues from BGS customers for Basic Generation Service and is subject to quarterly true-up.

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Rider BGS-CIEP
Basic Generation Service – Commercial Industrial Energy Pricing
(Applicable to Service Classifications GP and GT and
Certain Customers under Service Classifications GS and GST)

AVAILABILITY: Rider BGS-CIEP is available to and provides Basic Generation Service (default service) charges applicable to all Full Service Customers taking service at primary and transmission voltages under Service Classifications GP and GT and any Full Service Customers taking service at secondary voltages under Service Classifications GS and GST that have a peak load share of 500 KW or greater as of November 1, 2018, or that have elected to take BGS-CIEP service no later than the second business day in January of each year. All BGS-CIEP customers remain subject to this Rider for the entire 12-month period from June 1 of any given year through May 31 of the following year.

RATE PER BILLING MONTH:
(For service rendered effective June 1, 2019 through May 31, 2020)

1) BGS Energy Charge per KWH: The sum of actual real-time PJM load weighted average Residual Metered Load Aggregate Locational Marginal Price for JCP&L Transmission Zone and ancillary services of **\$0.00600** per KWH, times the Losses Multiplier provided below, times 1.06625 multiplier for Sales and Use Tax as provided in Rider SUT.

Losses Multiplier:	GT – High Tension Service	1.005
	GT	1.027
	GP	1.047
	GST	1.103
	GS	1.103

2) BGS Capacity Charge per KW of Generation Obligation: \$x.xxxxx per KW-day times BGS-CIEP customer's share of the capacity peak load assigned to the JCP&L Transmission Zone by the PJM Interconnection, L.L.C., as adjusted by PJM assigned capacity related factors, times 1.06625 multiplier for Sales and Use Tax as provided in Rider SUT.

3) BGS Transmission Charge per KWH: As provided in the respective tariff for Service Classifications GS, GST, GP and GT. Effective September 1, 2017, a RMR (BL England) surcharge will be added to the BGS Transmission Charge applicable to all KWH usage, as follows (includes Sales and Use Tax as provided in Rider SUT):

GT – High Tension Service	\$0.000119
GT	\$0.000122
GP	\$0.000124
GS and GST	\$0.000131

Effective January 1, 2018, a RMR (Yorktown) surcharge will be added to the BGS Transmission Charge applicable to all KWH usage, as follows (includes Sales and Use Tax as provided in Rider SUT):

GT – High Tension Service	\$0.000010
GT	\$0.000010
GP	\$0.000011
GS and GST	\$0.000011

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Rider BGS-CIEP
Basic Generation Service – Commercial Industrial Energy Pricing
 (Applicable to Service Classifications GP and GT and
 Certain Customers under Service Classifications GS and GST)

3) BGS Transmission Charge per KWH: (Continued)

Effective **December 1, 2018**, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage:

	<u>PSEG-TEC</u>	<u>VEPCO-TEC</u>	<u>PATH-TEC</u>
GS and GST	\$0.002472	\$0.000167	(\$0.000082)
GP	\$0.001649	\$0.000112	(\$0.000054)
GT	\$0.001502	\$0.000101	(\$0.000050)
GT – High Tension Service	\$0.000371	\$0.000026	(\$0.000013)
	<u>TRAILCO-TEC</u>	<u>Delmarva-TEC</u>	<u>ACE-TEC</u>
GS and GST	\$0.000211	\$0.000001	\$0.000097
GP	\$0.000141	\$0.000000	\$0.000065
GT	\$0.000128	\$0.000000	\$0.000059
GT – High Tension Service	\$0.000032	\$0.000000	\$0.000015
	<u>PEPCO-TEC</u>	<u>PPL-TEC</u>	<u>AEP-East-TEC</u>
GS and GST	\$0.000014	\$0.000808	\$0.000071
GP	\$0.000010	\$0.000540	\$0.000048
GT	\$0.000009	\$0.000492	\$0.000044
GT – High Tension Service	\$0.000002	\$0.000122	\$0.000011
	<u>BG&E-TEC</u>	<u>MAIT-TEC</u>	<u>PECO-TEC</u>
GS and GST	\$0.000016	\$0.000032	\$0.000064
GP	\$0.000011	\$0.000021	\$0.000043
GT	\$0.000010	\$0.000019	\$0.000039
GT – High Tension Service	\$0.000002	\$0.000005	\$0.000010
	<u>EL05-121-TEC</u>		
GS and GST	\$0.005884		
GP	\$0.003926		
GT	\$0.003577		
GT – High Tension Service	\$0.000883		

4) BGS Reconciliation Charge per KWH: \$x.xxxxxx (includes Sales and Use Tax as provided in Rider SUT)

The above BGS Reconciliation Charge recovers the difference between the payments to BGS suppliers and the revenues from BGS customers for Basic Generation Service and is subject to quarterly true-up.

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XX Rev. Sheet No. 39
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Rider CIEP – Standby Fee
Commercial Industrial Energy Pricing Standby Fee
(Applicable to Service Classifications GP and GT and
Certain Customers under Service Classifications GS and GST)

Effective June 1, 2007, Rider DSSAC (Default Supply Service Availability Charge) is renamed Rider CIEP – Standby Fee to comply with the BPU Order dated December 22, 2006 (Docket No. EO06020119).

APPLICABILITY: Rider CIEP – Standby Fee provides a charge applicable to all KWH usage of all Full Service Customers or Delivery Service Customers taking service under Service Classifications GP and GT and any Full Service Customer or Delivery Service Customer taking service under Service Classifications GS and GST that has a peak load share of 500 KW or greater as of November 1, 2018, or that has elected to take Basic Generation Service-Commercial Industrial Energy Pricing under Rider-CIEP no later than the second business day in January of each year. This charge is applicable for service rendered from June 1, 2019 through May 31, 2020 to recover costs associated with administrating and maintaining the availability of the hourly-priced default Basic Generation Service for these customers.

CIEP – Standby Fee per KWH: \$0.000150

(\$0.000160 including Sales and Use Tax as provided in Rider SUT)

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**Jersey Central Power & Light
Attachment 2
2019 BGS Auction Cost and Bid Factor Tables**

2017/2018 BGS Supply Period Estimated Supplier Payments Allocated by Rate Class

Development of Post Transition Period BGS Cost and Bid Factors

Adjusted to Billing Time Periods

% Usage During PJM On-Peak Period

Table #1

*Based on an average of 2015 through 2017 Load Profile Information
On-Peak periods defined as the 16 hr PJM Trading period, adj for NERC holidays*

	Profile Meter Data		Profile Meter Data		Profile Meter Data		Other Analysis	
	RT(1)	RS(2)	RS(2)	GS(3)	GS(3)	GST	OL/SL	
January	47.88%	45.71%	54.46%	52.74%	52.74%	31.25%	31.25%	
February	51.23%	48.40%	57.72%	55.74%	55.74%	31.36%	31.36%	
March	51.68%	48.73%	60.43%	57.06%	57.06%	29.68%	29.68%	
April	49.47%	47.61%	59.02%	56.71%	56.71%	26.45%	26.45%	
May	48.33%	47.31%	58.01%	56.16%	56.16%	24.87%	24.87%	
June	54.18%	53.71%	60.33%	59.84%	59.84%	25.76%	25.76%	
July	50.59%	50.79%	58.89%	56.26%	56.26%	23.57%	23.57%	
August	52.93%	53.07%	59.47%	58.60%	58.60%	26.49%	26.49%	
September	49.07%	48.51%	56.86%	57.59%	57.59%	27.05%	27.05%	
October	49.79%	47.91%	58.52%	57.27%	57.27%	29.66%	29.66%	
November	48.97%	45.47%	57.68%	55.28%	55.28%	32.32%	32.32%	
December	48.21%	45.96%	55.45%	53.35%	53.35%	32.31%	32.31%	

% Usage During JCP&L On-Peak Billing Period

Table #2

On-Peak periods as defined in specified rate schedule

	2018 Forecasted Sales		2018 Forecasted Sales		2018 Forecasted Sales	
	RT(1)	RS(2)	RS(2)	GS(3)	GST	OL/SL
January	35.64%	N/A	N/A	N/A	42.42%	N/A
February	35.41%	N/A	N/A	N/A	42.83%	N/A
March	34.73%	N/A	N/A	N/A	42.82%	N/A
April	34.68%	N/A	N/A	N/A	44.04%	N/A
May	36.66%	N/A	N/A	N/A	45.51%	N/A
June	39.93%	N/A	N/A	N/A	46.33%	N/A
July	41.59%	N/A	N/A	N/A	47.18%	N/A
August	41.59%	N/A	N/A	N/A	46.65%	N/A
September	40.03%	N/A	N/A	N/A	46.13%	N/A
October	36.68%	N/A	N/A	N/A	46.07%	N/A
November	35.18%	N/A	N/A	N/A	45.46%	N/A
December	35.59%	N/A	N/A	N/A	43.39%	N/A

(1) For BGS purposes the RT rate class includes the RS and GS rate class Off-Peak (OPWH) and Controlled Water Heating (CTWH) provisions. The RT rate class also includes the summer billing month RGT rate class usage. OPWH and CTWH is billed on the average RT rates, while RT and Summer RGT use is billed at on-peak and off-peak rates.

(2) For BGS purposes the RS rate class excludes the Off-Peak and Controlled Water Heating provisions and includes the winter billing month RGT rate class usage

(3) For BGS purposes the GS rate class excludes the Off-Peak and Controlled Water Heating provisions

**Jersey Central Power & Light
Attachment 2**

Table #3
Class Usage @ customer
calendar month sales forecasted for 2018
in MWh

	RT{(1)}	RS{(2)}	GS{(3)}	GST {(4)}	OL/SL	Total
January	26,592	799,279	510,394	15,108	9,480	1,360,863
February	27,398	760,155	493,890	15,108	9,485	1,306,036
March	25,342	690,812	508,325	15,667	9,480	1,249,626
April	19,847	589,629	465,966	14,129	9,475	1,099,046
May	15,385	552,906	436,268	10,341	9,470	1,024,370
June	16,535	715,966	508,549	13,565	9,465	1,264,080
July	20,574	1,004,787	564,605	14,168	9,460	1,613,594
August	21,951	1,111,718	587,963	15,782	9,454	1,746,868
September	18,583	923,564	548,162	14,605	9,449	1,514,364
October	14,081	658,509	477,383	12,752	9,444	1,172,169
November	14,764	573,321	453,136	12,796	9,439	1,063,456
December	20,028	678,062	472,439	13,077	9,434	1,193,040
Total	241,080	9,058,708	6,027,080	167,099	113,545	15,607,512

Table #4
Forwards Prices - Energy Only @ bulk system
in \$/MWh

	Initial On-Peak	Adjusted On-Peak	Initial Off-Peak	Adjusted Off-Peak
January	52.53	55,142	36.751	38,579
February	49.85	52,329	34.876	36,610
March	40.31	42,315	28.202	29,605
April	33.73	35,407	23,598	24,772
May	33.63	35,303	23,529	24,699
June	37.35	48,910	23,965	31,382
July	45.53	59,622	29,213	36,255
August	41.60	54,475	26,691	34,952
September	35.39	46,343	22,707	29,735
October	33.72	35,397	23,591	24,764
November	34.02	35,712	23,801	24,985
December	38.00	39,890	26,586	27,908

Table #6

Losses	RT{(1)}	RS{(2)}	GS{(3)}	GST {(4)}	OL/SL
Loss Factors =	10.5545%	10.5545%	10.5545%	10.5545%	10.5545%
Expansion Factor =	1.11800	1.11800	1.11800	1.11800	1.11800
Loss Factors from Transmission Nodes =	9.6175%	9.6175%	9.6175%	9.6175%	9.6175%
Expansion Factor to Transmission Nodes =	1.10972	1.10972	1.10972	1.10972	1.10972

Table #5
Zone-Hub Basis Differential
Based on 3 Year Average

On-Peak	Off-Peak
104%	103%
104%	103%
104%	103%
104%	103%
95%	90%
95%	90%
95%	90%
95%	90%
104%	103%
104%	103%

(4) The GS and GST units exclude the units associated with the 500 kW and above PLS accounts that will be required to take service under BGS-CIEP

**Jersey Central Power & Light
Attachment 2**

Table #7

Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses - PJM time periods
in \$/MWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs	\$ 45,463	\$ 45,502	\$ 46,847	\$ 46,583	\$ 39,411
PJM on pk	\$ 56,191	\$ 56,322	\$ 55,867	\$ 55,771	\$ 55,555
PJM off pk	\$ 34,003	\$ 34,030	\$ 33,942	\$ 33,859	\$ 33,821
Winter - all hrs	\$ 42,481	\$ 41,332	\$ 42,314	\$ 42,313	\$ 37,959
PJM on pk	\$ 50,241	\$ 49,287	\$ 48,497	\$ 48,860	\$ 48,648
PJM off pk	\$ 34,854	\$ 34,235	\$ 33,898	\$ 34,141	\$ 33,435
Annual	\$ 43,441	\$ 43,061	\$ 43,976	\$ 43,798	\$ 38,442
System Total	\$	\$ 43.39			

Table #8

Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses
in \$/1000

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	Total
Summer - all hrs	\$ 3,530	\$ 170,906	\$ 103,497	\$ 2,707	\$ 1,491	\$ 282,131
PJM on pk	\$ 2,253	\$ 108,864	\$ 72,646	\$ 1,882	\$ 541	\$ 186,185
PJM off pk	\$ 1,276	\$ 62,043	\$ 30,852	\$ 825	\$ 950	\$ 95,946
Winter - all hrs	\$ 6,943	\$ 219,168	\$ 161,548	\$ 4,611	\$ 2,874	\$ 395,144
PJM on pk	\$ 4,070	\$ 123,219	\$ 106,741	\$ 2,956	\$ 1,095	\$ 238,082
PJM off pk	\$ 2,873	\$ 95,949	\$ 54,807	\$ 1,655	\$ 1,779	\$ 157,062
Annual	\$ 10,473	\$ 390,074	\$ 265,045	\$ 7,319	\$ 4,365	\$ 677,276
System Total	\$	\$ 677,276				

**Jersey Central Power & Light
Attachment 2**

Table #9

Summary of Average BGS Energy Only Unit Costs @ customer - JCP&L Time Periods
based on Forwards prices corrected for zone-hub differential and losses - JCP&L billing time periods
in \$/MWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs	\$ 45,463	\$ 45,502	\$ 46,847	\$ 46,563	\$ 39,411
JCP&L On pk	\$ 59,122		\$	\$ 58,474	
JCP&L Off pk	\$ 36,026		\$	\$ 36,216	
Winter - all hrs	\$ 42,481	\$ 41,332	\$ 42,314	\$ 42,313	\$ 37,959
JCP&L On pk	\$ 52,274		\$	\$ 50,800	
JCP&L Off pk	\$ 37,087		\$	\$ 35,661	
Annual Average	\$ 43,441	\$ 43,061	\$ 43,976	\$ 43,798	\$ 38,442
System Average	\$ 43.39				

Table #10

Generation & Transmission Obligations and Costs and Other Adjustments
obligations - annual average forecasted for 2018, costs are market estimates
in MW

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	BGS-RSCP TOTAL
Gen Obl - MW	89.6	2,933.9	1,449.2	46.1	0.2	4,519.0
Trans Obl - MW						

Not applicable for JCP&L - Transmission rates are based on Retail Tariff rates for the respective rate classes

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 charges will be based on Retail Tariff rates for the applicable rate schedules

	Initial	Adjusted	Summer Total	Winter Total	Annual Total
Generation Capacity cost	\$ 151.36	158,909 \$/MWh/day	\$ 87,608,810	\$ 175,217,621	\$ 262,826,431
Residential summer BGS + Transmission charge differential per BPU and summer blocking percentages	\$ 151.36	158,909 \$/MWh/day			

Charges	% Usage
Block 1 (0-600 kWh/m)	52.35%
Block 2 (>600 kWh/m)	47.65%
Differential (Excl. SUT)	0.8652 ¢/kWh

Table #11

Ancillary Services
Forecasted Ancillary Services Cost
Renewable Portfolio Standard Cost
forecasted overall annual average

Initial	Adjusted
\$2.00	\$/MWh
\$8.57	\$/MWh
\$10.57	\$11,096 \$/MWh

Table #12

Summary of Obligation Costs Expressed as \$/MWh @ customer

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Transmission Obl - all months	\$ 3,842	\$ 4,627	\$ 4,615	\$ 3,650	\$ 3,508
Generation Obl \$/MWh - all months	\$ 21,614	\$ 18,837	\$ 13,965	\$ 16,035	\$ 0,092
Generation Obl \$/MWh - Summer - All Hours	\$ 22,370	\$ 15,143	\$ 12,717	\$	\$ 0,092
Generation Obl \$/MWh - Summer - On-Peak Hours	\$ 54,744	\$	\$	\$ 32,995	\$
Generation Obl \$/MWh - Winter - All Hours	\$ 21,254	\$ 21,453	\$ 14,718	\$	\$ 0,092
Generation Obl \$/MWh - Winter - On-Peak Hours	\$ 59,847	\$	\$	\$ 37,306	\$

**Jersey Central Power & Light
Attachment 2**

Table #13

Summary of BGS Unit Costs @ customer

NON-DEMAND RATES

includes energy, Generation and Transmission obligations, and Ancillary Services - adjusted to billing time periods in \$/MWh

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL
Summer - all hrs	\$ 84.08	\$ 77.68	\$ 76.58	\$	\$ 55.42
JCP&L On pk	\$ 130.11			\$ 107.56	
JCP&L Off pk	\$ 52.27			\$ 52.31	
Block 1 (0-600 kWh/m)	\$	\$ 73.55			
Block 2 (>600 kWh/m)	\$	\$ 82.21			
Winter - all hrs	\$ 79.98	\$ 79.82	\$ 74.05	\$	\$ 53.96
JCP&L On pk	\$ 128.37			\$ 104.20	
JCP&L Off pk	\$ 53.33			\$ 51.76	
Annual -all hrs	\$ 81.30	\$ 78.93	\$ 74.98	\$ 75.93	\$ 54.45

DEMAND RATES

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

JCP&L does not have a demand component in its BGS charges

**Jersey Central Power & Light
Attachment 2**

Table #14

Units @ Customer
in kWh

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
Summer - all hrs	1,764,142		2,209,279,000		37,828,000
JCP&L On pk	31,007,842			27,069,178	
JCP&L Off pk	44,871,016			31,051,822	
Block 1 (0-600 kWh/m)		1,966,234,000			
Block 2 (>600 kWh/m)		1,789,601,000			
Winter - all hrs	3,609,561	5,302,673,000	3,817,601,000	47,882,798	75,717,000
JCP&L On pk	56,758,897			61,095,202	
JCP&L Off pk	103,068,542				
Summer Total	77,643,000	3,756,035,000	2,209,279,000	58,121,000	37,828,000
Winter Total	163,437,000	5,302,673,000	3,817,801,000	108,978,000	75,717,000
Annual Total	241,080,000	9,058,708,000	6,027,080,000	167,099,000	113,545,000
Total					
					6,138,906,000
					9,468,606,000
					15,607,512,000

Table #15

Summary of Total Estimated BGS Costs by Season

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL	Total
Total Costs by Rate - in \$1000						
Summer - all hrs	\$ 148	\$	\$ 169,196	\$ 2,912	\$ 2,096	
JCP&L On pk	\$ 4,035			\$ 1,624		
JCP&L Off pk	\$ 2,346					
Block 1 (0-600 kWh/m)		\$ 144,626				
Block 2 (>600 kWh/m)		\$ 147,134				
Winter - all hrs	\$ 289	\$ 423,243	\$ 282,721	\$ 4,989	\$ 4,086	
JCP&L On pk	\$ 7,286			\$ 3,162		
JCP&L Off pk	\$ 5,497					
Total Costs - in \$1000						
Summer	\$ 6,528	\$ 291,759	\$ 169,196	\$ 4,536	\$ 2,096	\$ 474,116
Winter	\$ 13,072	\$ 423,243	\$ 282,721	\$ 8,152	\$ 4,086	\$ 731,273
Total	\$ 19,600	\$ 715,003	\$ 451,916	\$ 12,688	\$ 6,182	\$ 1,205,389
% of Annual Total \$						
Summer	33%	41%	37%	36%	34%	39%
Winter	67%	59%	63%	64%	66%	61%

**Jersey Central Power & Light
Attachment 2**

Table #16

Customer & Bulk System Costs

Customer Costs Per Allocation Matrix
Grand Total Cost in \$1000 = \$ 1,205,389

Seasonal Units	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	Total
Summer	86,805	4,198,244	2,469,972	64,979	42,292	6,863,292
Winter	182,722	5,928,384	4,268,299	121,837	84,652	10,585,894

Supplier Payment in \$1000	Seasonal Price per MWh	Units	Payment
Post Transition Year 15 Bid price	69.080	69,080	474,116
Seasonally Adjusted Summer Payment	1.0000	69,080	69,080
Seasonally Adjusted Winter Payment	1.0000	10,585,894	7,31,274
Total Supplier Payment			\$ 1,205,390

Table #17

Adjustment Factor Calculation

Allocated Customer Costs on a per MWh basis (on bulk system MWhs):
 Summer \$ 69.08 per MWh @ bulk system
 Winter \$ 69.08 per MWh @ bulk system

Seasonal Supplier Payment	Adjustment Factor Calculation	Adjustment Factor
69.08	1.0000	1.309507
69.08	1.0000	1.049733

Assumptions:

- Generation Capacity Cost = \$ 158.91 per MW day Summer
- Transmission cost = \$ 158.91 per MW day Winter
- Analysis time period = 4 summer months
- Ancillary Services = 8 winter months
- Energy Costs = \$ 11.10 per MWh
- Usage patterns = Based on Forwards prices @ PJM West corrected for hub-zone basis differential (both based on the figures used to derive the Bid Factors and establish retail rates in Post Transition Year 15 and adjusted to match the total cost at the actual supplier bid price. forecasted 2018 energy use by class based upon PJM on/off % from 2015 through 2017 class load profiles
- Obligations = JCP&L billing on/off % from 2018 forecasted billing determinants
- Losses = class totals for 2018 excluding accounts required to take service under BGS-CIEP as of June 1, 2019
- PJM Time Periods = Consistent with Losses as approved by the BPU
- Billing time periods = PJM trading time periods - 7 AM to 11 PM weekdays, local time, excluding NERC holidays - New Year's, Memorial, 4th of July, Labor Day, Thanksgiving & Christmas
- RT On-peak hours are 8 am to 8 pm Eastern Standard Time, Monday through Friday.
- GST On-peak hours are 8 am to 8 pm prevailing time, Monday through Friday.
- The Holidays identified by PJM are not excluded from the RT or GST Billing On-Peak kWh.
- NJ Sales and Use Tax (SUT) = SUT excluded from all costs

**Jersey Central Power & Light
Attachment 2
2019 BGS Auction Cost and Bid Factor Tables**

2018/2019 BGS Supply Period Estimated Supplier Payments Allocated by Rate Class

Development of Post Transition Period BGS Cost and Bid Factors

Adjusted to Billing Time Periods

% Usage During PJM On-Peak Period

Table #1

(data rounded to nearest .01 %)

	Profile Meter Data		Profile Meter Data		Profile Meter Data		Other Analysis	
	RT{1}	RS{2}	RS{2}	GS{3}	Data	GS	OL/SL	OL/SL
January	47.88%	45.71%	54.46%	52.74%	52.74%	31.25%	31.25%	31.25%
February	51.23%	48.40%	57.72%	55.74%	55.74%	31.36%	31.36%	31.36%
March	51.68%	48.73%	60.43%	57.06%	57.06%	29.68%	29.68%	29.68%
April	49.47%	47.61%	59.02%	56.71%	56.71%	26.45%	26.45%	26.45%
May	48.33%	47.31%	58.01%	56.16%	56.16%	24.87%	24.87%	24.87%
June	54.18%	53.71%	60.33%	59.84%	59.84%	25.76%	25.76%	25.76%
July	50.59%	50.79%	56.89%	56.26%	56.26%	23.57%	23.57%	23.57%
August	52.93%	53.07%	59.47%	58.60%	58.60%	26.49%	26.49%	26.49%
September	49.07%	48.51%	58.86%	57.59%	57.59%	27.06%	27.06%	27.06%
October	49.79%	47.91%	58.52%	57.27%	57.27%	29.66%	29.66%	29.66%
November	48.97%	45.47%	57.68%	55.28%	55.28%	32.32%	32.32%	32.32%
December	48.21%	45.96%	55.45%	53.35%	53.35%	32.31%	32.31%	32.31%

*Based on an average of 2015 through 2017 Load Profile Information
On-Peak periods defined as the 16 hr PJM Trading period, adj for NERC holidays*

% Usage During JCP&L On-Peak Billing Period

Table #2

(data rounded to nearest .01 %)

	2018 Forecasted Calendar Month Sales		2018 Forecasted Calendar Month Sales		2018 Forecasted Calendar Month Sales	
	RT{1}	RS{2}	N/A	GS{3}	N/A	OL/SL
January	35.84%	---	---	42.42%	---	---
February	35.41%	---	---	42.83%	---	---
March	34.73%	---	---	42.82%	---	---
April	34.68%	---	---	44.04%	---	---
May	36.66%	---	---	45.51%	---	---
June	39.93%	---	---	46.33%	---	---
July	41.59%	---	---	47.18%	---	---
August	41.59%	---	---	46.65%	---	---
September	40.03%	---	---	46.13%	---	---
October	36.68%	---	---	46.07%	---	---
November	35.18%	---	---	45.46%	---	---
December	35.59%	---	---	43.39%	---	---

On-Peak periods as defined in specified rate schedule

{1} For BGS purposes the RT rate class includes the RS and GS rate class Off-Peak (OPWH) and Controlled Water Heating (CTWH) provisions. The RT rate class also includes the summer billing month RGT rate class usage. OPWH and CTWH is billed on the average RT rates, while RT and Summer RGT use is billed at on-peak and off-peak rates.
 {2} For BGS purposes the RS rate class excludes the Off-Peak and Controlled Water Heating provisions and includes the winter billing month RGT rate class usage.
 {3} For BGS purposes the GS rate class excludes the Off-Peak and Controlled Water Heating provisions

**Jersey Central Power & Light
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Table #3
Class Usage @ customer
calendar month sales forecasted for 2018
in MWh

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL	Total
January	26,592	799,279	510,394	15,108	9,490	1,360,863
February	27,398	760,155	493,890	15,108	9,485	1,306,036
March	25,342	690,812	508,325	15,667	9,480	1,249,626
April	19,847	589,629	465,966	14,129	9,475	1,099,046
May	15,385	552,906	436,268	10,341	9,470	1,024,370
June	16,535	715,966	508,549	13,565	9,465	1,264,080
July	20,574	1,004,787	564,605	14,168	9,460	1,613,594
August	21,951	1,111,718	587,963	15,782	9,454	1,746,868
September	18,583	923,564	548,162	14,606	9,449	1,514,364
October	14,081	658,909	477,383	12,752	9,444	1,172,169
November	14,764	573,321	453,136	12,796	9,439	1,063,456
December	20,028	678,062	472,439	13,077	9,434	1,193,040
Total	241,080	9,058,708	6,027,080	167,099	113,545	15,607,512

Table #4
Forwards Prices - Energy Only @ bulk system
in \$/MWh

	Initial On-Peak	Adjusted On-Peak	Initial Off-Peak	Adjusted Off-Peak
January	48,230	50,959	36,146	38,191
February	46,020	48,624	34,490	36,442
March	36,970	39,062	27,707	29,275
April	32,630	34,476	24,455	25,839
May	32,000	33,811	23,983	25,340
June	34,360	48,629	22,251	31,492
July	38,950	55,125	25,224	35,699
August	35,000	50,950	23,313	32,995
September	34,440	48,743	22,303	31,565
October	32,420	34,255	24,297	25,672
November	32,430	34,265	24,305	25,680
December	36,580	38,650	27,415	28,966

Table #6

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL
Losses					
Loss Factors =	10.5545%	10.5545%	10.5545%	10.5545%	10.5545%
Expansion Factor =	1.11800	1.11800	1.11800	1.11800	1.11800
Loss Factors from Transmission Nodes =	9.9325%	9.9325%	9.9325%	9.9325%	9.9325%
Expansion Factor to Transmission Nodes =	1.11028	1.11028	1.11028	1.11028	1.11028

Table #5
Zone-Hub Basis Differential
Based on 3 Year Average

	On-Peak	Off-Peak
January	95%	94%
February	95%	94%
March	95%	94%
April	95%	94%
May	95%	94%
June	92%	86%
July	92%	86%
August	92%	86%
September	92%	86%
October	95%	94%
November	95%	94%
December	95%	94%

(4) The GS and GST units exclude the units associated with the 500 kW and above PLS accounts that will be required to take service under BGS-CIEP

**Jersey Central Power & Light
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Table #7

Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses - PJM time periods
in \$/MWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs	\$ 42,468	\$ 42,471	\$ 43,886	\$ 43,667	\$ 36,898
PJM on pk	\$ 52,587	\$ 52,655	\$ 52,456	\$ 52,396	\$ 52,311
PJM off pk	\$ 31,657	\$ 31,674	\$ 31,625	\$ 31,580	\$ 31,562
Winter - all hrs	\$ 37,514	\$ 36,646	\$ 37,312	\$ 37,328	\$ 34,136
PJM on pk	\$ 43,111	\$ 42,398	\$ 41,775	\$ 42,053	\$ 41,914
PJM off pk	\$ 32,013	\$ 31,515	\$ 31,236	\$ 31,430	\$ 30,845
Annual	\$ 39,110	\$ 39,061	\$ 39,722	\$ 39,533	\$ 35,057
System Total	\$	\$ 39,29			

Table #8

Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses
in \$1000

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	Total
Summer - all hrs	\$ 3,297	\$ 159,524	\$ 96,956	\$ 2,538	\$ 1,396	\$ 263,711
PJM on pk	\$ 2,109	\$ 101,776	\$ 68,210	\$ 1,768	\$ 509	\$ 174,373
PJM off pk	\$ 1,188	\$ 57,747	\$ 28,746	\$ 770	\$ 887	\$ 89,338
Winter - all hrs	\$ 6,131	\$ 194,323	\$ 142,449	\$ 4,068	\$ 2,585	\$ 349,556
PJM on pk	\$ 3,493	\$ 105,996	\$ 91,947	\$ 2,544	\$ 944	\$ 204,924
PJM off pk	\$ 2,639	\$ 88,326	\$ 50,503	\$ 1,524	\$ 1,641	\$ 144,632
Annual	\$ 9,429	\$ 353,846	\$ 239,405	\$ 6,606	\$ 3,980	\$ 613,267
System Total	\$	\$ 613,267				

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Table #9

Summary of Average BGS Energy Only Unit Costs @ customer - JCP&L Time Periods based on Forwards prices corrected for zone-hub differential and losses - JCP&L billing time periods in \$/MWh

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL
Summer - all hrs	\$ 42,468	\$ 42,471	\$ 43,886	\$ 43,667	\$ 36,698
JCP&L On pk	\$ 55,353			\$ 54,964	
JCP&L Off pk	\$ 33,565			\$ 33,818	
Winter - all hrs	\$ 37,514	\$ 36,646	\$ 37,312	\$ 37,328	\$ 34,136
JCP&L On pk	\$ 43,500			\$ 43,453	
JCP&L Off pk	\$ 34,217			\$ 32,527	
Annual Average System Average	\$ 39,110	\$ 39,061	\$ 39,722	\$ 39,533	\$ 35,057

Table #10

Generation & Transmission Obligations and Costs and Other Adjustments obligations - annual average forecasted for 2018, costs are market estimates in MW

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL	BGS-RSCP TOTAL
Gen Obl - MW	89.6	2,933.9	1,449.2	46.1	0.2	4,519.0
Trans Obl - MW						

Not applicable for JCP&L - Transmission rates are based on Retail Tariff rates for the respective rate classes

of Months and Days used in this analysis

# of summer days =	122	# of summer months =	4
# of winter days =	243	# of winter months =	8
		total # months =	12

Transmission charges will be based on Retail Tariff rates for the applicable rate schedules

	Initial	Adjusted	Summer Total	Winter Total	Annual Total
Generation Capacity cost	\$ 218.96	231.347 \$/MWh/day	\$ 127,544,919	\$ 254,044,387	\$ 381,589,306
Residential summer BGS + Transmission charge differential per BPU and summer blocking percentages	\$ 218.96	231.347 \$/MWh/day			

Charges	Rate	% usage
Block 1 (0-600 kWh/m)		52.35%
Block 2 (>600 kWh/m)		47.65%
Differential (Excl. SUT)	0.8652 \$/kWh	

Table #11

Ancillary Services Forecasted Ancillary Services Cost Renewable Portfolio Standard Cost forecasted overall annual average

	Initial	Adjusted
Forecasted Ancillary Services Cost	\$2.00	
Renewable Portfolio Standard Cost	\$6.96	
forecasted overall annual average	\$8.96	9.467 \$/MWh

Table #12

Summary of Obligation Costs Expressed as \$/MWh @ customer

	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL
Transmission Obl - all months	\$ 7,465	\$ 7,465	\$ 7,465	\$ 7,465	\$
Generation Obl \$/MWh - all months	\$ 31,380	\$ 27,349	\$ 20,304	\$ 23,281	\$ 0.134
Generation Obl \$/MWh - Summer - All Hours	\$ 32,557	\$ 22,046	\$ 18,514	\$	\$ 0.134
Generation Obl \$/MWh - Summer - On-Peak Hours	\$ 79,698	\$	\$	\$ 48,036	\$
Generation Obl \$/MWh - Winter - All Hours	\$ 30,816	\$ 31,104	\$ 21,340	\$	\$ 0.134
Generation Obl \$/MWh - Winter - On-Peak Hours	\$ 86,771	\$	\$	\$ 54,089	\$

**Jersey Central Power & Light
Attachment 2**

Table #13 Summary of BGS Unit Costs @ customer

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
NON-DEMAND RATES					
<i>includes energy, Generation and Transmission obligations, and Ancillary Services - adjusted to billing time periods in \$/MWh</i>					
Summer - all hrs					
JCP&L On pk	\$ 93.08	\$ 82.57	\$ 80.45	\$	\$ 47.62
JCP&L Off pk	\$ 153.10			\$ 121.05	
Block 1 (0-600 kWh/m)	\$ 51.61	\$ 78.44		\$	\$ 51.87
Block 2 (>600 kWh/m)		\$ 87.10			
Winter - all hrs					
JCP&L On pk	\$ 86.38	\$ 85.80	\$ 76.70	\$	\$ 44.85
JCP&L Off pk	\$ 148.32			\$ 115.59	
Annual -all hrs	\$ 52.27			\$ 50.58	
	\$ 88.54	\$ 84.46	\$ 78.07	\$ 80.86	\$ 45.77

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

JCP&L does not have a demand component in its BGS charges

**Jersey Central Power & Light
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Units @ Customer in kWh	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL
Summer - all hrs	1,764,142		2,209,279,000	27,069,178	37,828,000
JCP&L On pk	31,007,842			31,051,822	
JCP&L Off pk	44,871,016				
Block 1 (0-600 kWh/m)		1,966,234,000			
Block 2 (>600 kWh/m)		1,789,801,000			
Winter - all hrs	3,609,561	5,302,673,000	3,817,801,000	47,862,798	75,717,000
JCP&L On pk	56,758,897			61,095,202	
JCP&L Off pk	103,068,542				
Summer Total	77,643,000	3,756,035,000	2,209,279,000	58,121,000	37,828,000
Winter Total	163,437,000	5,302,673,000	3,817,801,000	108,978,000	75,717,000
Annual Total	241,080,000	9,058,708,000	6,027,080,000	167,099,000	113,545,000
					Total
					6,138,906,000
					9,488,606,000
					15,607,512,000

Table #14

Summary of Total Estimated BGS Costs by Season	RT{(1)}	RS{(2)}	GS{(3)}	GST{(4)}	OL/SL	Total
Total Costs by Rate - in \$1000						
Summer - all hrs	\$ 164	\$	\$ 177,735	\$ 3,277	\$ 1,801	
JCP&L On pk	\$ 4,747			\$ 1,611		
JCP&L Off pk	\$ 2,316					
Block 1 (0-600 kWh/m)		\$ 154,235				
Block 2 (>600 kWh/m)		\$ 155,885				
Winter - all hrs	\$ 312	\$ 454,967	\$ 292,829	\$ 5,535	\$ 3,396	
JCP&L On pk	\$ 8,419			\$ 3,090		
JCP&L Off pk	\$ 5,387					
Total Costs - in \$1000						
Summer	\$ 7,227	\$ 310,124	\$ 177,735	\$ 4,887	\$ 1,801	\$ 504,775
Winter	\$ 14,117	\$ 454,967	\$ 292,829	\$ 8,625	\$ 3,396	\$ 773,935
Total	\$ 21,345	\$ 765,091	\$ 470,564	\$ 13,512	\$ 5,197	\$ 1,278,710
% of Annual Total \$						
Summer	34%	41%	36%	36%	35%	39%
Winter	66%	59%	62%	64%	65%	61%

**Jersey Central Power & Light
Attachment 2**

Table #16

Customer & Bulk System Costs

Customer Costs Per Allocation Matrix
Grand Total Cost in \$1000 = \$ 1,275,710

Seasonal Units	RT{(1)}	RS{(2)}	GS{(3)}	GST {(4)}	OL/SL	Total
Summer	86,805	4,199,244	2,469,972	64,979	42,292	6,863,292
Winter	182,722	5,928,384	4,268,299	121,837	84,652	10,585,894

Supplier Payment in \$1000	Units	Price per MWh	Payment
Post Transition Year 16 Bid price	73,110		
Seasonally Adjusted Summer Payment	73,110	\$ 6,863,292	\$ 501,775
Seasonally Adjusted Winter Payment	73,110	\$ 10,585,894	\$ 773,935
Total Supplier Payment			\$ 1,275,710

Table #17

Adjustment Factor Calculation

Allocated Customer Costs on a per MWh basis (on bulk system MWhs):
 Summer \$ 73.11 per MWh @ bulk system
 Winter \$ 73.11 per MWh @ bulk system

Seasonal Supplier Payment	Adjustment Factor Calculation	Adjustment Factor
73.11	1.0000	1.415288
73.11	1.0000	1.056586

Assumptions:

- Generation Capacity Cost = \$ 231.35 per MW day Summer
- Transmission cost = \$ 231.35 per MW day Winter
- Analysis time period = 4 summer months
8 winter months
- Ancillary Services = \$ 9.47 per MWh
- Energy Costs = Based on Forwards prices @ PJM West corrected for hub-zone basis differential (both based on the figures used to derive the Bid Factors and establish retail rates in Post Transition Year 16 and adjusted to match the total cost at the actual supplier bid price.
- Usage patterns = forecasted 2018 energy use by class based upon PJM on/off % from 2015 through 2017 class load profiles
JCP&L billing on/off % from 2018 forecasted billing determinants
- Obligations = class totals for 2018 excluding accounts required to take service under BGS-CIEP as of June 1, 2019
- Losses = Consistent with Losses as approved by the BPU
- PJM Time Periods = PJM trading time periods - 7 AM to 11 PM weekdays, local time, excluding NERC holidays - New Year's, Memorial, 4th of July, Labor Day, Thanksgiving & Christmas
- JCP&L Billing time periods = RT On-peak hours are 8 am to 8 pm Eastern Standard Time, Monday through Friday.
GST On-peak hours are 8 am to 8 pm prevailing time, Monday through Friday.
The Holidays identified by PJM are not excluded from the RT or GST Billing On-Peak kWh.
- NJ Sales and Use Tax (SUT) = SUT excluded from all costs

**Jersey Central Power & Light
Attachment 2
2019 BGS Auction Cost and Bid Factor Tables**

2019/2020 BGS Supply Period Estimated Supplier Payments Allocated by Rate Class

**Development of Post Transition Period BGS Cost and Bid Factors
Adjusted to Billing Time Periods**

Table #1
% Usage During PJM On-Peak Period
(data rounded to nearest .01 %)

Profile Meter	Profile Meter Data			Data			Other Analysis OL/SL
	RT(1)	RS(2)	GS(3)	RT(1)	RS(2)	GS(3)	
January	47.88%	45.71%	54.46%	52.74%	55.74%	52.74%	31.25%
February	51.23%	48.40%	57.72%	55.74%	55.74%	55.74%	31.36%
March	51.68%	48.73%	60.43%	57.06%	57.06%	57.06%	29.68%
April	49.47%	47.61%	59.02%	56.71%	56.71%	56.71%	26.45%
May	48.33%	47.31%	58.01%	56.16%	56.16%	56.16%	24.87%
June	54.18%	53.71%	60.33%	59.84%	59.84%	59.84%	25.76%
July	50.59%	50.79%	56.89%	56.26%	56.26%	56.26%	23.57%
August	52.93%	53.07%	59.47%	58.60%	58.60%	58.60%	26.49%
September	49.07%	48.51%	58.86%	57.59%	57.59%	57.59%	27.06%
October	49.79%	47.91%	58.52%	57.27%	57.27%	57.27%	29.68%
November	48.97%	45.47%	57.68%	55.28%	55.28%	55.28%	32.32%
December	48.21%	45.96%	55.45%	53.35%	53.35%	53.35%	32.31%

Table #2
% Usage During JCP&L On-Peak Billing Period
(data rounded to nearest .01 %)

On-Peak periods as defined in specified rate schedule

Profile Meter	2018 Forecasted Calendar Month Sales			2018 Forecasted Calendar Month Sales			Other Analysis OL/SL
	RT(1)	RS(2)	GS(3)	RT(1)	RS(2)	GS(3)	
January	35.84%	---	---	42.42%	---	---	---
February	35.41%	---	---	42.83%	---	---	---
March	34.73%	---	---	42.82%	---	---	---
April	34.68%	---	---	44.04%	---	---	---
May	36.66%	---	---	45.51%	---	---	---
June	39.93%	---	---	46.33%	---	---	---
July	41.59%	---	---	47.18%	---	---	---
August	41.59%	---	---	46.65%	---	---	---
September	40.03%	---	---	46.13%	---	---	---
October	36.68%	---	---	46.07%	---	---	---
November	35.18%	---	---	45.46%	---	---	---
December	35.59%	---	---	43.39%	---	---	---

(1) For BGS purposes the RT rate class includes the RS and GS rate class Off-Peak (OPWH) and Controlled Water Heating (CTWH) provisions. The RT rate class also includes the summer billing month RGT rate class usage. OPWH and CTWH is billed on the average RT rates, while RT and Summer RGT use is billed at on-peak and off-peak rates.
 (2) For BGS purposes the RS rate class excludes the Off-Peak and Controlled Water Heating provisions and includes the winter billing month RGT rate class usage.
 (3) For BGS purposes the GS rate class excludes the Off-Peak and Controlled Water Heating provisions.

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Table #3
Class Usage @ customer
calendar month sales forecasted for 2018
in MWh

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL	Total
January	26,592	799,279	510,394	15,108	9,490	1,360,863
February	27,398	760,155	493,890	15,108	9,485	1,306,036
March	25,342	690,812	508,325	15,667	9,480	1,249,626
April	19,847	589,629	465,966	14,129	9,475	1,089,046
May	15,385	552,906	436,268	10,341	9,470	1,024,370
June	16,535	715,966	506,549	13,565	9,465	1,264,080
July	20,574	1,004,787	564,605	14,168	9,460	1,673,594
August	21,951	1,111,718	587,963	15,782	9,454	1,746,868
September	18,583	923,564	548,162	14,606	9,449	1,514,364
October	14,081	658,509	477,383	12,752	9,444	1,172,169
November	14,764	573,321	453,136	12,796	9,439	1,063,456
December	20,028	678,062	472,439	13,077	9,434	1,193,040
Total	241,080	9,058,708	6,027,080	167,099	113,545	15,607,512

Table #4
Forwards Prices - Energy Only @ bulk system
in \$/MWh

	On-Peak	Off/On Pk LMP ratio	Off-Peak
January	51.78	0.7792	40.349
February	48.72	0.7792	37.964
March	38.19	0.7792	29.759
April	34.25	0.7792	26.689
May	33.16	0.7792	25.839
June	34.13	0.6508	22.212
July	39.56	0.6508	25.746
August	36.56	0.6508	23.794
September	35.13	0.6508	22.853
October	33.98	0.7792	26.478
November	33.80	0.7792	26.338
December	36.00	0.7792	28.052

Table #6

Losses	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
Loss Factors @ Bulk =	10.5545%	10.5545%	10.5545%	10.5545%	10.5545%
Expansion Factors @ Bulk =	1.11800	1.11800	1.11800	1.11800	1.11800
Loss Factors @ Transmission Node =	9.8737%	9.8737%	9.8737%	9.8737%	9.8737%
Expansion Factors @ Transmission Node =	1.10955	1.10955	1.10955	1.10955	1.10955

Table #5
Zone-Hub Basis Differential
Based on 3 Year Average

	On-Peak	Off-Peak
January	90%	92%
February	90%	92%
March	90%	92%
April	90%	92%
May	90%	92%
June	94%	88%
July	94%	88%
August	94%	88%
September	94%	88%
October	90%	92%
November	90%	92%
December	90%	92%

(4) The GS and GST units exclude the units associated with the 500 kW and above PLS accounts that will be required to take service under BCS-CIEP

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Table #7

Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses - PJM time periods
in \$/MWh

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
Summer - all hrs	\$ 31,056 \$	31,076 \$	32,047 \$	31,888 \$	27,099 \$
PJM on pk	\$ 36,198 \$	36,268 \$	38,096 \$	36,048 \$	37,980 \$
PJM off pk	\$ 23,426 \$	23,450 \$	23,393 \$	23,359 \$	23,332 \$
Winter - all hrs	\$ 36,174 \$	35,366 \$	35,732 \$	35,818 \$	33,319 \$
PJM on pk	\$ 40,325 \$	39,624 \$	39,010 \$	39,295 \$	39,119 \$
PJM off pk	\$ 32,094 \$	31,567 \$	31,270 \$	31,479 \$	30,865 \$
Annual	\$ 34,526 \$	33,587 \$	34,381 \$	34,451 \$	31,247 \$
System Total	\$ 33,90				

Table #8

Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods
based on Forwards prices corrected for zone-hub differential and losses
in \$/1000

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL	Total
Summer - all hrs	\$ 2,411 \$	116,721 \$	70,800 \$	1,853 \$	1,025 \$	192,811 \$
PJM on pk	\$ 1,532 \$	73,967 \$	49,537 \$	1,284 \$	370 \$	126,690 \$
PJM off pk	\$ 879 \$	42,754 \$	21,263 \$	569 \$	656 \$	66,121 \$
Winter - all hrs	\$ 5,912 \$	187,532 \$	136,418 \$	3,903 \$	2,523 \$	336,289 \$
PJM on pk	\$ 3,267 \$	99,061 \$	85,852 \$	2,377 \$	881 \$	191,448 \$
PJM off pk	\$ 2,645 \$	88,471 \$	50,566 \$	1,526 \$	1,642 \$	144,841 \$
Annual	\$ 8,324 \$	304,253 \$	207,218 \$	5,757 \$	3,548 \$	529,100 \$
System Total	\$ 529,100					

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Table #9

Summary of Average BGS Energy Only Unit Costs @ customer - JCP&L Time Periods
based on Forwards prices corrected for zone-hub differential and losses - JCP&L billing time periods
in \$/MWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	BGS-RSCP TOTAL
Summer - all hrs						
JCP&L On pk	\$ 31,056	\$ 31,076	\$ 32,047	\$ 31,888	\$ 27,099	
JCP&L Off pk	\$ 40,150			\$ 39,861		
	\$ 24,773			\$ 24,939		
Winter - all hrs						
JCP&L On pk	\$ 36,174	\$ 35,366	\$ 35,732	\$ 35,818	\$ 33,319	
JCP&L Off pk	\$ 44,089			\$ 40,325		
	\$ 31,816			\$ 32,286		
Annual Average	\$ 34,526	\$ 33,587	\$ 34,381	\$ 34,451	\$ 31,247	
System Average	\$ 33,90					

Table #10

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

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	BGS-RSCP TOTAL
Gen Obl - MW	89.6	2,933.9	1,449.2	46.1	0.2	4,519.0

Trans Obl - MW Not applicable for JCP&L - Transmission rates are based on Retail Tariff rates for the respective rate classes
of Months and Days used in this analysis # of summer days = 122 # of winter months = 4
of winter days = 243 total # months = 12

Transmission charges will be based on Retail Tariff rates for the applicable rate schedules

	Summer	Winter	Summer Total	Winter Total	Annual Total
Generation Capacity cost	\$ 115.68 \$/MWh/day	\$ 115.68 \$/MWh/day	\$ 63,776,043	\$ 127,029,331	\$ 190,805,374

Residential summer BGS + Transmission charge differential
per BPU and summer blocking percentages

Charges	Rate	% Usage
Block 1 (0-600 kWh/m)	0.8652 \$/kWh	52.35%
Block 2 (>600 kWh/m)		47.65%
Differential (Excl. SUT)		

Table #11

Ancillary Services
Forecasted Ancillary Services Cost
Renewable Portfolio Standard Cost
Total Forecasted Ancillary Services & Renewable Power Costs

	\$2.00 \$/MWh
	\$17.51 \$/MWh
	\$19.51 \$/MWh

Table #12

Summary of Obligation Costs Expressed as \$/MWh @ customer

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Transmission Obl - all months	\$ 7,465	\$ 7,465	\$ 7,465	\$ 7,465	\$ -
Generation Obl \$/MWh - all months	\$ 15,691	\$ 13,675	\$ 10,153	\$ 11,641	\$ 0.067
Generation Obl \$/MWh - Summer - All Hours	\$ 16,285	\$ 11,024	\$ 9,258	\$ 24,019	\$ 0.067
Generation Obl \$/MWh - Summer - On-Peak Hours	\$ 39,851				
Generation Obl \$/MWh - Winter - All Hours	\$ 15,409	\$ 15,553	\$ 10,671	\$ 27,046	\$ 0.067
Generation Obl \$/MWh - Winter - On-Peak Hours	\$ 43,388				

**Jersey Central Power & Light
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Table #13 Summary of BGS Unit Costs @ customer

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
NON-DEMAND RATES					
<i>includes energy, Generation and Transmission obligations, and Ancillary Services - adjusted to billing time periods in \$/MWh</i>					
Summer - all hrs					
JCP&L On pk	\$ 76.62	\$ 71.38	\$ 70.58	\$ 93.16	\$ 48.98
JCP&L Off pk	\$ 109.28			\$ 54.22	
Block 1 (0-600 kWh/m)	\$ 54.05	\$ 67.25			
Block 2 (>600 kWh/m)		\$ 75.91			
Winter - all hrs					
JCP&L On pk	\$ 80.86	\$ 80.20	\$ 75.68	\$ 96.65	\$ 55.20
JCP&L Off pk	\$ 116.75			\$ 61.56	
Annual -all hrs	\$ 79.49	\$ 76.54	\$ 73.81	\$ 75.37	\$ 53.13

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

JCP&L does not have a demand component in its BGS charges

**Jersey Central Power & Light
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Table #14

Units @ Customer
in kWh

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL
Summer - all hrs	1,764,142		2,209,279,000		37,828,000
JCP&L On pk	31,007,842			27,069,178	
JCP&L Off pk	44,871,016			31,051,822	
Block 1 (0-600 kWh/m)		1,966,234,000			
Block 2 (>600 kWh/m)		1,789,801,000			
Winter - all hrs	3,609,561	5,302,673,000	3,817,801,000	47,882,798	75,717,000
JCP&L On pk	56,758,897			61,095,202	
JCP&L Off pk	103,068,542				
Summer Total	77,643,000	3,756,035,000	2,209,279,000	58,121,000	37,828,000
Winter Total	163,437,000	5,302,673,000	3,817,801,000	108,978,000	75,717,000
Annual Total	241,080,000	9,058,708,000	6,027,080,000	167,099,000	113,545,000
					Total
					6,136,906,000
					9,468,606,000
					15,607,512,000

Table #15

Summary of Total Estimated BGS Costs by Season

	RT(1)	RS(2)	GS(3)	GST (4)	OL/SL	Total
Total Costs by Rate - in \$1000	\$ 135		\$ 155,934		\$ 1,853	
Summer - all hrs	\$ 3,388			\$ 2,522		
JCP&L On pk	\$ 2,425			\$ 1,684		
JCP&L Off pk		\$ 132,237				
Block 1 (0-600 kWh/m)		\$ 135,856				
Block 2 (>600 kWh/m)						
Winter - all hrs	\$ 292	\$ 425,252	\$ 288,931	\$ 4,628	\$ 4,179	
JCP&L On pk	\$ 6,627			\$ 3,761		
JCP&L Off pk						
Total Costs - in \$1000	\$ 5,949	\$ 268,093	\$ 155,934	\$ 4,205	\$ 1,853	\$ 436,034
Summer	\$ 13,215	\$ 425,252	\$ 288,931	\$ 8,389	\$ 4,179	\$ 739,967
Winter	\$ 19,164	\$ 693,345	\$ 444,865	\$ 12,594	\$ 6,032	\$ 1,176,001
Total						
% of Annual Total \$	31%	39%	35%	33%	31%	37%
Summer	69%	61%	65%	67%	69%	63%
Winter						

**Jersey Central Power & Light
Attachment 2**

Table #16 & Table #17

Not Applicable to 2018/2019 BGS Supply Period

Table #18

Bulk System Costs

ALL RATES

Grand Total Cost in \$1,000 = \$ 1,175,001

All-In Average costs @ bulk system = \$ 67.40 per MWh at bulk system (per bulk system metered MWh)

Table #19

Seasonal Payment Factors

If total \$ were split on a per MWh basis (on bulk nodes MWhs):

Summer	\$	63.53	per MWh @ bulk system
Winter	\$	69.90	per MWh @ bulk system

Ratio to All-In Cost (rounded to 4 decimal places)

Summer	0.9427
Winter	1.0372

Ratio to All-In Cost (if Winter is greater than Summer)

Summer	1.0000
Winter	1.0000

Assumptions:

- Generation Capacity Cost = \$ 115.68 per MW day Summer
- Transmission cost = \$ 115.68 per MW day Winter
- Analysis time period = 4 summer months
8 winter months
- Ancillary Services and Renewable Power Cost = \$ 19.51 per MWh
- Energy Costs = based on 6/18 to 5/19 Forwards @ PJM West corrected for hub-zone basis differential
- Usage patterns = forecasted 2018 energy use by class based upon PJM on/off % from 2015 through 2017 class load profiles
JCP&L billing on/off % from 2018 forecasted billing determinants
- Obligations = class totals for 2018 excluding accounts required to take service under BGS-CIEP as of June 1, 2019
- Loss = Consistent with Losses as approved by the BPU
- PJM Marginal Losses = PJM's calculated mean value of hourly marginal loss factor
- PJM Time Periods = PJM trading time periods - 7 AM to 11 PM weekdays, local time, excluding NERC holidays - New Year's, Memorial, 4th of July, Labor Day, Thanksgiving & Christmas
- JCP&L Billing time periods = RT On-peak hours are 8 am to 8 pm Eastern Standard Time, Monday through Friday.
GST On-peak hours are 8 am to 8 pm prevailing time, Monday through Friday.
The Holidays identified by PJM are not excluded from the RT or GST Billing On-Peak kWh.
- NJ Sales and Use Tax (SUT) = SUT excluded from all costs

**Jersey Central Power & Light
Attachment 2
2019 BGS Auction Cost and Bid Factor Tables**

BGS-RSCP Composite Cost Allocation

Table #C1

Post Transition Year 15 Costs in \$1,000's	Size of Tranches = <u>15</u>					
Total Costs by Rate - in \$1000	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	
Summer - all hrs	\$ 148	\$	169,196	\$ 2,912	\$	2,096
JCP&L On pk	\$ 4,035			\$ 1,624		
JCP&L Off pk	\$ 2,346					
Block 1 (0-600 kWh/m)		\$ 144,626				
Block 2 (>600 kWh/m)		\$ 147,134				
Winter - all hrs	\$ 289	\$ 423,243	\$ 282,721	\$ 4,989	\$	4,086
JCP&L On pk	\$ 7,286			\$ 3,162		
JCP&L Off pk	\$ 5,497					
Total Costs - in \$1000						
Summer	\$ 6,528	\$ 291,759	\$ 169,196	\$ 4,536	\$	2,096
Winter	\$ 13,072	\$ 423,243	\$ 282,721	\$ 8,152	\$	4,086
Total	\$ 19,600	\$ 715,003	\$ 451,916	\$ 12,688	\$	6,182
						\$ 1,205,389

Table #C2

Post Transition Year 16 Costs in \$1,000's	Size of Tranches = <u>20</u>					
Total Costs by Rate - in \$1000	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL	
Summer - all hrs	\$ 164	\$	177,735	\$ 3,277	\$	1,801
JCP&L On pk	\$ 4,747			\$ 1,611		
JCP&L Off pk	\$ 2,316					
Block 1 (0-600 kWh/m)		\$ 154,239				
Block 2 (>600 kWh/m)		\$ 155,885				
Winter - all hrs	\$ 312	\$ 454,967	\$ 292,829	\$ 5,535	\$	3,396
JCP&L On pk	\$ 8,419			\$ 3,090		
JCP&L Off pk	\$ 5,387					
Total Costs - in \$1000						
Summer	\$ 7,227	\$ 310,124	\$ 177,735	\$ 4,887	\$	1,801
Winter	\$ 14,117	\$ 454,967	\$ 292,829	\$ 8,625	\$	3,396
Total	\$ 21,345	\$ 765,091	\$ 470,564	\$ 13,512	\$	5,197
						\$ 1,275,710

{1} For BGS purposes the RT rate class includes the RS and GS rate class Off-Peak (OPWH) and Controlled Water Heating (CTWH) provisions. The RT rate class also includes the summer billing month RGT rate class usage. OPWH and CTWH is billed on the average RT rates, while RT and Summer RGT use is billed at on-peak and off-peak rates.
 {2} For BGS purposes the RS rate class excludes the Off-Peak and Controlled Water Heating provisions and includes the winter billing month RGT rate class usage
 {3} For BGS purposes the GS rate class excludes the Off-Peak and Controlled Water Heating provisions
 {4} The GS and GST units exclude the units associated with the 500 kW and above PLS accounts that will be required to take service under BGS-CIEP

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Table #C3

Post Transition Year 17 Costs in \$1,000's	Size of Tranches =	<u>18</u>			
	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Total Costs by Rate - in \$1000					
Summer - all hrs	\$ 135	\$	\$ 155,934	\$	\$ 1,853
JCP&L On pk	\$ 3,388			\$ 2,522	
JCP&L Off pk	\$ 2,425			\$ 1,684	
Block 1 (0-600 kWh/m)		\$ 132,237			
Block 2 (>600 kWh/m)		\$ 135,856			
Winter - all hrs	\$ 292	\$ 425,252	\$ 288,931	\$ 4,628	\$ 4,179
JCP&L On pk	\$ 6,827			\$ 3,761	
JCP&L Off pk	\$ 6,297				
Total Costs - in \$1000					
Summer	\$ 5,949	\$ 268,093	\$ 155,934	\$ 4,205	\$ 1,853
Winter	\$ 13,215	\$ 425,252	\$ 288,931	\$ 8,389	\$ 4,179
Total	\$ 19,164	\$ 693,345	\$ 444,865	\$ 12,594	\$ 6,032

Table #C4

Composite (Tranche Weighted) Costs in \$1,000's	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Total Costs by Rate - in \$1000					
Summer - all hrs	\$ 150	\$	\$ 167,914	\$	\$ 1,902
JCP&L On pk	\$ 4,084			\$ 2,917	
JCP&L Off pk	\$ 2,361			\$ 1,639	
Block 1 (0-600 kWh/m)		\$ 144,046			
Block 2 (>600 kWh/m)		\$ 146,606			
Winter - all hrs	\$ 298	\$ 435,897	\$ 288,644	\$ 5,072	\$ 3,857
JCP&L On pk	\$ 7,490			\$ 3,336	
JCP&L Off pk	\$ 5,727				
Total Costs - in \$1000					
Summer	\$ 6,595	\$ 290,652	\$ 167,914	\$ 4,556	\$ 1,902
Winter	\$ 13,515	\$ 435,897	\$ 288,644	\$ 8,411	\$ 3,857
Total	\$ 20,111	\$ 726,549	\$ 456,558	\$ 12,967	\$ 5,760

**Jersey Central Power & Light
Attachment 2**

Table #C5

Units @ Customer
Forecasted 2018 in kWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs	1,764,142		2,209,279,000		37,828,000
JCP&L On pk	31,007,842			27,069,178	
JCP&L Off pk	44,871,016			31,051,822	
Block 1 (0-600 kWh/m)		1,966,234,000			
Block 2 (>600 kWh/m)		1,789,801,000			
Winter - all hrs	3,609,561	5,302,673,000	3,817,801,000	47,882,798	75,717,000
JCP&L On pk	56,758,897			61,095,202	
JCP&L Off pk	103,068,542				
Summer Total	77,643,000	3,756,035,000	2,209,279,000	58,121,000	37,828,000
Winter Total	163,437,000	5,302,673,000	3,817,801,000	108,978,000	75,717,000
Annual Total	241,080,000	9,058,708,000	6,027,080,000	167,099,000	113,545,000
					Total
					6,138,906,000
					9,468,606,000
					15,607,512,000

Table #C6

Summary of BGS Unit Costs @ customer

NON-DEMAND RATES

includes energy, Generation & Transmission obligations, and Ancillary Services - adjusted to billing time periods in \$/MWh

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs	\$ 84.94	\$	75.68	\$	50.29
JCP&L On pk	\$ 130.71			\$ 107.76	
JCP&L Off pk	\$ 52.23			\$ 52.79	
Block 1 (0-600 kWh/m)		\$ 72.69			
Block 2 (>600 kWh/m)		\$ 81.28			
Winter - all hrs	\$ 82.69	\$ 81.57	\$ 75.28	\$	50.95
JCP&L On pk	\$ 130.95			\$ 105.93	
JCP&L Off pk	\$ 55.14			\$ 54.64	
Annual-all hrs	\$ 82.78	\$ 79.58	\$ 75.43	\$ 77.60	\$ 50.73

DEMAND RATES

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

JCP&L does not have a demand component in its BGS charges

ALL RATES

Grand Total Cost in \$1000 = \$ 1,221,944
 All-In Average costs @ bulk system = \$ 70.03 per MWh at bulk system (per bulk system metered MWh)
 All-In Average costs @ transmission nodes = \$ 70.56 per MWh at transmission nodes (per transmission nodes metered MWh)

**Jersey Central Power & Light
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Table #C7

Ratio of BGS Unit Costs @ customer to All-in Average Cost @ transmission nodes (rounded to 3 decimal places)

NON-DEMAND RATES

includes Energy, Generation & Transmission obligations, and Ancillary Services - adjusted to billing time periods

	RT{1}	RS{2}	GS{3}	GST {4}	OL/SL
Summer - all hrs					
JCP&L On pk	1.204	1.088	1.072	1.527	0.713
JCP&L Off pk	1.852			0.748	
	0.740				
Constant for Block 1 (0-600 kWh/m) usage (Excl. SUT)		(4.123)			
Constant for Block 2 (>600 kWh/m) usage (Excl. SUT)		4.529			
Winter - all hrs					
JCP&L On pk	1.172	1.156	1.067	1.501	0.722
JCP&L Off pk	1.856			0.774	
	0.782				
Annual - all hrs					
	1.173	1.128	1.069	1.100	0.719